YU-TT15
AMERICA

Registered
ISO 9001:2008 / ISO 14001:2004

GLOBAL BRAND 2012

THREADING TOOLS

SOLID CARBIDE THREAD MILL / COMBO TAPS / SPIRAL FLUTE TAPS / SPIRAL POINT TAPS /
STRAIGHT FLUTE TAPS / FORMING TAPS / SCREW THREAD INSERT TAPS / PIPE TAPS

www.yg1usa.com

YG-1 CO., LTD.

GUIDE LINE TO ICONS

Work Material

- **MU** — Multi-Purpose
- **GS** — Steels with good machinability Rm<850N/mm²
- **HR** — High alloyed steels Rm>1,200N/mm²
- **VG** — Heat treated and heat-resistant steels Rm<850N/mm2≤Rm≤1,200N/mm²
- **VA** — Stainless steels
- **GG** — Grey Cast Iron
- **Al** — Aluminum & Aluminum alloys
- **GV** — Any material with at least 8~10% elongation
- **Ti Ni** — Titanium alloys Nickel alloys

Class of Thread

H1~H11 | D3~D11 | 2B

Thread Angle

Chamfer Lead

Tool Material

- **Carbide** — Micrograin carbide
- **Super HSS** — Premium HSS Metallurgy
- **P-HSS** — Powder Metallurgy
- **HSS-EX** — High Vanadium HSS
- **HSS-V3** — 3% Vanadium Alloy HSS
- **HSS-V** — Vanadium Alloy HSS
- **HSS** — High Speed Steel

Surface Treatment

- **Bright** — Bright Finish
- **Steam Oxide** — Steam Tempered
- **TiCN** — Titanium Carbon Nitride Coating
- **TiN** — Titanium Nitride Coating
- **TiAlN** — Titanium Aluminum Nitride Coating
- **Hardslick** — TiAlN+WC/C Coating
- **Gold& Black** — Titanium Nitride + Steam Tempered

Standard of Tools

USCTI 302 | USCTI 302A | USCTI 311
USCTI 322 | USCTI 322A

Helix Angle

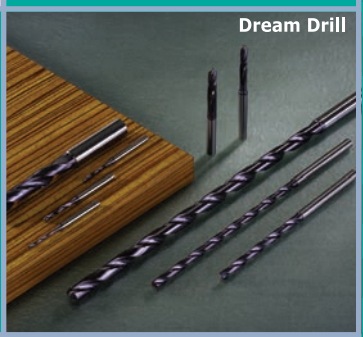

CBN End Mill


V7 Mill


X5070 End Mill


D-Power End Mill


Multi-1 Drill


Dream Drill


Tank-Power End Mill


HSS End Mill


i-Xmill


i-Dream Drill


Spade Drill Inserts


Combo Tap

THREADING TOOLS

Contents

THREADING TOOLS

SOLID CARBIDE THREAD MILL

INCH

EDP No.	MODEL	Description	Page
TE		Solid Carbide Thread mill for Unified Internal Threads - ANSI B 1.1	33
TD		Solid Carbide Thread mill for Metric Internal Threads - DIN 13	34
TF **TG**		Solid Carbide Thread mill for Unified Internal Threads - ANSI B 1.20.1(NPT) / ANSI B1.20.3(NPTF)	35

Application Program Available

Programming of Thread Milling

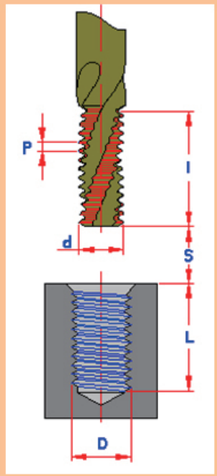
☞ Internal Thread Milling in Machining Center
☞ Fanuc

English
INCH

Thread Milling
UN - Unified

D = thread diameter (Inch)	0.375
P = pitch (TPI)	16
L = thread length (Inch)	0.750
S = safety distance (Inch)	0.250

Steel, High Alloy, < 1200 N/mm2
NC0285C0750 16TPI L121E480



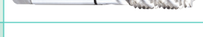
Number of passes, axial	1	
Number of passes, radial (max 2)	1	
d = cutter diameter (Inch)	0.285	
l = length of cutting edge (Inch)	0.750	
z = number of flutes	4	
V = cutting speed (SFM)	262	
Fz = feed/tooth (inch/tooth)	0.0010	
Fdr = drilling feed(inch/rev.)		
N = spindle speed (rpm)	3,511	
FD = feed at thread diameter (inch/min)	14	
Fd = feed in center of mill (inch/min)	3.4	
T = time to mill the thread (seconds)	9	

CNC program for Fanuc

```
G90 G00 G57 X0. Y0.
G43 H10 Z0.250 M3 S3511
G91 G00 Z-1.0156
G41 D10 X0. Y-0.1563 F3.4
G03 X0.1906 Y0.1563 Z0.0156 R0.1594
G03 X0. Y0. Z0.0625 I-0.1906 J0.
G03 X-0.1906 Y0.1563 Z0.0156 R0.1594
G00 G40 X0. Y-0.1563
G00 Z0.9219
G90 G49 G00 Z8. M5
M30
```

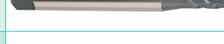
COMBO TAPS

INCH

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
T2 **T2-S** **T2-C**		HSS-EX	UNC/UNF	**MU**	USCTI 302A	H2~H6	2 ~ 3P	2.5D	Bright Steam Oxide TiCN	41
T5 **T5-S** **T5-C**		HSS-EX	M	**MU**	USCTI 302A	D3~D8	2 ~ 3P		Bright Steam Oxide TiCN	43
T6 **T6-N**	with Internal Coolant 	HSS-EX	UNC/UNF	**MU**	USCTI 302A	H4~H6	2 ~ 3P		Bright TiN	44
T8 **T8-N**	with Internal Coolant 	HSS-EX	M	**MU**	USCTI 302A	D5~D7	2 ~ 3P		Bright TiN	45
T7 **T7-C**	Short Chamfer 	HSS-EX	UNC/UNF	**MU**	USCTI 302A	H2~H6	1 ~ 2P		Bright TiCN	46
T9 **T9-C**	Short Chamfer 	HSS-EX	M	**MU**	USCTI 302A	D3~D8	1 ~ 2P		Bright TiCN	48
T1-S **T1-C**		HSS-EX	UNC/UNF	**MU**	DIN-ANSI Shank	H2~H6	2 ~ 3P		Steam Oxide TiCN	49
TA-S **TA-C**		HSS-EX	M	**MU**	DIN-ANSI Shank	D3~D7	2 ~ 3P		Steam Oxide TiCN	50
TCA-S/C **TCB-S/C**		Super HSS HSS-EX	UNC/UNF	**VA**	USCTI 302A	H2~H6	2 ~ 3P		Steam Oxide TiCN	51
TCC-S/C **TCD-S/C**		Super HSS HSS-EX	M	**VA**	USCTI 302A	D3~D7	2 ~ 3P		Steam Oxide TiCN	53
T4 **T4-S** **T4-C**		HSS-EX	UNC/UNF	**MU**	USCTI 302A	H2~H6	4 ~ 5P	3.0D	Bright Steam Oxide TiCN	54
T3 **T3-S** **T3-C**		HSS-EX	M	**MU**	USCTI 302A	D3~D8	4 ~ 5P		Bright Steam Oxide TiCN	56
TB **TB-N**	with Internal Coolant 	HSS-EX	UNC/UNF	**MU**	USCTI 302A	H4~H6	4 ~ 5P		Bright TiN	57
TH **TH-N**	with Internal Coolant 	HSS-EX	M	**MU**	USCTI 302A	D5~D7	4 ~ 5P		Bright TiN	58
TC-S **TC-C**		HSS-EX	UNC/UNF	**MU**	DIN-ANSI Shank	H2~H6	4 ~ 5P		Steam Oxide TiCN	59
TK-S **TK-C**		HSS-EX	M	**MU**	DIN-ANSI Shank	D3~D7	4 ~ 5P		Steam Oxide TiCN	60
TCE-S/C **TCF-S/C**		Super HSS HSS-EX	UNC/UNF	**VA**	USCTI 302A	H2~H6	4P		Steam Oxide TiCN	61
TCG-S/C **TCH-S/C**		Super HSS HSS-EX	M	**VA**	USCTI 302A	D3~D7	4P		Steam Oxide TiCN	63

SPIRAL FLUTE TAPS

INCH

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
BB/BI		Super HSS	UNC/UNF	**VG**	USCTI 302A	H2~H6	2 ~ 3P	2.5D	Steam Oxide Hardslick	68
BH/BM		Super HSS	M/MF	**VG**	USCTI 302A	D3~D7	2 ~ 3P		Steam Oxide Hardslick	70
BF/BK		Super HSS	UNC/UNF	**VG**	DIN-ANSI Shank	H2~H6	2 ~ 3P		Steam Oxide Hardslick	71
BD/BO		Super HSS	M/MF	**VG**	DIN-ANSI Shank	D3~D7	2 ~ 3P		Steam Oxide Hardslick	72
H5/H7/H8		P-HSS	UNC/UNF	**HR**	USCTI 302A	H2~H5	2 ~ 3P		Steam Oxide TiCN Hardslick	73
TQ858/ TK858/TR858		P-HSS	M/MF	**HR**	USCTI 302A	H2~H5	2 ~ 3P		Steam Oxide TiCN Hardslick	74
B3/B5/D6		P-HSS	UNC/UNF	**Ti Ni**	USCTI 302A	H2~H5	2 ~ 3P		Steam Oxide TiCN Hardslick	75
G9/H0		P-HSS	UNC/UNF	**VA**	DIN-ANSI Shank	H2~H3	2 ~ 3P		Hardslick	77
H2/H4		P-HSS	UNC/UNF	**VA**	DIN-ANSI Shank	H3	4 ~ 5P	3.0D	TiN Hardslick	78
BG/BG-GB		HSSE-V3	UNC/UN8	**VG**	DIN-ANSI Shank	2B	2 ~ 3P	2.5D	Hardslick Gold & Black	79
B1/B0/B2/D2		HSSE-V3	UNC/UNF	**VA**	USCTI 302A	H2~H7	2 ~ 3P		Bright Steam Oxide TiN/Hardslick	80
BS/BT		HSSE-V3	M/MF	**VA**	USCTI 302A	D3~D7	2 ~ 3P		Steam Oxide Hardslick	83
E6/E8/E9		HSSE-V3	M/MF	**VA**	DIN-ANSI Shank	D3~D7	2 ~ 3P		Steam Oxide TiCN Hardslick	84
D3/E0		HSSE-V3	UNC/UNF	**VG**	USCTI 302A	H2~H11	2 ~ 3P		Hardslick Steam Oxide	85
BU/BV		HSSE-V3	M/MF	**VG**	USCTI 302A	D3~D11	2 ~ 3P		Steam Oxide Hardslick	88
E2/E4/E5		HSSE-V3	M/MF	**VG**	DIN-ANSI Shank	D3~D7	2 ~ 3P		Steam Oxide TiCN Hardslick	90
C0/D8		HSSE-V3	UNC/UNF	**AI**	USCTI 302A	H2~H5	2 ~ 3P		Bright Hardslick	91
BW/BX		HSSE-V3	M/MF	**AI**	USCTI 302A	D3~D6	2 ~ 3P		Bright Hardslick	92

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
C2/C3/C4/D9		HSSE-V3	UNC/UNF	**GS**	USCTI 302	H2~H6	1.5 ~ 2P	2.5D	Steam Oxide Bright/TiN Hardslick	93
F4/F8/F6		HSS-V	UNC/UNF	**GS**	USCTI 302A	H2~H6	1.5 ~ 2P		Steam Oxide TiN Hardslick	94
G4/G5/G6		HSS-V	M/MF	**GS**	USCTI 302A	D3~D6	1.5 ~ 2P		Bright TiCN Hardslick	96
G0/G1/G2		HSS-V	UNC/UNF	**GS**	DIN-ANSI Shank	H2~H6	2 ~ 3P		Bright TiN Hardslick	97
T7A96/T6A96/ T8A96 T7295/T6295/ T8295		HSS	UNC/UNF	**GS**	USCTI 302	H2~H5	4 ~ 5P 1.5 ~ 2P		Bright Steam Oxide TiN	99
T7A86/T6A86/ T8A86 T7A85/T6A85/ T8A85		HSS	M/MF	**GS**	USCTI 302	D3~D6	4 ~ 5P 1.5 ~ 2P		Bright Steam Oxide TiN	100
T7D01/T8D01 T7D02/T8D02		HSS	UNC/UNF	**GS**	USCTI Long Shank	H3	4 ~ 5P 1.5 ~ 2P		Bright TiN	101

SPIRAL POINT TAPS

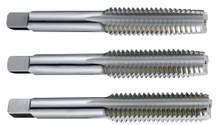
INCH

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
M9/O1		Super HSS	UNC/UNF	**VG**	USCTI 302A	H2~H6	4 ~ 5P		Steam Oxide Hardslick	106
N7/N8		Super HSS	M/MF	**VG**	USCTI 302A	D3~D7	4 ~ 5P		Steam Oxide Hardslick	108
N4/O5		Super HSS	UNC/UNF	**VG**	DIN-ANSI Shank	H2~H6	4 ~ 5P		Steam Oxide Hardslick	109
N3/O3		Super HSS	M/MF	**VG**	DIN-ANSI Shank	D3~D7	4 ~ 5P		Steam Oxide Hardslick	110
M4/M6/M7		P-HSS	UNC/UNF	**HR**	USCTI 302A	H2~H5	4 ~ 5P		Steam Oxide TiCN Hardslick	111
TQ808/ TK808/TR808		P-HSS	M/MF	**HR**	USCTI 302A	H2~H5	4 ~ 5P		Steam Oxide TiCN Hardslick	112
I3/I5/J6		P-HSS	UNC/UNF	**Ti Ni**	USCTI 302A	H2~H5	4 ~ 5P		Steam Oxide TiCN Hardslick	113
M2/M3		P-HSS	UNC/UNF	**VA**	USCTI Long Shank	H2~H3	4 ~ 5P		Hardslick	115
I0/I2/J2		HSSE-V3	UNC/UNF	**VA**	USCTI 302A	H2~H7	4 ~ 5P	3.0D	Steam Oxide TiN Hardslick	116
O9/IA		HSSE-V3	M/MF	**VA**	USCTI 302A	D3~D7	4 ~ 5P		Steam Oxide Hardslick	119
K3/K5/K6		HSSE-V3	M/MF	**VA**	DIN-ANSI Shank	D3~D7	4 ~ 5P		Steam Oxide TiCN Hardslick	120
J3/J8		HSSE-V3	UNC/UNF	**VG**	USCTI 302A	H2~H11	4 ~ 5P		Steam Oxide Hardslick	121
IB/IC		HSSE-V3	M/MF	**VG**	USCTI 302A	D3~D11	4 ~ 5P		Steam Oxide Hardslick	125
J9/K7/K2		HSSE-V3	M/MF	**VG**	DIN-ANSI Shank	D3~D7	4 ~ 5P		Steam Oxide TiCN Hardslick	127
T2496		HSSE-V3	UNC/UNF	**AI**	USCTI 302A	H2~H5	4 ~ 5P		Bright	128
T2K01		HSSE-V3	M/MF	**AI**	USCTI 302A	D3~D6	4 ~ 5P		Bright	129
I9/J0/J1/J7		HSSE-V3	UNC/UNF	**GS**	USCTI	H2~H6	4 ~ 5P		Steam Oxide Bright/TiN Hardslick	130
K9/L0/L1		HSS-V	UNC/UNF	**GS**	USCTI 302A	H2~H6	4 ~ 5P		Bright TiN Hardslick	131

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
L7/L8/L9		HSS-V	M/MF	**GS**	USCTI 302A	D3~D6	4 ~ 5P		Bright TiCN Hardslick	132
L3/L4/L5		HSS-V	UNC/UNF	**GS**	DIN-ANSI Shank	H2~H6	4 ~ 5P		Bright TiN Hardslick	133
T7216/T6216/ T8216 T7C16/T6C16/ T8C16		HSS	UNC/UNF	**GS**	USCTI 302	H1~H7	4 ~ 5P		Bright Finish Steam Oxide TiN	134
T7256/T6256		HSS	UNC/UNF	**GS**	USCTI 302	H1~H7	1.5 ~ 2P		Bright Finish Steam Oxide	138
T7217/T6217/ T8217		HSS	M/MF	**GS**	USCTI 302	D3~D7	4 ~ 5P	3.0D	Bright Finish Steam Oxide TiN	140
T7226/T6226/ T8226		HSS	UNC/UNF	**GS**	USCTI 302	+.005" oversize	4 ~ 5P		Bright Finish Steam Oxide TiN	141
T7B17/T6B17/ T8B17		HSS	M/MF	**GS**	USCTI 302	+.127mm oversize	4 ~ 5P		Bright Finish Steam Oxide TiN	142
T7236/T6236/ T8236 T7G36/ T6G36/T8G36		HSS	UNC/UNF	**GS**	USCTI Long Shank	H3	4 ~ 5P		Bright Finish Steam Oxide TiN	143

STRAIGHT FLUTE TAPS

INCH

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
T0C01		Carbide	UNC/UNF	**GG**	USCTI 302A	2B	1.5 ~ 2P	2.0D	Bright	147
TR		Super HSS	UNC/UNF	**GG**	USCTI 302A	H3~H5	2 ~ 3P		TiAlN	148
			M	**GG**		D4~D6	2 ~ 3P			
TR-A, TR-R		Super HSS	UNC/UNF	**GG**	USCTI 302A	H3~H5	2 ~ 3P		TiAlN	150
			M	**GG**		D4~D6	2 ~ 3P			
T7316/T6316/ T8316/T7A16 T7B16		HSS	UNC/ UNF/ UNS	**GS**	USCTI 302	H1~H7	9P/5P/2P		Bright Steam Oxide TiN	152
T7315/T6315/ T8315		HSS	M/MF	**GS**	USCTI 302	D3~D9	9P/5P/2P		Bright Steam Oxide TiN	158
T7326		HSS	UNC/UNF	**GS**	USCTI 302	+.005" oversize	5P/2P		Bright	159
T7B15		HSS	M/MF	**GS**	USCTI 302	+.127mm oversize	5P/2P		Bright	160
T7336		HSS	UNC/UNF	**GS**	USCTI 302 (Left Hand)	H2~H4	5P/2P		Bright	161
T7A15		HSS	UNC/UNF	**GS**	USCTI 302 (Left Hand)	D4~D8	5P/2P		Bright	162
T7616/T6616/ T8616		HSS	UNC/UNF	**GS**	USCTI Long Shank	H3	4 ~ 5P		Bright Steam Oxide TiN	163

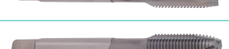
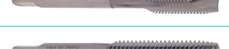
FORMING TAPS

INCH

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
TKR03		Super HSS	UNC/UNF	**GV**	USCTI 302A	H3~H7	2 ~ 3P	3.0D	TiCN	167
ZF		HSSE-V3	UNC/UNF	**GV**	USCTI 302	H2~H5	1.5 ~ 2P		Bright	168
Z0/Z1/Z2/Z3		HSSE-V3	UNC/UNF	**GV**	USCTI 302A	H2~H12	4 ~ 5P 1.5 ~ 2P		Bright TiN	169
Z4/Z5/Z6/Z7		HSSE-V3	UNC/UNF	**GV**	USCTI 302A	H3~H12	4 ~ 5P 1.5 ~ 2P		Bright TiN	171
Z8/ZA/ZC Z9/ZB/ZD		HSSE-V3	M/MF	**GV**	USCTI 302A	D3~D11	4 ~ 5P 1.5 ~ 2P		Bright TiN /TiCN	173
T7R01/T8R01/ THR01 T7R02/T8R02/ THR02		HSS	UNC/UNF	**GV**	USCTI 302A	H2~H5	4 ~ 5P 1.5 ~ 2P		Bright TiN /TiCN	174

SCREW THREAD INSERT TAPS

INCH

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
ST/SI		HSSE-V3	UNC/UNF	**GS**	USCTI 322	2B	1.5 ~ 2P	2.5D	Hardslick	177
T7406		HSS	UNC/UNF	**GS**	USCTI 322	H2~H4	1.5 ~ 2P		Bright	178
T7425		HSS	M/MF	**GS**	USCTI 322A	D2~D4	1.5 ~ 2P		Bright	179
ST/SI		HSSE-V3	UNC/UNF	**GS**	USCTI 322	2B	4 ~ 5P	3.0D	Hardslick	180
T7436		HSS	UNC/UNF	**GS**	USCTI 322	H1~H4	4 ~ 5P		Bright	181
T7415		HSS	M/MF	**GS**	USCTI 322A	D2~D4	4 ~ 5P		Bright	182
T7426		HSS	UNC/UNF	**GS**	USCTI 322	H1~H4	4 ~ 5P 1.5 ~ 2P	2.0D	Bright	183
T7405		HSS	M/MF	**GS**	USCTI 322A	D2~D4	4 ~ 5P 1.5 ~ 2P		Bright	184

PIPE TAPS

INCH

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Chamfer	Thread Depth	Surface Treatment	Page
Q1/Q0/Q6		HSSE-V3	NPTF	**VA**	USCTI 311	2 ~ 3P	2.5D	Bright Steam Oxide Hardslick	187
Q9/R0/R1		HSSE-V3	NPTF	**GG**	USCTI 311	2 ~ 3P		Bright TiN Hardslick	188
R7/R8/R9/S0		HSSE-V3	NPTF	**GG**	USCTI 311	2 ~ 3P	2.0D	Bright TiN Hardslick Nitrided-Steam Oxide	189
S1/S2		HSSE-V3	NPTF	**GG**	USCTI 311	2 ~ 3P		Bright TiCN	190
T7L36/T6L36 T7536/T6536		HSS	NPS/NPSF	**GS**	USCTI 311	4 ~ 5P		Bright Steam Oxide	191
T7505/T6505/ TH505		HSS	NPT	**GS**	USCTI 311	2 ~ 3P		Bright Steam Oxide TiCN	192
T7546/T8546		HSS	NPTF	**GS**	USCTI 311	2 ~ 3P		Bright TiN	193

HIGH PERFORMANCE TAPS RECOMMENDATION TABLE

Super HSS : Premium HSS Metallurgy
P-HSS : Powdered Metallurgy
HSSE-V3 : 3% Vanadium Alloy HSS-EX
HSS-V : Vanadium Alloy HSS

◎= RECOMMENDED
○= SUITABLE

COOLANT
A = Cutting Oil
T = Oil Emulsion
X = Cutting Oil/Oil Emulsion

	MU			MU			MU
SERIES	T2	T2-S	T2-C	T5	T5-S	T5-C	T6 T6-N
DESCRIPTION	USCTI 302A			USCTI 302A			USCTI 302A
PAGE	41			43			44
THREADS	UNC/UNF			M			UNC/UNF
TAP MATERIALS	HSS-EX			HSS-EX			HSS-EX
CHAMFER LENGTH	2-3P			2-3P			2-3P
SURFACE TREATMENT	Bright	Steam Oxide	TiCN	Bright	Steam Oxide	TiCN	Bright TiN
SPIRAL FLUTE ANGLE	R40°			R40°			R40°
Thread Depth	2.5D			2.5D			2.5D
HOLE TYPE	Blind			Blind			Blind
							

	MU	MU	MU	MU		MU		VA	VA	MU			MU		
SERIES	T8 T8-N	T7 T7-C	T9 T9-C	T1-S	T1-C	TA-S	TA-C	TCA-S/C TCB-S/C	TCC-S/C TCD-S/C	T4	T4-S	T4-C	T3	T3-S	T3-C
DESCRIPTION	USCTI 302A	USCTI 302A	USCTI 302A	DIN-ANSI Shank		DIN-ANSI Shank		USCTI 302A	USCTI 302A	USCTI 302A			USCTI 302A		
PAGE	45	46	48	49		50		51	53	54			56		
THREADS	M	UNC/UNF	M	UNC/UNF		M		UNC/UNF	M	UNC/UNF			M		
TAP MATERIALS	HSS-EX	HSS-EX	HSS-EX	HSS-EX		HSS-EX		Super HSS HSS-EX	Super HSS HSS-EX	HSS-EX			HSS-EX		
CHAMFER LENGTH	2-3P	1-2P	1-2P	2-3P		2-3P		2-3P	2-3P	4-5P			4-5P		
SURFACE TREATMENT	Bright TiN	Bright TiCN	Bright TiCN	Steam Oxide	TiCN	Steam Oxide	TiCN	Steam Oxide TiCN	Steam Oxide TiCN	Bright	Steam Oxide	TiCN	Bright	Steam Oxide	TiCN
SPIRAL FLUTE ANGLE	R40°	R40°	R40°	R40°		R40°		R45°	R45°	-			-		
Thread Depth	2.5D	2.5D	2.5D	2.5D		2.5D		2.5D	2.5D	3.0D			3.0D		
HOLE TYPE	Blind	Blind	Blind	Blind		Blind		Blind	Blind	Through			Through		
															

Material Group	Material Sub-Group	ISO	Hardness (HRc)	Hardness (BHN)	Cutting Speed (SFM) Uncoated	Cutting Speed (SFM) Coated	COOLANT	T2	T2-S	T2-C	T5	T5-S	T5-C	T6 T6-N
Steel	Low carbon steels Free machining carbon steels	P	<15	<180	25 – 50	50 – 80	T	◎	◎	◎	◎	◎	◎	◎
	Medium to high carbon steels Low alloyed steels	P	<23	<240	25 – 50	50 – 80	T	◎	◎	◎	◎	◎	◎	◎
	Steel castings & forgings Heat-treatable alloy steels	P	>24 ≤38	>250 ≤350	6 – 30	10 – 35	X	◎	◎	◎	◎	◎	◎	◎
	Alloyed tool steels Mold steels	P	>38 ≤44	>350 ≤420	6 – 12	–	A	◎	◎	◎	◎	◎	◎	◎
Stainless Steel	Free machining stainless steels	M	<23	<240	12 – 35	20 – 50	A	◎	◎	◎	◎	◎	◎	◎
	Heat-and corrosion-resistant stainless steels Valve stainless steels	M	>24 ≤38	>250 ≤350	12 – 15	12 – 15	A	◎	◎	◎	◎	◎	◎	◎
	Stainless steel castings Precipitation hardening stainless steels	M	>38 ≤44	>350 ≤420	12 – 15	–	A	◎	◎	◎	◎	◎	◎	◎
Aluminum	Pure Aluminum Aluminum alloys	N	–	–	50 – 65	–	T	◎		◎	◎		◎	◎
	Aluminum alloy castings	N	–	–	40 – 65	45 – 90	T	◎		◎	◎		◎	◎
Cast Iron	Grey cast iron	K	–	≤220	35 – 50	50 – 65	T	◎	◎	◎	◎	◎	◎	◎
	Nodular cast iron / Chilled cast iron Meehanite iron / Ductile iron	K	–	≥250	12 – 45	25 – 55	X	◎	◎	◎	◎	◎	◎	◎
Nickel Alloys	718 & 625 INCOn / Waspaloy Hastelloyn / Invar Moneln / Incoloy	S	≤38	≤350	10 – 15	–	A	○	○	○	○	○	○	○
	718 Inconel A286	S	>38 ≤44	>350 ≤420	10 – 12	–	A							
Titanium		S	≤38	≤350	3 – 15	–	A	○	○	○	○	○	○	○
Copper	Pure and alloyed copper	N	–	–	50 – 60	65 – 100	T	◎	◎	◎	◎	◎	◎	◎
Brass	Free machining brass Alloyed brass	N	–	–	30 – 65	–	T	◎	◎	◎	◎	◎	◎	◎
Bronze		N	44	<420	12 – 20	35 – 80	T	◎	◎	◎	◎	◎	◎	◎
Zinc		N	–	–	25 – 65	50 – 80	T	◎	◎	◎	◎	◎	◎	◎
Magnesium		N	–	–	–	45 – 100	T	◎	◎	◎	◎	◎	◎	◎

Material Sub-Group	T8 T8-N	T7 T7-C	T9 T9-C	T1-S	T1-C	TA-S	TA-C	TCA-S/C TCB-S/C	TCC-S/C TCD-S/C	T4	T4-S	T4-C	T3	T3-S	T3-C
Low carbon steels / Free machining carbon steels	◎	◎	◎	◎	◎	◎	◎	○	○	◎	◎	◎	◎	◎	◎
Medium to high carbon steels / Low alloyed steels	◎	◎	◎	◎	◎	◎	◎	○	○	◎	◎	◎	◎	◎	◎
Steel castings & forgings / Heat-treatable alloy steels	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎
Alloyed tool steels / Mold steels	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎
Free machining stainless steels	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
Heat-and corrosion-resistant stainless steels / Valve stainless steels	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎
Stainless steel castings / Precipitation hardening stainless steels	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎
Pure Aluminum / Aluminum alloys	◎	◎	◎		◎		◎			◎		◎	◎		◎
Aluminum alloy castings	◎	◎	◎		◎		◎			◎		◎	◎		◎
Grey cast iron	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎
Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎
718 & 625 INCOn / Waspaloy / Hastelloyn / Invar / Moneln / Incoloy	○	○	○	○	○	○	○			○	○	○	○	○	○
718 Inconel / A286															
Titanium	○	○	○	○	○	○	○			○	○	○	○	○	○
Pure and alloyed copper	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎
Free machining brass / Alloyed brass	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎
Bronze	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎
Zinc	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎
Magnesium	◎	◎	◎	◎	◎	◎	◎			◎	◎	◎	◎	◎	◎

HIGH PERFORMANCE TAPS RECOMMENDATION TABLE

Super HSS : Premium HSS Metallurgy
P-HSS : Powdered Metallurgy
HSSE-V3 : 3% Vanadium Alloy HSS-EX
HSS-V : Vanadium Alloy HSS

◎= RECOMMENDED
○= SUITABLE

COOLANT
A = Cutting Oil
T = Oil Emulsion
X = Cutting Oil/Oil Emulsion

Material Group	Material Sub-Group	ISO	Hardness (HRc)	Hardness (BHN)	Cutting Speed (SFM) Uncoated	Cutting Speed (SFM) Coated	COOLANT	MU TB TB-N	MU TH TH-N	MU TC-S	MU TC-C
	SERIES							TB TB-N	TH TH-N	TC-S	TC-C
	DESCRIPTION							USCTI 302A	USCTI 302A	DIN-ANSI Shank	
	PAGE							57	58	59	
	THREADS							UNC/UNF	M	UNC/UNF	
	TAP MATERIALS							HSS-EX	HSS-EX	HSS-EX	
	CHAMFER LENGTH							4-5P	4-5P	4-5P	
	SURFACE TREATMENT							Bright TiN	Bright TiN	Steam Oxide	TiCN
	SPIRAL FLUTE ANGLE							-	-	-	
	Thread Depth							3.0D	3.0D	3.0D	
	HOLE TYPE							Through	Through	Through	
Steel	Low carbon steels Free machining carbon steels	P	<15	<180	25 – 50	50 – 80	T	◎	◎	◎	◎
	Medium to high carbon steels Low alloyed steels	P	<23	<240	25 – 50	50 – 80	T	◎	◎	◎	◎
	Steel castings & forgings Heat-treatable alloy steels	P	>24 ≤38	>250 ≤350	6 – 30	10 – 35	X	◎	◎	◎	◎
	Alloyed tool steels Mold steels	P	>38 ≤44	>350 ≤420	6 – 12	–	A	◎	◎	◎	◎
Stainless Steel	Free machining stainless steels	M	<23	<240	12 – 35	20 – 50	A	◎	◎	◎	◎
	Heat-and corrosion-resistant stainless steels Valve stainless steels	M	>24 ≤38	>250 ≤350	12 – 15	12 – 15	A	◎	◎	◎	◎
	Stainless steel castings Precipitation hardening stainless steels	M	>38 ≤44	>350 ≤420	12 – 15	–	A	◎	◎	◎	◎
Aluminum	Pure Aluminum Aluminum alloys	N	–	–	50 – 65	–	T	◎	◎		◎
	Aluminum alloy castings	N	–	–	40 – 65	45 – 90	T	◎	◎		◎
Cast Iron	Grey cast iron	K	–	≤220	35 – 50	50 – 65	T	◎	◎	◎	◎
	Nodular cast iron / Chilled cast iron Meehanite iron / Ductile iron	K	–	≥250	12 – 45	25 – 55	X	◎	◎	◎	◎
Nickel Alloys	718 & 625 INCOn / Waspaloy Hastelloyn / Invar Moneln / Incoloy	S	≤38	≤350	10 – 15	–	A	○	○	○	○
	718 Inconel A286	S	>38 ≤44	>350 ≤420	10 – 12	–	A				
Titanium		S	≤38	≤350	3 – 15	–	A	○	○	○	○
Copper	Pure and alloyed copper	N	–	–	50 – 60	65 – 100	T	◎	◎	◎	◎
Brass	Free machining brass Alloyed brass	N	–	–	30 – 65	–	T	◎	◎	◎	◎
Bronze		N	44	<420	12 – 20	35 – 80	T	◎	◎	◎	◎
Zinc		N	–	–	25 – 65	50 – 80	T	◎	◎	◎	◎
Magnesium		N	–	–	–	45 – 100	T	◎	◎	◎	◎

MU TK-S	MU TK-C	VA TCE-S/C TCF-S/C	VA TCG-S/C TCH-S/C	VG BB/BI	VG BH/BM	VG BF/BK	VG BD/BO	HR H5/H7/H8	HR TQ858/ TK858/ TR858
DIN-ANSI Shank		USCTI 302A	USCTI 302A	USCTI 302A	USCTI 302A	DIN-ANSI Shank	DIN-ANSI Shank	USCTI 302A	USCTI 302A
60		61	63	68	70	71	72	73	74
M		UNC/UNF	M	UNC/UNF	M/MF	UNC/UNF	M/MF	UNC/UNF	M/MF
HSS-EX		Super HSS HSS-EX	Super HSS HSS-EX	Super HSS	Super HSS	Super HSS	Super HSS	P-HSS	P-HSS
4-5P		4P	4P	2-3P	2-3P	2-3P	2-3P	2-3P	2-3P
Steam Oxide	TiCN	Steam Oxide TiCN	Steam Oxide TiCN	Steam Oxide Hardslick	Steam Oxide Hardslick	Steam Oxide Hardslick	Steam Oxide Hardslick	Steam Oxide TiCN Hardslick	Steam Oxide TiCN Hardslick
-		-	-	R40°	R40°	R40°	R40°	R15°	R15°
3.0D		3.0D	3.0D	2.5D	2.5D	2.5D	2.5D	2.5D	2.5D
Through		Through	Through	Blind	Blind	Blind	Blind	Blind	Blind
◎	◎	○	○	○	○	○	○		
◎	◎	○	○	○	○	○	○		
◎	◎			◎	◎	◎	◎	○	○
◎	◎							◎	◎
◎	◎	◎	◎	◎	◎	◎	◎		
◎	◎			◎	◎	◎	◎	○	○
◎	◎							◎	◎
	◎			○	○	○	○		
	◎								
◎	◎								
◎	◎								
○	○							○	○
								○	○
○	○							○	○
◎	◎			○	○	○	○		
◎	◎			○	○	○	○		
◎	◎							◎	◎
◎	◎			○	○	○	○		
◎	◎			○	○	○	○		

HIGH PERFORMANCE TAPS RECOMMENDATION TABLE

Super HSS : Premium HSS Metallurgy
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◎= RECOMMENDED
○= SUITABLE

COOLANT
A = Cutting Oil
T = Oil Emulsion
X = Cutting Oil/Oil Emulsion

								Ti / Ni	VA	VA
							SERIES	B3/B5/D6	G9/H0	H2/H4
							DESCRIPTION	USCTI 302A	USCTI Long Shank	USCTI Long Shank
							PAGE	75	77	78
							THREADS	UNC/UNF	UNC/UNF	UNC/UNF
							TAP MATERIALS	P-HSS	P-HSS	P-HSS
							CHAMFER LENGTH	2-3P	2-3P	4-5P
							SURFACE TREATMENT	Steam Oxide TiCN Hardslick	Hardslick	TiN Hardslick
							SPIRAL FLUTE ANGLE	R15°	R45°	L15°
							Thread Depth	2.5D	2.5D	3.0D
							HOLE TYPE	Blind	Blind	Through
Material Group	Material Sub-Group	ISO	Hardness (HRc)	Hardness (BHN)	Cutting Speed (SFM) Uncoated	Cutting Speed (SFM) Coated	COOLANT			
Steel	Low carbon steels Free machining carbon steels	P	<15	<180	25 – 50	50 – 80	T		○	○
	Medium to high carbon steels Low alloyed steels	P	<23	<240	25 – 50	50 – 80	T		◎	◎
	Steel castings & forgings Heat-treatable alloy steels	P	>24 ≤38	>250 ≤350	6 – 30	10 – 35	X			
	Alloyed tool steels Mold steels	P	>38 ≤44	>350 ≤420	6 – 12	–	A			
Stainless Steel	Free machining stainless steels	M	<23	<240	12 – 35	20 – 50	A		◎	◎
	Heat-and corrosion-resistant stainless steels Valve stainless steels	M	>24 ≤38	>250 ≤350	12 – 15	12 – 15	A			
	Stainless steel castings Precipitation hardening stainless steels	M	>38 ≤44	>350 ≤420	12 – 15	–	A			
Aluminum	Pure Aluminum Aluminum alloys	N	–	–	50 – 65	–	T		○	○
	Aluminum alloy castings	N	–	–	40 – 65	45 – 90	T			
Cast Iron	Grey cast iron	K	–	≤220	35 – 50	50 – 65	T			
	Nodular cast iron / Chilled cast iron Meehanite iron / Ductile iron	K	–	≥250	12 – 45	25 – 55	X			
Nickel Alloys	718 & 625 INCOn / Waspaloy Hastelloyn / Invar Moneln / Incoloy	S	≤38	≤350	10 – 15	–	A	◎		
	718 Inconel A286	S	>38 ≤44	>350 ≤420	10 – 12	–	A	◎		
Titanium		S	≤38	≤350	3 – 15	–	A	◎		
Copper	Pure and alloyed copper	N	–	–	50 – 60	65 – 100	T		○	○
Brass	Free machining brass Alloyed brass	N	–	–	30 – 65	–	T		○	○
Bronze		N	44	<420	12 – 20	35 – 80	T			
Zinc		N	–	–	25 – 65	50 – 80	T		○	○
Magnesium		N	–	–	–	45 – 100	T		○	○

VG	VA	VA	VA	VG	VG	VG	Al
BG/BG-GB	B1/B0/B2/D2	BS/BT	E6/E8/E9	D3/E0	BU/BV	E2/E4/E5	C0/D8
DIN-ANSI Shank	USCTI 302A	USCTI 302A	DIN-ANSI Shank	USCTI 302A	USCTI 302A	DIN-ANSI Shank	USCTI 302A
79	80	83	84	85	88	90	91
UNC/UN8	UNC/UNF	M/MF	M/MF	UNC/UNF	M/MF	M/MF	UNC/UNF
HSSE-V3	HSSE-V3	HSSE-V3	HSSE-V3	HSSE-V3	HSSE-V3	HSSE-V3	HSSE-V3
2-3P	2-3P	2-3P	2-3P	2-3P	2-3P	2-3P	2-3P
Hardslick Gold & Black	Bright Steam Oxide TiN Hardslick	Steam Oxide Hardslick	Steam Oxide TiCN Hardslick	Steam Oxide Hardslick	Steam Oxide Hardslick	Steam Oxide TiCN Hardslick	Bright Hardslick
R40°	R45°	R45°	R45°	R45°	R45°	R45°	R50°
2.5D	2.5D	2.5D	2.5D	2.5D	2.5D	2.5D	2.5D
Blind	Blind	Blind	Blind	Blind	Blind	Blind	Blind
	○	○	○				
○	◎	◎	◎	◎	◎	◎	
◎				◎	◎	◎	
◎	◎	◎	◎	○	○	○	
◎				○	○	○	
	○	○	○				◎
◎							◎
				○	○	○	
	○	○	○				
	○	○	○				
	○	○	○				
	○	○	○				

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◎= RECOMMENDED
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COOLANT
A = Cutting Oil
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| | | |

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◎= RECOMMENDED
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COOLANT
A = Cutting Oil
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X = Cutting Oil/Oil Emulsion

								VG	VG	HR
							SERIES	N4/O5	N3/O3	M4/M6/M7
							DESCRIPTION	DIN-ANSI Shank	DIN-ANSI Shank	USCTI 302A
							PAGE	109	110	111
							THREADS	UNC/UNF	M/MF	UNC/UNF
							TAP MATERIALS	Super HSS	Super HSS	P-HSS
							CHAMFER LENGTH	4-5P	4-5P	4-5P
							SURFACE TREATMENT	Steam Oxide Hardslick	Steam Oxide Hardslick	Steam Oxide TiCN Hardslick
							SPIRAL FLUTE ANGLE	-	-	-
							Thread Depth	3.0D	3.0D	3.0D
							HOLE TYPE	Through	Through	Through
Material Group	Material Sub-Group	ISO	Hardness (HRc)	Hardness (BHN)	Cutting Speed (SFM) Uncoated	Cutting Speed (SFM) Coated	COOLANT			
Steel	Low carbon steels Free machining carbon steels	P	<15	<180	25 – 50	50 – 80	T	○	○	
	Medium to high carbon steels Low alloyed steels	P	<23	<240	25 – 50	50 – 80	T	◎	◎	
	Steel castings & forgings Heat-treatable alloy steels	P	>24 ≤38	>250 ≤350	6 – 30	10 – 35	X	◎	◎	○
	Alloyed tool steels Mold steels	P	>38 ≤44	>350 ≤420	6 – 12	–	A			◎
Stainless Steel	Free machining stainless steels	M	<23	<240	12 – 35	20 – 50	A	◎	◎	
	Heat-and corrosion-resistant stainless steels Valve stainless steels	M	>24 ≤38	>250 ≤350	12 – 15	12 – 15	A	◎	◎	○
	Stainless steel castings Precipitation hardening stainless steels	M	>38 ≤44	>350 ≤420	12 – 15	–	A			◎
Aluminum	Pure Aluminum Aluminum alloys	N	–	–	50 – 65	–	T	○	○	
	Aluminum alloy castings	N	–	–	40 – 65	45 – 90	T			
Cast Iron	Grey cast iron	K	–	≤220	35 – 50	50 – 65	T			
	Nodular cast iron / Chilled cast iron Meehanite iron / Ductile iron	K	–	≥250	12 – 45	25 – 55	X			
Nickel Alloys	718 & 625 INCOn / Waspaloy Hastelloyn / Invar Moneln / Incoloy	S	≤38	≤350	10 – 15	–	A			○
	718 Inconel A286	S	>38 ≤44	>350 ≤420	10 – 12	–	A			○
Titanium		S	≤38	≤350	3 – 15	–	A			○
Copper	Pure and alloyed copper	N	–	–	50 – 60	65 – 100	T	○	○	
Brass	Free machining brass Alloyed brass	N	–	–	30 – 65	–	T	○	○	
Bronze		N	44	<420	12 – 20	35 – 80	T			◎
Zinc		N	–	–	25 – 65	50 – 80	T	○	○	
Magnesium		N	–	–	–	45 – 100	T	○	○	

HR	Ti / Ni	VA	VA	VA	VA	VG	VG	VG
TQ808/ TK808/ TR808	I3/I5/J6	M2/M3	I0/I2/J2	O9/IA	K3/K5/K6	J3/J8	IB/IC	J9/K7/K2
USCTI 302A	USCTI 302A	USCTI Long Shank	USCTI 302A	USCTI 302A	DIN-ANSI Shank	USCTI 302A	USCTI 302A	DIN-ANSI Shank
112	113	115	116	119	120	121	125	127
M/MF	UNC/UNF	UNC/UNF	UNC/UNF	M/MF	M/MF	UNC/UNF	M/MF	M/MF
P-HSS	P-HSS	P-HSS	HSSE-V3	HSSE-V3	HSSE-V3	HSSE-V3	HSSE-V3	HSSE-V3
4-5P	4-5P	4-5P	4-5P	4-5P	4-5P	4-5P	4-5P	4-5P
Steam Oxide TiCN Hardslick	Steam Oxide TiCN Hardslick	Hardslick	Steam Oxide TiN Hardslick	Steam Oxide Hardslick	Steam Oxide TiCN Hardslick	Steam Oxide Hardslick	Steam Oxide Hardslick	Steam Oxide TiCN Hardslick
	-	-	-	-	-	-	-	-
3.0D	3.0D	3.0D	3.0D	3.0D	3.0D	3.0D	3.0D	3.0D
Through	Through	Through	Through	Through	Through	Through	Through	Through
		○	○	○	○			
		○	○	○	○			
		◎	◎	◎	◎	◎	◎	◎
○						◎	◎	◎
◎								
		◎	◎	◎	◎	○	○	○
○						○	○	○
◎								
		○	○	○	○			
○	◎					○	○	○
○	◎							
○	◎							
		○	○	○	○			
		○	○	○	○			
◎								
		○	○	○	○			
		○	○	○	○			

HIGH PERFORMANCE TAPS RECOMMENDATION TABLE

Super HSS : Premium HSS Metallurgy
P-HSS : Powdered Metallurgy
HSSE-V3 : 3% Vanadium Alloy HSS-EX
HSS-V : Vanadium Alloy HSS

◎= RECOMMENDED
○= SUITABLE

COOLANT
A = Cutting Oil
T = Oil Emulsion
X = Cutting Oil/Oil Emulsion

			SERIES				Al	Al	GS	
							T2496	T2K01	I9/J0/J1/J7	
			DESCRIPTION				USCTI 302A	USCTI 302A	USCTI	
			PAGE				128	129	130	
			THREADS				UNC/UNF	M/MF	UNC/UNF	
			TAP MATERIALS				HSSE-V3	HSSE-V3	HSSE-V3	
			CHAMFER LENGTH				4-5P	4-5P	4-5P	
			SURFACE TREATMENT				Bright	Bright	Steam Oxide Bright/TiN Hardslick	
			SPIRAL FLUTE ANGLE				-	-	-	
			Thread Depth				3.0D	3.0D	3.0D	
			HOLE TYPE				Through	Through	Through	
Material Group	Material Sub-Group	ISO	Hardness (HRc)	Hardness (BHN)	Cutting Speed (SFM) Uncoated	Cutting Speed (SFM) Coated	COOLANT			
Steel	Low carbon steels Free machining carbon steels	P	<15	<180	25 – 50	50 – 80	T			◎
	Medium to high carbon steels Low alloyed steels	P	<23	<240	25 – 50	50 – 80	T			◎
	Steel castings & forgings Heat-treatable alloy steels	P	>24 ≤38	>250 ≤350	6 – 30	10 – 35	X			○
	Alloyed tool steels Mold steels	P	>38 ≤44	>350 ≤420	6 – 12	–	A			
Stainless Steel	Free machining stainless steels	M	<23	<240	12 – 35	20 – 50	A			○
	Heat-and corrosion-resistant stainless steels Valve stainless steels	M	>24 ≤38	>250 ≤350	12 – 15	12 – 15	A			○
	Stainless steel castings Precipitation hardening stainless steels	M	>38 ≤44	>350 ≤420	12 – 15	–	A			
Aluminum	Pure Aluminum Aluminum alloys	N	–	–	50 – 65	–	T	◎	◎	
	Aluminum alloy castings	N	–	–	40 – 65	45 – 90	T	◎	◎	○
Cast Iron	Grey cast iron	K	–	≤220	35 – 50	50 – 65	T			
	Nodular cast iron / Chilled cast iron Meehanite iron / Ductile iron	K	–	≥250	12 – 45	25 – 55	X			○
Nickel Alloys	718 & 625 INCOn / Waspaloy Hastelloyn / Invar Moneln / Incoloy	S	≤38	≤350	10 – 15	–	A			
	718 Inconel A286	S	>38 ≤44	>350 ≤420	10 – 12	–	A			
Titanium		S	≤38	≤350	3 – 15	–	A			
Copper	Pure and alloyed copper	N	–	–	50 – 60	65 – 100	T			
Brass	Free machining brass Alloyed brass	N	–	–	30 – 65	–	T			
Bronze		N	44	<420	12 – 20	35 – 80	T			
Zinc		N	–	–	25 – 65	50 – 80	T			
Magnesium		N	–	–	–	45 – 100	T			

GS	GS	GS	GS	GS	GS	GS	GS
K9/L0/L1	L7/L8/L9	L3/L4/L5	T7216/T6216/T8216 T7C16/T6C16/T8C16	T7256 /T6256	T7217/T6217/ T8217	T7226/T6226/ T8226	T7B17/T6B17/ T8B17
USCTI 302A	USCTI 302A	DIN-ANSI Shank	USCTI 302	USCTI 302	USCTI 302	USCTI Oversize	USCTI Oversize
131	132	133	134	138	140	141	142
UNC/UNF	M/MF	UNC/UNF	UNC/UNF	UNC/UNF	M/MF	UNC/UNF	M/MF
HSS-V	HSS-V	HSS-V	HSS	HSS	HSS	HSS	HSS
4-5P	4-5P	4-5P	4-5P	1.5-2P	4-5P	4-5P	4-5P
Bright TiN Hardslick	Bright TiCN Hardslick	Bright TiN Hardslick	Bright Steam Oxide TiN	Bright Steam Oxide	Bright Steam Oxide TiN	Bright Steam Oxide TiN	Bright Steam Oxide TiN
-	-	-	-	-	-	-	-
3.0D	3.0D	3.0D	3.0D	3.0D	3.0D	3.0D	3.0D
Through	Through	Through	Through	Through	Through	Through	Through
◎	◎	◎	◎	◎	◎	◎	◎
◎	◎	◎	◎	◎	◎	◎	◎
◎	◎	◎	◎	◎	◎	◎	◎
○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○

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Super HSS : Premium HSS Metallurgy
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HSS-V : Vanadium Alloy HSS

◎= RECOMMENDED
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COOLANT
A = Cutting Oil
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								GS	GG
							SERIES	T7236/T6236/T8236 T7G36/T6G36/T8G36	T0C01
							DESCRIPTION	USCTI Long Shank	USCTI 302A
							PAGE	143	147
							THREADS	UNC/UNF	UNC/UNF
							TAP MATERIALS	HSS	Carbide
							CHAMFER LENGTH	4-5P	1.5-2P
							SURFACE TREATMENT	Bright Steam Oxide TiN	Bright
							SPIRAL FLUTE ANGLE	-	-
							Thread Depth	3.0D	2.0D
							HOLE TYPE	Through	Blind Through
Material Group	Material Sub-Group	ISO	Hardness (HRc)	Hardness (BHN)	Cutting Speed (SFM) Uncoated	Cutting Speed (SFM) Coated	COOLANT		
Steel	Low carbon steels Free machining carbon steels	P	<15	<180	25 – 50	50 – 80	T	◎	
	Medium to high carbon steels Low alloyed steels	P	<23	<240	25 – 50	50 – 80	T	◎	
	Steel castings & forgings Heat-treatable alloy steels	P	>24 ≤38	>250 ≤350	6 – 30	10 – 35	X	○	
	Alloyed tool steels Mold steels	P	>38 ≤44	>350 ≤420	6 – 12	–	A		
Stainless Steel	Free machining stainless steels	M	<23	<240	12 – 35	20 – 50	A	○	
	Heat-and corrosion-resistant stainless steels Valve stainless steels	M	>24 ≤38	>250 ≤350	12 – 15	12 – 15	A	○	
	Stainless steel castings Precipitation hardening stainless steels	M	>38 ≤44	>350 ≤420	12 – 15	–	A		
Aluminum	Pure Aluminum Aluminum alloys	N	–	–	50 – 65	–	T		
	Aluminum alloy castings	N	–	–	40 – 65	45 – 90	T	○	◎
Cast Iron	Grey cast iron	K	–	≤220	35 – 50	50 – 65	T		◎
	Nodular cast iron / Chilled cast iron Meehanite iron / Ductile iron	K	–	≥250	12 – 45	25 – 55	X	○	◎
Nickel Alloys	718 & 625 INCOn / Waspaloy Hastelloyn / Invar Moneln / Incoloy	S	≤38	≤350	10 – 15	–	A		
	718 Inconel A286	S	>38 ≤44	>350 ≤420	10 – 12	–	A		
Titanium		S	≤38	≤350	3 – 15	–	A		
Copper	Pure and alloyed copper	N	–	–	50 – 60	65 – 100	T		◎
Brass	Free machining brass Alloyed brass	N	–	–	30 – 65	–	T		
Bronze		N	44	<420	12 – 20	35 – 80	T		
Zinc		N	–	–	25 – 65	50 – 80	T		
Magnesium		N	–	–	–	45 – 100	T		

GG	GG	GG	GG	GS	GS	GS	GS
TR		TR-A, TR-R		T7316/T6316/T8316 T7A16/T7B16	T7315/T6315/ T8315	T7326	T7B15
USCTI 302A	USCTI 302A	USCTI 302A	USCTI 302A	USCTI 302	USCTI 302	USCTI Oversize	USCTI Oversize
148		150		152	158	159	160
UNC/UNF	M	UNC/UNF	M	UNC/UNF/UNS	M/MF	UNC/UNF	UNC/UNF
Super HSS	Super HSS	Super HSS	Super HSS	HSS	HSS	HSS	HSS
2P~3P	2P~3P	2P~3P	2P~3P	9P / 5P / 2P	9P / 5P / 2P	5P / 2P	5P / 2P
TiAlN	TiAlN	TiAlN	TiAlN	Bright Steam Oxide TiN	Bright Steam Oxide TiN	Bright	Bright
-	-	-	-	-	-	-	-
2.0D	2.0D	2.0D	2.0D	2.0D	2.0D	2.0D	2.0D
Blind Through	Blind Through	Blind Through	Blind Through	Blind Through	Blind Through	Blind Through	Blind Through
				◎	◎	◎	◎
				◎	◎	◎	◎
				◎	◎	◎	◎
◎	◎	◎	◎	◎	◎	◎	◎
◎	◎	◎	◎				
				◎	◎	◎	◎
				◎	◎	◎	◎
				◎	◎	◎	◎
				◎	◎	◎	◎

HIGH PERFORMANCE TAPS RECOMMENDATION TABLE

Super HSS : Premium HSS Metallurgy
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HSSE-V3 : 3% Vanadium Alloy HSS-EX
HSS-V : Vanadium Alloy HSS

◎= RECOMMENDED
○= SUITABLE

COOLANT
A = Cutting Oil
T = Oil Emulsion
X = Cutting Oil/Oil Emulsion

								GS	GS	GS
							SERIES	T7336 (LH)	T7A15 (LH)	T7616/ T6616/ T8616
							DESCRIPTION	USCTI 302 (Left Hand)	USCTI 302 (Left Hand)	USCTI Long Shank
							PAGE	161	162	163
							THREADS	UNC/UNF	UNC/UNF	UNC/UNF
							TAP MATERIALS	HSS	HSS	HSS
							CHAMFER LENGTH	5P / 2P	5P / 2P	4-5P
							SURFACE TREATMENT	Bright	Bright	Bright Steam Oxide TiN
							SPIRAL FLUTE ANGLE	-	-	-
							Thread Depth	2.0D	2.0D	2.0D
							HOLE TYPE	Blind Through	Blind Through	Blind Through
Material Group	Material Sub-Group	ISO	Hardness (HRc)	Hardness (BHN)	Cutting Speed (SFM) Uncoated	Cutting Speed (SFM) Coated	COOLANT			
Steel	Low carbon steels Free machining carbon steels	P	<15	<180	25 – 50	50 – 80	T	◎	◎	◎
	Medium to high carbon steels Low alloyed steels	P	<23	<240	25 – 50	50 – 80	T	◎	◎	◎
	Steel castings & forgings Heat-treatable alloy steels	P	>24 ≤38	>250 ≤350	6 – 30	10 – 35	X			
	Alloyed tool steels Mold steels	P	>38 ≤44	>350 ≤420	6 – 12	–	A			
Stainless Steel	Free machining stainless steels	M	<23	<240	12 – 35	20 – 50	A	◎	◎	◎
	Heat-and corrosion-resistant stainless steels Valve stainless steels	M	>24 ≤38	>250 ≤350	12 – 15	12 – 15	A			
	Stainless steel castings Precipitation hardening stainless steels	M	>38 ≤44	>350 ≤420	12 – 15	–	A			
Aluminum	Pure Aluminum Aluminum alloys	N	–	–	50 – 65	–	T	◎	◎	◎
	Aluminum alloy castings	N	–	–	40 – 65	45 – 90	T	◎	◎	◎
Cast Iron	Grey cast iron	K	–	≤220	35 – 50	50 – 65	T			
	Nodular cast iron / Chilled cast iron Meehanite iron / Ductile iron	K	–	≥250	12 – 45	25 – 55	X			
Nickel Alloys	718 & 625 INCOn / Waspaloy Hastelloyn / Invar Moneln / Incoloy	S	≤38	≤350	10 – 15	–	A			
	718 Inconel A286	S	>38 ≤44	>350 ≤420	10 – 12	–	A			
Titanium		S	≤38	≤350	3 – 15	–	A			
Copper	Pure and alloyed copper	N	–	–	50 – 60	65 – 100	T	◎	◎	◎
Brass	Free machining brass Alloyed brass	N	–	–	30 – 65	–	T	◎	◎	◎
Bronze		N	44	<420	12 – 20	35 – 80	T			
Zinc		N	–	–	25 – 65	50 – 80	T	◎	◎	◎
Magnesium		N	–	–	–	45 – 100	T	◎	◎	◎

GV	GV	GV	GV	GV	GV	GS	GS
TKR03	ZF	Z0/Z1/Z2/Z3	Z4/Z5/Z6/Z7	Z8/ZA/ZC Z9/ZB/ZD	T7R01/T8R01/THR01 T7R02/T8R02/THR02	ST/SI	T7406
USCTI 302A	USCTI 302	USCTI 302A	USCTI 302A	USCTI 302A	USCTI 302A	USCTI 322	USCTI 322
167	168	169	171	173	174	177	178
UNC/UNF	UNC/UNF	UNC/UNF	UNC/UNF	M/MF	UNC/UNF	UNC/UNF	UNC/UNF
Super HSS	HSSE-V3	HSSE-V3	HSSE-V3	HSSE-V3	HSS	HSSE-V3	HSS
2-3P	1.5-2P	4-5P 1.5-2P	4-5P 1.5-2P	4-5P 1.5-2P	4-5P 1.5-2P	1.5-2P	1.5-2P
TiCN	Bright	Bright TiN	Bright TiN	Bright TiN TiCN	Bright TiN TiCN	Hardslick	Bright
-	-	-	-	-	-	R40°	R50°
3.0D	3.0D	3.0D	3.0D	3.0D	3.0D	2.5D	2.5D
Blind Through	Blind Through	Blind Through	Blind Through	Blind Through	Blind Through	Blind	Blind
							
◎	◎	◎	◎	◎	◎	◎	○
◎		◎	◎	◎	◎	◎	○
						○	
◎	◎	◎	◎	◎	○		
◎	◎	◎	◎	◎	◎	○	○
◎	◎	◎	◎	◎	◎	○	○
						○	○
◎		◎	◎	◎	○		
◎		◎	◎	◎	○		
◎		◎	◎	◎	○		
◎		◎	◎	◎	○		

HIGH PERFORMANCE TAPS RECOMMENDATION TABLE

Super HSS : Premium HSS Metallurgy
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HSS-V : Vanadium Alloy HSS

◎= RECOMMENDED
○= SUITABLE

COOLANT
A = Cutting Oil
T = Oil Emulsion
X = Cutting Oil/Oil Emulsion

								GS	GS	GS
							SERIES	T7425	STI TAP (ST/SI)	T7436
							DESCRIPTION	USCTI 322A	USCTI 322	USCTI 322
							PAGE	179	180	181
							THREADS	M/MF	UNC/UNF	UNC/UNF
							TAP MATERIALS	HSS	HSSE-V3	HSS
							CHAMFER LENGTH	1.5-2P	4-5P	4-5P
							SURFACE TREATMENT	Bright	Hardslick	Bright
							SPIRAL FLUTE ANGLE	R50°	-	-
							Thread Depth	2.5D	3.0D	3.0D
							HOLE TYPE	Blind	Through	Through
Material Group	Material Sub-Group	ISO	Hardness (HRc)	Hardness (BHN)	Cutting Speed (SFM) Uncoated	Cutting Speed (SFM) Coated	COOLANT			
Steel	Low carbon steels Free machining carbon steels	P	<15	<180	25 – 50	50 – 80	T	○	◎	○
	Medium to high carbon steels Low alloyed steels	P	<23	<240	25 – 50	50 – 80	T	○	◎	○
	Steel castings & forgings Heat-treatable alloy steels	P	>24 ≤38	>250 ≤350	6 – 30	10 – 35	X		○	
	Alloyed tool steels Mold steels	P	>38 ≤44	>350 ≤420	6 – 12	–	A			
Stainless Steel	Free machining stainless steels	M	<23	<240	12 – 35	20 – 50	A			
	Heat-and corrosion-resistant stainless steels Valve stainless steels	M	>24 ≤38	>250 ≤350	12 – 15	12 – 15	A			
	Stainless steel castings Precipitation hardening stainless steels	M	>38 ≤44	>350 ≤420	12 – 15	–	A			
Aluminum	Pure Aluminum Aluminum alloys	N	–	–	50 – 65	–	T	○	○	○
	Aluminum alloy castings	N	–	–	40 – 65	45 – 90	T	○	○	○
Cast Iron	Grey cast iron	K	–	≤220	35 – 50	50 – 65	T	○	○	○
	Nodular cast iron / Chilled cast iron Meehanite iron / Ductile iron	K	–	≥250	12 – 45	25 – 55	X			
Nickel Alloys	718 & 625 INCOn / Waspaloy Hastelloyn / Invar Moneln / Incoloy	S	≤38	≤350	10 – 15	–	A			
	718 Inconel A286	S	>38 ≤44	>350 ≤420	10 – 12	–	A			
Titanium		S	≤38	≤350	3 – 15	–	A			
Copper	Pure and alloyed copper	N	–	–	50 – 60	65 – 100	T			
Brass	Free machining brass Alloyed brass	N	–	–	30 – 65	–	T			
Bronze		N	44	<420	12 – 20	35 – 80	T			
Zinc		N	–	–	25 – 65	50 – 80	T			
Magnesium		N	–	–	–	45 – 100	T			

GS	GS	GS	VA	GG	GG	GG	GS
T7415	T7426	T7405	Q1/Q0/Q6	Q9/R0/R1	R7/R8/R9/S0	S1/S2 (INTERRUPTED)	T7L36/T6L36 T7536/T6536
USCTI 322A	USCTI 322	USCTI 322A	USCTI 311	USCTI 311	USCTI 311	USCTI 311	USCTI 311
182	183	184	187	188	189	190	191
M/MF	UNC/UNF	M/MF	NPTF	NPTF	NPTF	NPTF	NPS/NPSF
HSS	HSS	HSS	HSSE-V3	HSSE-V3	HSSE-V3	HSSE-V3	HSS
4-5P	4-5P 1.5-2P	4-5P 1.5-2P	2-3P	2-3P	2-3P	2-3P	4-5P
Bright	Bright	Bright	Bright Steam Oxide Hardslick	Bright TiN Hardslick	Bright TiN Hardslick Nitrided-Steam Oxide	Bright TiCN	Bright Steam Oxide
-	-	-	R15°	R15°	-	-	-
3.0D	2.0D	2.0D	2.5D	2.5D	2.0D	2.0D	2.0D
Through	Blind Through	Blind Through	Blind	Blind Through	Blind Through	Blind Through	Blind Through
○	○	○	○	◎	◎	◎	○
○	○	○	◎	◎	◎	◎	○
			○	○	○	○	
			◎				
			○				
○	○	○					○
○	○	○	○				○
○	○	○		◎	◎	◎	○
			○	◎	◎	◎	

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Super HSS : Premium HSS Metallurgy
P-HSS : Powdered Metallurgy
HSSE-V3 : 3% Vanadium Alloy HSS-EX
HSS-V : Vanadium Alloy HSS

◎= RECOMMENDED
○= SUITABLE

COOLANT
A = Cutting Oil
T = Oil Emulsion
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								GS	GS
							SERIES	T7505/T6505/ TH505 (INTERRUPTED)	T7546/T8546
							DESCRIPTION	USCTI 311	USCTI 311
							PAGE	192	193
							THREADS	NPT	NPTF
							TAP MATERIALS	HSS	HSS
							CHAMFER LENGTH	2-3P	2-3P
							SURFACE TREATMENT	Bright Steam Oxide TiCN	Bright TiN
							SPIRAL FLUTE ANGLE	-	-
							Thread Depth	2.0D	2.0D
							HOLE TYPE	Blind Through	Blind Through
Material Group	Material Sub-Group	ISO	Hardness (HRc)	Hardness (BHN)	Cutting Speed (SFM) Uncoated	Cutting Speed (SFM) Coated	COOLANT		
Steel	Low carbon steels Free machining carbon steels	P	<15	<180	25 – 50	50 – 80	T	○	○
	Medium to high carbon steels Low alloyed steels	P	<23	<240	25 – 50	50 – 80	T	○	○
	Steel castings & forgings Heat-treatable alloy steels	P	>24 ≤38	>250 ≤350	6 – 30	10 – 35	X		
	Alloyed tool steels Mold steels	P	>38 ≤44	>350 ≤420	6 – 12	–	A		
Stainless Steel	Free machining stainless steels	M	<23	<240	12 – 35	20 – 50	A		
	Heat-and corrosion-resistant stainless steels Valve stainless steels	M	>24 ≤38	>250 ≤350	12 – 15	12 – 15	A		
	Stainless steel castings Precipitation hardening stainless steels	M	>38 ≤44	>350 ≤420	12 – 15	–	A		
Aluminum	Pure Aluminum Aluminum alloys	N	–	–	50 – 65	–	T	○	○
	Aluminum alloy castings	N	–	–	40 – 65	45 – 90	T	○	○
Cast Iron	Grey cast iron	K	–	≤220	35 – 50	50 – 65	T	○	○
	Nodular cast iron / Chilled cast iron Meehanite iron / Ductile iron	K	–	≥250	12 – 45	25 – 55	X		
Nickel Alloys	718 & 625 INCOn / Waspaloy Hastelloyn / Invar Moneln / Incoloy	S	≤38	≤350	10 – 15	–	A		
	718 Inconel A286	S	>38 ≤44	>350 ≤420	10 – 12	–	A		
Titanium		S	≤38	≤350	3 – 15	–	A		
Copper	Pure and alloyed copper	N	–	–	50 – 60	65 – 100	T		
Brass	Free machining brass Alloyed brass	N	–	–	30 – 65	–	T		
Bronze		N	44	<420	12 – 20	35 – 80	T		
Zinc		N	–	–	25 – 65	50 – 80	T		
Magnesium		N	–	–	–	45 – 100	T		

CARBIDE

Being the best through innovation

SOLID CARBIDE THREAD MILL

- For blind holes and through holes with one single tool.
- Higher cutting speed and feed than taps.

SELECTION GUIDE

- For blind holes and through holes with one single tool.
- Higher cutting speed and feed than taps.

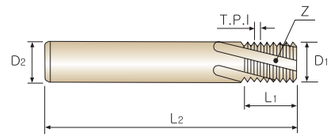
INCH

EDP No.	MODEL	Description	Page
TE		Solid Carbide Thread mill for Unified Internal Threads - ANSI B 1.1	33
TD		Solid Carbide Thread mill for Metric Internal Threads - DIN 13	34
TF **TG**		Solid Carbide Thread mill for Unified Internal Threads - ANSI B 1.20.1(NPT) / ANSI B1.20.3(NPTF)	35

SOLID CARBIDE THREAD MILLS

TE SERIES

SOLID CARBIDE THREAD MILL FOR UNIFIED INTERNAL THREADS - ANSI B 1.1



▶Material : Solid Carbide
▶Shank : Plain Straight
▶Spiral Angle : 15°

Unit : Inch

EDP No. TiAlN	SIZE	Pitch TPI	Cutter Diameter D_1	Shank Diameter D_2	Thread Length L_1	Overall Length L_2	No. of Flute Z
TE080	#2	56	**.065**	.125	.125	2.000	3
TE120	#3	48	**.075**	.125	.167	2.000	3
TE220	#5	44	**.095**	.125	.228	2.000	3
TE160	#4	40	**.085**	.125	.175	2.000	3
TE300	#8	36	**.115**	.125	.250	2.000	3
TE240	#6	32	**.100**	.125	.218	2.000	3
TE280	#8	32	**.115**	.125	.250	2.000	3
TE340	#10	32	**.120**	.125	.312	2.000	3
TEF90	1/2	32	**.370**	.375	1.000	3.500	4
TEK90	#10	28	**.120**	.125	.312	2.000	3
TE420	1/4	28	**.180**	.187	.500	2.500	3
TE590	1/2	28	**.370**	.375	1.000	3.500	4
TE320	#10	24	**.120**	.125	.312	2.000	3
TE460	5/16	24	**.235**	.250	.625	2.500	3
TE500	3/8	24	**.285**	.312	.750	3.000	4
TE570	1/2	24	**.370**	.375	1.000	3.500	4
TE400	1/4	20	**.180**	.187	.500	2.500	3
TE540	7/16	20	**.335**	.375	.875	3.500	4
TE580	1/2	20	**.370**	.375	1.000	3.500	4
TE440	5/16	18	**.235**	.250	.625	2.500	3
TE620	9/16	18	**.370**	.375	.875	3.500	4
TE480	3/8	16	**.285**	.312	.750	3.000	4
TE720	3/4	16	**.490**	.500	1.250	3.500	4
TE520	7/16	14	**.305**	.312	.750	3.000	4
TE760	7/8	14	**.490**	.500	1.250	3.500	4
TE560	1/2	13	**.350**	.375	.875	3.500	4
TE600	9/16	12	**.370**	.375	.875	3.500	4
TE710	3/4	12	**.495**	.500	1.250	3.500	4
TE640	5/8	11	**.470**	.500	1.250	3.500	4
TE700	3/4	10	**.495**	.500	1.250	3.500	4
TE740	7/8	9	**.620**	.625	1.375	4.000	4
TE780	1	8	**.620**	.625	1.375	4.000	4
TE800	1	12	**.745**	.750	1.500	4.000	5
TE820	1-1/8 & 1-1/4	7	**.745**	.750	1.572	4.500	5

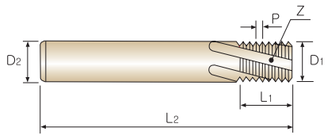
◎ : Excellent ○: Good

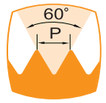
Carbon Steels	Alloy Steels	Heat Treated Steels	Cast Iron	Stainless Steels	Titanium Alloy	Chrome-Nickel Alloy	Non Ferrous Materials
◎	◎	◎	◎	○	○	○	◎

SOLID CARBIDE THREAD MILLS

TD SERIES

SOLID CARBIDE THREAD MILL FOR METRIC INTERNAL THREADS - DIN 13





▶Material : Solid Carbide
▶Shank : Plain Straight
▶Spiral Angle : 15°

Unit : Inch

EDP No. TiAIN	SIZE	Pitch (mm) P	Cutter Diameter D_1	Shank Diameter D_2	Thread Length L_1	Overall Length L_2	No. of Flute Z
TD200	M3	0.50	**.085**	.125	.178	2.000	3
TD240	M4	0.70	**.115**	.125	.276	2.000	3
TD260	M4.5	0.75	**.120**	.125	.250	2.000	3
TD380	M8	0.75	**.235**	.250	.625	2.500	3
TD280	M5	0.80	**.120**	.125	.312	2.000	3
TD310	M6	1.00	**.170**	.187	.500	2.500	3
TD530	M12	1.00	**.360**	.375	.875	3.500	4
TD360	M8	1.25	**.235**	.250	.625	2.500	3
TD420	M10	1.50	**.300**	.312	.750	3.000	4
TD550	M14	1.50	**.370**	.375	.875	3.500	4
TD670	M18	1.50	**.490**	.500	1.250	3.500	4
TD500	M12	1.75	**.360**	.375	.875	3.500	4
TD600	M16	2.00	**.470**	.500	1.250	3.500	4
TD700	M20	2.50	**.495**	.500	1.250	3.500	4
TD780	M24	3.00	**.620**	.625	1.375	4.000	4

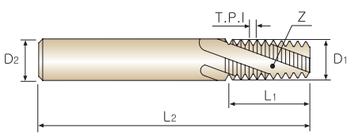
◎ : Excellent ○: Good

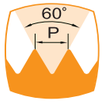
Carbon Steels	Alloy Steels	Heat Treated Steels	Cast Iron	Stainless Steels	Titanium Alloy	Chrome-Nickel Alloy	Non Ferrous Materials
◎	◎	◎	◎	○	○	○	◎

SOLID CARBIDE THREAD MILLS

TF/TG SERIES

SOLID CARBIDE THREAD MILL FOR UNIFIED INTERNAL THREADS - ANSI B 1.20.1(NPT) / ANSI B1.20.3(NPTF)





▶Material : Solid Carbide
▶Shank : Plain Straight
▶Spiral Angle : 15°

TF Series (NPT)

Unit : Inch

EDP No. TiAIN	SIZE	Pitch T.P.I	Cutter Diameter D_1	Shank Diameter D_2	Thread Length L_1	Overall Length L_2	No. of Flute Z
TF020	1/16 & 1/8	27	**.245**	.250	.437	2.500	3
TF400	1/4 & 3/8	18	**.305**	.312	.625	3.000	4
TF480	1/4 & 3/8	18	**.363**	.375	.680	3.500	4
TF560	1/2 & 3/4	14	**.495**	.500	.875	3.500	4
TF780	1" - 2"	11.5	**.620**	.625	1.125	4.000	4
TFF40	2-1/2" - 6"	8	**.745**	.750	1.500	5.000	4

TG Series (NPTF)

Unit : Inch

EDP No. TiAIN	SIZE	Pitch T.P.I	Cutter Diameter D_1	Shank Diameter D_2	Thread Length L_1	Overall Length L_2	No. of Flute Z
TG020	1/16 & 1/8	27	**.245**	.250	.437	2.500	3
TG400	1/4 & 3/8	18	**.305**	.312	.625	3.000	4
TG560	1/2 & 3/4	14	**.495**	.500	.875	3.500	4
TG780	1" - 2"	11.5	**.620**	.625	1.125	4.000	4
TGF40	2-1/2" - 6"	8	**.745**	.750	1.500	5.000	4

◎ : Excellent ○: Good

Carbon Steels	Alloy Steels	Heat Treated Steels	Cast Iron	Stainless Steels	Titanium Alloy	Chrome-Nickel Alloy	Non Ferrous Materials
◎	◎	◎	◎	○	○	○	◎

SOLID CARBIDE THREAD MILLS

RECOMMENDED CUTTING SPEED

Application Program Available

Unit : Inch

Material	Cutting Speed (SFM)	Feed per Tooth (fz)	
		Cutter Diameter < 5/16	Cutter Diameter > 5/16
Low Carbon Steels Medium Carbon Steels	250 - 400	.0008 - .0016	.0016 - .0040
High Carbon Steels	250 - 350	.0008 - .0016	.0016 - .0040
Alloy Steels	250 - 300	.0008 - .0016	.0016 - .0040
Heat Treated Steels	200 - 300	.0008 - .0016	.0016 - .0040
Stainless Steels	150 - 250	.0004 - .0008	.0008 - .0024
Cast Iron	200 - 350	.0008 - .0016	.0016 - .0040
Chrome-Nickel Alloys Titanium Alloys	70 - 200	.0004 - .0008	.0008 - .0024
Non Ferrous Material	350 - 1000	.0012 - .0020	.0020 - .0040

RECOMMENDED CUTTING SPEED

Calculate R.P.M of cutter

$$N = \frac{12 \times SFM}{d \times \pi}$$

Calculate Feed per Revolution

$$F_1 = fz \times Z \times N$$

Calculate Feed at Tool Center Line

$$F_2 = \frac{F_1 \times (D - d)}{D}$$

N : R.P.M
SFM : Recommended Cutting Speed
d : Diameter of Cutter
fz : Recommended Feed per Tooth
Z : Number of Teeth
$\mathbf{F_1}$: Feed at Cutting Edge
$\mathbf{F_2}$: Feed at Center Line of Cutting
D : Major Diameter of Component

HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

SOLID CARBIDE THREAD MILLS

PROGRAMING OF THREAD MILLING

Application Program Available

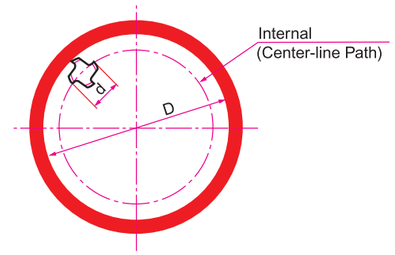
Program Data

G Codes for Thread Milling

G00	Fast Feed Linear	**G90**	Absolute Command
G01	Linear Movement	**G91**	Incremental Command
G02	Circular/Helical Interpolation C.W.	**M03**	Clockwise Rotation of Spindle
G03	Circular/Helical Interpolation A.C.W.	**M05**	Spindle Stop
G17	X, Y Plane (Vertical Machining)	**M08**	Coolant On
G18	Z, X Plane (Horizontal Machining)	**X**	Horizontal Co-ordinate
G19	Y, Z Plane (Using 90° Head)	**Y**	Horizontal Co-ordinate
G40	Cutter Radius Compensation Cancel	**Z**	Vertical Co-ordinate
G41	Cutter Radius Compensation Left	**I**	X Co-ordinate to Center of Arc Travel
G42	Cutter Radius Compensation Right	**J**	Y Co-ordinate to Center of Arc Travel
G43	Tool Length Compensation Plus	**S**	Spindle Speed R.P.M.
G49	Tool Length Compensation Cancel	**F**	Feed inch/min

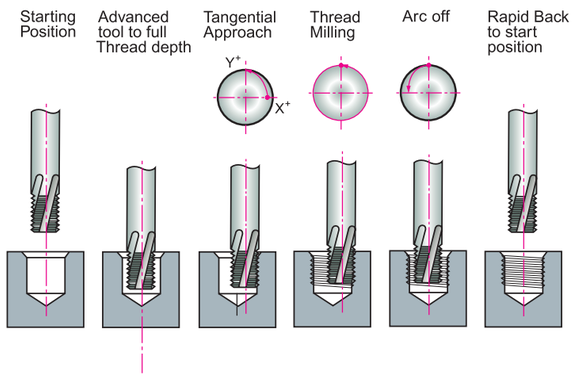
CNC Internal Thread Milling

N10	G54	G90	G00	X…	Y…	
N20	G43	H10	Z0.250	M0.3	S…	
N30	G91	G00	Z-…(A3+0.250)			
N40	G41	G01	D26	X…(A6)	Y…(A5)	F…
N50	G03	X-…(A6)	Y…(A6)	Z…(A4)	I-…(A6)	J0
N60	G03	X0	Y0	Z…(A2)	I0	J-…(A1)
N70	G03	X-…(A6)	Y-…(A6)	Z…(A4)	I0	J-…(A6)
N80	G00	G40	X…(A6)	Y-…(A5)		
N90	G00	Z…(A7)				
N100	G90	G49	G00	Z8.0	M5	
N110	M30					



<Explanation of Parameters>

A1 : 1/2 Nominal Thread Diameter (D/2)
A2 : Thread Pitch(P)
A3 : Thread Depth
A4 : P/4(for climb milling and right-hand thread)
A5 : Beginning of Contour in Y (P/2)
A6 : Arc Off (A1 - A5)
A7 : A3 + 0.250 - P/2
H10 : Tool length compensation number
D26 : Tool radius compensation number



HARDslick

ULTIMATE TAP PERFORMANCE

Application Range

SOFT 70 BHN — HARD 340 BHN

STEEL • STAINLESS STEEL
NICKEL ALLOYS
ALUMINUM

- Reduces Galling & Seizing
- Extends Life with Minimal Coolant
- Reduces Tap Inventory

TAP SUBSTRATE -
67Rc .8 Coefficient of Friction

TIALN - 90Rc

WC/C - .2 Coefficient of Friction

HSS

YG

Being the best through innovation

COMBO TAPS

- Spiral Point and Spiral Flute Taps

Multi Purpose tapping / YG-1's Patent / Super HSS & HSS-E for Prevention of Oversized Threads

SELECTION GUIDE

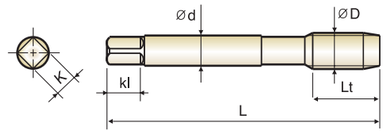
Spiral Point and Spiral Flute Taps
Multi Purpose tapping / YG-1's Patent / Super HSS & HSS-E for Prevention of Oversized Threads

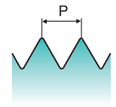
INCH

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
T2 T2-S T2-C		HSS-EX	UNC/UNF	MU	USCTI 302A	H2~H6	2 ~ 3P	2.5D	Bright Steam Oxide TiCN	41
T5 T5-S T5-C		HSS-EX	M	MU	USCTI 302A	D3~D8	2 ~ 3P		Bright Steam Oxide TiCN	43
T6 T6-N	with Internal Coolant	HSS-EX	UNC/UNF	MU	USCTI 302A	H4~H6	2 ~ 3P		Bright TiN	44
T8 T8-N	with Internal Coolant	HSS-EX	M	MU	USCTI 302A	D5~D7	2 ~ 3P		Bright TiN	45
T7 T7-C	Short Chamfer	HSS-EX	UNC/UNF	MU	USCTI 302A	H2~H6	1 ~ 2P		Bright TiCN	46
T9 T9-C	Short Chamfer	HSS-EX	M	MU	USCTI 302A	D3~D8	1 ~ 2P		Bright TiCN	48
T1-S T1-C		HSS-EX	UNC/UNF	MU	DIN-ANSI Shank	H2~H6	2 ~ 3P		Steam Oxide TiCN	49
TA-S TA-C		HSS-EX	M	MU	DIN-ANSI Shank	D3~D7	2 ~ 3P		Steam Oxide TiCN	50
TCA-S/C TCB-S/C		Super HSS HSS-EX	UNC/UNF	VA	USCTI 302A	H2~H6	2 ~ 3P		Steam Oxide TiCN	51
TCC-S/C TCD-S/C		Super HSS HSS-EX	M	VA	USCTI 302A	D3~D7	2 ~ 3P		Steam Oxide TiCN	53
T4 T4-S T4-C		HSS-EX	UNC/UNF	MU	USCTI 302A	H2~H6	4 ~ 5P	3.0D	Bright Steam Oxide TiCN	54
T3 T3-S T3-C		HSS-EX	M	MU	USCTI 302A	D3~D8	4 ~ 5P		Bright Steam Oxide TiCN	56
TB TB-N	with Internal Coolant	HSS-EX	UNC/UNF	MU	USCTI 302A	H4~H6	4 ~ 5P		Bright TiN	57
TH TH-N	with Internal Coolant	HSS-EX	M	MU	USCTI 302A	D5~D7	4 ~ 5P		Bright TiN	58
TC-S TC-C		HSS-EX	UNC/UNF	MU	DIN-ANSI Shank	H2~H6	4 ~ 5P		Steam Oxide TiCN	59
TK-S TK-C		HSS-EX	M	MU	DIN-ANSI Shank	D3~D7	4 ~ 5P		Steam Oxide TiCN	60
TCE-S/C TCF-S/C		Super HSS HSS-EX	UNC/UNF	VA	USCTI 302A	H2~H6	4P		Steam Oxide TiCN	61
TCG-S/C TCH-S/C		Super HSS HSS-EX	M	VA	USCTI 302A	D3~D7	4P		Steam Oxide TiCN	63

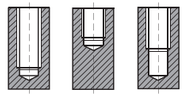
YG COMBO TAPS — Combo TAP — T2/T2-S/T2-C SERIES

SPIRAL FLUTE TAPS for Multi-Purpose





Hole type
2.5×D



MU | HSS-EX | UNC UNF | USCTI 302A | H2~H6 | 60° | 2P~3P | Bright | Steam Oxide | TiCN | R40

Unit : Inch

EDP No.			SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright	Steam Oxide	TiCN			L	Lt	D	K	kl	
T2162	T2162S	T2162C	#4 - 40 UNC	H2	1.88	.236	.141	.110	.188	2
T2182	T2182S	T2182C	#4 - 48 UNF	H2	1.88	.236	.141	.110	.188	2
T2202	T2202S	T2202C	#5 - 40 UNC	H2	1.94	.236	.141	.110	.188	3
T2222	T2222S	T2222C	#5 - 44 UNF	H2	1.94	.236	.141	.110	.188	3
T2243	T2243S	T2243C	#6 - 32 UNC	H3	2.00	.276	.141	.110	.188	3
T2262	T2262S	T2262C	#6 - 40 UNF	H2	2.00	.276	.141	.110	.188	3
T2283	T2283S	T2283C	#8 - 32 UNC	H3	2.13	.276	.168	.131	.250	3
T2302	T2302S	T2302C	#8 - 36 UNF	H2	2.13	.276	.168	.131	.250	3
T2323	T2323S	T2323C	#10 - 24 UNC	H3	2.38	.354	.194	.152	.250	3
T2343	T2343S	T2343C	#10 - 32 UNF	H3	2.38	.276	.194	.152	.250	3
T2363	T2363S	T2363C	#12 - 24 UNC	H3	2.38	.354	.220	.165	.281	3
T2383	T2383S	T2383C	#12 - 28 UNF	H3	2.38	.276	.220	.165	.281	3
T2403	T2403S	T2403C	1/4 - 20 UNC	H3	2.50	.433	.255	.191	.312	3
T2405	T2405S	T2405C	1/4 - 20 UNC	H5	2.50	.433	.255	.191	.312	3
T2423	T2423S	T2423C	1/4 - 28 UNF	H3	2.50	.354	.255	.191	.312	3
T2424	T2424S	T2424C	1/4 - 28 UNF	H4	2.50	.354	.255	.191	.312	3
T2443	T2443S	T2443C	5/16 - 18 UNC	H3	2.72	.472	.318	.238	.375	3
T2445	T2445S	T2445C	5/16 - 18 UNC	H5	2.72	.472	.318	.238	.375	3
T2463	T2463S	T2463C	5/16 - 24 UNF	H3	2.72	.394	.318	.238	.375	3
T2465	T2465S	T2465C	5/16 - 24 UNF	H5	2.72	.394	.318	.238	.375	3

▶Coating(TiN, TiAlN or Hardslick) is available on your request.
▶Coating Codes for Combo Tap
Bright Finish No. + N(TiN), F(TiAlN), H(Hardslick)

▶ NEXT PAGE

▶Steam Oxide is not recommended for Aluminum and Aluminum alloys.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

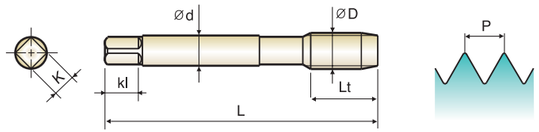
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

COMBO TAPS

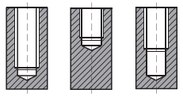
Combo TAP

T2/T2-S/T2-C SERIES

SPIRAL FLUTE TAPS for Multi-Purpose



Hole type
2.5×D



MU | HSS-EX | UNC UNF | USCTI 302A | H2~H6 | 60° | 2P~3P | Bright | Steam Oxide | TiCN | R40

Unit : Inch

EDP No.			SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright	Steam Oxide	TiCN			L	Lt	D	K	kl	
T2483	T2483S	T2483C	3/8 - 16 UNC	H3	2.94	.551	.381	.286	.438	3
T2485	T2485S	T2485C	3/8 - 16 UNC	H5	2.94	.551	.381	.286	.438	3
T2503	T2503S	T2503C	3/8 - 24 UNF	H3	2.94	.394	.381	.286	.438	3
T2504	T2504S	T2504C	3/8 - 24 UNF	H4	2.94	.394	.381	.286	.438	3
T2523	T2523S	T2523C	7/16 - 14 UNC	H3	3.16	.591	.323	.242	.406	3
T2525	T2525S	T2525C	7/16 - 14 UNC	H5	3.16	.591	.323	.242	.406	3
T2543	T2543S	T2543C	7/16 - 20 UNF	H3	3.16	.472	.323	.242	.406	3
T2545	T2545S	T2545C	7/16 - 20 UNF	H5	3.16	.472	.323	.242	.406	3
T2565	T2565S	T2565C	1/2 - 13 UNC	H5	3.38	.630	.367	.275	.438	3
T2585	T2585S	T2585C	1/2 - 20 UNF	H5	3.38	.472	.367	.275	.438	3
T2605	T2605S	T2605C	9/16 - 12 UNC	H5	3.59	.709	.429	.322	.500	3
T2625	T2625S	T2625C	9/16 - 18 UNF	H5	3.59	.512	.429	.322	.500	3
T2645	T2645S	T2645C	5/8 - 11 UNC	H5	3.81	.748	.480	.360	.562	4
T2665	T2665S	T2665C	5/8 - 18 UNF	H5	3.81	.512	.480	.360	.562	4
T2705	T2705S	T2705C	3/4 - 10 UNC	H5	4.25	.827	.590	.442	.688	4
T2725	T2725S	T2725C	3/4 - 16 UNF	H5	4.25	.591	.590	.442	.688	4
T2746	T2746S	T2746C	7/8 - 9 UNC	H6	4.69	.827	.697	.523	.750	4
T2766	T2766S	T2766C	7/8 - 14 UNF	H6	4.69	.709	.697	.523	.750	4
T2786	T2786S	T2786C	1" - 8 UNC	H6	5.13	.984	.800	.600	.812	4
T2806	T2806S	T2806C	1" - 12 UNF	H6	5.13	.709	.800	.600	.812	4

▶Coating(TiN, TiAlN or Hardslick) is available on your request.
▶Coating Codes for Combo Tap
Bright Finish No. + N(TiN), F(TiAlN), H(Hardslick)

▶Steam Oxide is not recommended for Aluminum and Aluminum alloys.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

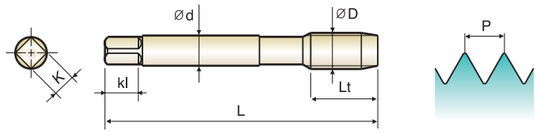
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

COMBO TAPS

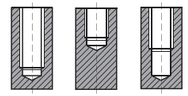
Combo TAP

T5/T5-S/T5-C SERIES

SPIRAL FLUTE TAPS for Multi-Purpose



Hole type
2.5×D



MU | HSS-EX | M | USCTI 302A | D3~D8 | 60° | 2P~3P | Bright | Steam Oxide | TiCN | R40

Unit : Inch

EDP No.			SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright	Steam Oxide	TiCN			L	Lt	D	K	kl	
T5203	T5203S	T5203C	M3 x 0.5	D3	1.94	.197	.141	.110	.188	3
T5224	T5224S	T5224C	M3.5 x 0.6	D4	2.00	.276	.141	.110	.188	3
T5244	T5244S	T5244C	M4 x 0.7	D4	2.13	.276	.168	.131	.250	3
T5284	T5284S	T5284C	M5 x 0.8	D4	2.38	.354	.194	.152	.250	3
T5315	T5315S	T5315C	M6 x 1.0	D5	2.50	.433	.255	.191	.312	3
T5345	T5345S	T5345C	M7 x 1.0	D5	2.72	.433	.318	.238	.375	3
T5365	T5365S	T5365C	M8 x 1.25	D5	2.72	.472	.318	.238	.375	3
T5375	T5375S	T5375C	M8 x 1.0	D5	2.72	.433	.318	.238	.375	3
T5426	T5426S	T5426C	M10 x 1.5	D6	2.94	.512	.381	.286	.438	3
T5435	T5435S	T5435C	M10 x 1.25	D5	2.94	.472	.381	.286	.438	3
T5506	T5506S	T5506C	M12 x 1.75	D6	3.38	.591	.367	.275	.438	3
T5525	T5525S	T5525C	M12 x 1.25	D5	3.38	.551	.367	.275	.438	3
T5547	T5547S	T5547C	M14 x 2.0	D7	3.59	.709	.429	.322	.500	3
T5556	T5556S	T5556C	M14 x 1.5	D6	3.59	.551	.429	.322	.500	3
T5607	T5607S	T5607C	M16 x 2.0	D7	3.81	.709	.480	.360	.562	3
T5616	T5616S	T5616C	M16 x 1.5	D6	3.81	.551	.480	.360	.562	3
T5657	T5657S	T5657C	M18 x .5	D7	4.03	.787	.542	.406	.625	4
T5676	T5676S	T5676C	M18 x 1.5	D6	4.03	.551	.542	.406	.625	4
T5707	T5707S	T5707C	M20 x 2.5	D7	4.47	.787	.652	.489	.688	4
T5726	T5726S	T5726C	M20 x 1.5	D6	4.47	.551	.652	.489	.688	4
T5747	T5747S	T5747C	M22 x 2.5	D7	4.69	.787	.697	.523	.750	4
T5766	T5766S	T5766C	M22 x 1.5	D6	4.69	.551	.697	.523	.750	4
T5788	T5788S	T5788C	M24 x 3.0	D8	4.91	.945	.760	.570	.750	4

▶Coating(TiN, TiAlN or Hardslick) is available on your request.
▶Coating Codes for Combo Tap
Bright Finish No. + N(TiN), F(TiAlN), H(Hardslick)

▶Steam Oxide is not recommended for Aluminum and Aluminum alloys.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

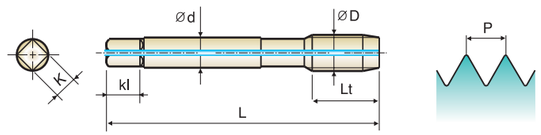
COMBO TAPS

Combo TAP

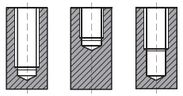
T6/T6-N SERIES

SPIRAL FLUTE TAPS for Multi-Purpose

with Internal Coolant



Hole type
2.5×D



MU | **HSS-EX** | **UNC UNF** | **USCTI 302A** | **H4~H6** | **60°** | **2P~3P** | **Bright** | **TiN** | **R40**

Unit : Inch

EDP No.		SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright	TiN			L	Lt	D	K	kl	
T6405	**T6405N**	1/4 - 20 UNC	H5	2.50	.433	.255	.191	.312	3
T6424	**T6424N**	1/4 - 28 UNF	H4	2.50	.354	.255	.191	.312	3
T6445	**T6445N**	5/16 - 18 UNC	H5	2.72	.472	.318	.238	.375	3
T6464	**T6464N**	5/16 - 24 UNF	H4	2.72	.394	.318	.238	.375	3
T6485	**T6485N**	3/8 - 16 UNC	H5	2.94	.551	.381	.286	.438	3
T6504	**T6504N**	3/8 - 24 UNF	H4	2.94	.394	.381	.286	.438	3
T6525	**T6525N**	7/16 - 14 UNC	H5	3.16	.591	.323	.242	.406	3
T6545	**T6545N**	7/16 - 20 UNF	H5	3.16	.472	.323	.242	.406	3
T6565	**T6565N**	1/2 - 13 UNC	H5	3.38	.630	.367	.275	.438	3
T6585	**T6585N**	1/2 - 20 UNF	H5	3.38	.472	.367	.275	.438	3
T6605	**T6605N**	9/16 - 12 UNC	H5	3.59	.709	.429	.322	.500	3
T6625	**T6625N**	9/16 - 18 UNF	H5	3.59	.512	.429	.322	.500	3
T6645	**T6645N**	5/8 - 11 UNC	H5	3.81	.748	.480	.360	.562	4
T6665	**T6665N**	5/8 - 18 UNF	H5	3.81	.512	.480	.360	.562	4
T6705	**T6705N**	3/4 - 10 UNC	H5	4.25	.827	.590	.442	.688	4
T6725	**T6725N**	3/4 - 16 UNF	H5	4.25	.591	.590	.442	.688	4
T6746	**T6746N**	7/8 - 9 UNC	H6	4.69	.827	.697	.523	.750	4
T6766	**T6766N**	7/8 - 14 UNF	H6	4.69	.709	.697	.523	.750	4
T6786	**T6786N**	1" - 8 UNC	H6	5.13	.984	.800	.600	.812	4
T6806	**T6806N**	1" - 12 UNF	H6	5.13	.709	.800	.600	.812	4

▶Coating(TiCN, TiAlN or Hardslick) or Surface Treatment(Steam Oxide) is available on your request.
Coating Codes for Combo Tap
Bright Finish No. + C(TiCN), F(TiAlN), H(Hardslick), S(Steam Oxide)

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

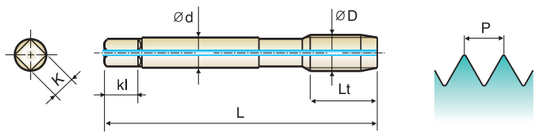
COMBO TAPS

Combo TAP

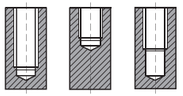
T8/T8-N SERIES

SPIRAL FLUTE TAPS for Multi-Purpose

with Internal Coolant



Hole type
2.5×D



MU | **HSS-EX** | **M** | **USCTI 302A** | **D5~D7** | **60°** | **2P~3P** | **Bright** | **TiN** | **R40**

Unit : Inch

EDP No.		SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright	TiN			L	Lt	D	K	kl	
T8315	**T8315N**	M6 x 1.0	D5	2.50	.433	.255	.191	.312	3
T8365	**T8365N**	M8 x 1.25	D5	2.72	.472	.318	.238	.375	3
T8426	**T8426N**	M10 x 1.5	D6	2.94	.512	.381	.286	.438	3
T8506	**T8506N**	M12 x 1.75	D6	3.38	.591	.367	.275	.438	3
T8547	**T8547N**	M14 x 2.0	D7	3.59	.709	.429	.322	.500	3
T8607	**T8607N**	M16 x 2.0	D7	3.81	.709	.480	.360	.562	3
T8657	**T8657N**	M18 x 2.5	D7	4.03	.787	.542	.406	.625	4
T8707	**T8707N**	M20 x 2.5	D7	4.47	.787	.652	.489	.688	4

▶Coating(TiCN, TiAlN or Hardslick) or Surface Treatment(Steam Oxide) is available on your request.
Coating Codes for Combo Tap
Bright Finish No. + C(TiCN), F(TiAlN), H(Hardslick), S(Steam Oxide)

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

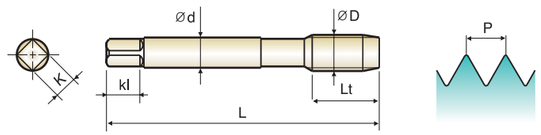
COMBO TAPS

Combo TAP

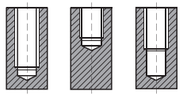
T7/T7-C SERIES

SPIRAL FLUTE TAPS for Multi-Purpose

Short Chamfer



Hole type
2.5×D



MU | HSS-EX | UNC UNF | USCTI 302A | H2~H6 | 60° | 1P~2P | Bright | TiCN | R40

Unit : Inch

EDP No.		SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright	TiCN			L	Lt	D	K	kl	
T7162	**T7162C**	#4 - 40 UNC	H2	1.88	.236	.141	.110	.188	2
T7182	**T7182C**	#4 - 48 UNF	H2	1.88	.236	.141	.110	.188	2
T7202	**T7202C**	#5 - 40 UNC	H2	1.94	.236	.141	.110	.188	3
T7222	**T7222C**	#5 - 44 UNF	H2	1.94	.236	.141	.110	.188	3
T7243	**T7243C**	#6 - 32 UNC	H3	2.00	.276	.141	.110	.188	3
T7262	**T7262C**	#6 - 40 UNF	H2	2.00	.276	.141	.110	.188	3
T7283	**T7283C**	#8 - 32 UNC	H3	2.13	.276	.168	.131	.250	3
T7302	**T7302C**	#8 - 36 UNF	H2	2.13	.276	.168	.131	.250	3
T7323	**T7323C**	#10 - 24 UNC	H3	2.38	.354	.194	.152	.250	3
T7343	**T7343C**	#10 - 32 UNF	H3	2.38	.276	.194	.152	.250	3
T7363	**T7363C**	#12 - 24 UNC	H3	2.38	.354	.220	.165	.281	3
T7383	**T7383C**	#12 - 28 UNF	H3	2.38	.276	.220	.165	.281	3
T7405	**T7405C**	1/4 - 20 UNC	H5	2.50	.433	.255	.191	.312	3
T7424	**T7424C**	1/4 - 28 UNF	H4	2.50	.354	.255	.191	.312	3
T7445	**T7445C**	5/16 - 18 UNC	H5	2.72	.472	.318	.238	.375	3
T7464	**T7464C**	5/16 - 24 UNF	H4	2.72	.394	.318	.238	.375	3
T7485	**T7485C**	3/8 - 16 UNC	H5	2.94	.551	.381	.286	.438	3
T7504	**T7504C**	3/8 - 24 UNF	H4	2.94	.394	.381	.286	.438	3
T7525	**T7525C**	7/16 - 14 UNC	H5	3.16	.591	.323	.242	.406	3
T7545	**T7545C**	7/16 - 20 UNF	H5	3.16	.472	.323	.242	.406	3
T7565	**T7565C**	1/2 - 13 UNC	H5	3.38	.630	.367	.275	.438	3
T7585	**T7585C**	1/2 - 20 UNF	H5	3.38	.472	.367	.275	.438	3

▶Coating(TiN, TiAlN or Hardslick) or Surface Treatment(Steam Oxide) is available on your request.
Coating Codes for Combo Tap
Bright Finish No. + N(TiN), F(TiAlN), H(Hardslick), S(Steam Oxide)

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

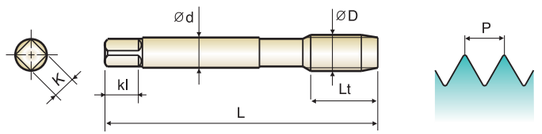
COMBO TAPS

Combo TAP

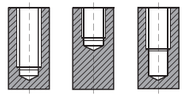
T7/T7-C SERIES

SPIRAL FLUTE TAPS for Multi-Purpose

Short Chamfer



Hole type
2.5×D



MU | HSS-EX | UNC UNF | USCTI 302A | H2~H6 | 60° | 1P~2P | Bright | TiCN | R40

Unit : Inch

EDP No.		SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright	TiCN			L	Lt	D	K	kl	
T7605	**T7605C**	9/16 - 12 UNC	H5	3.59	.709	.429	.322	.500	3
T7625	**T7625C**	9/16 - 18 UNF	H5	3.59	.512	.429	.322	.500	3
T7645	**T7645C**	5/8 - 11 UNC	H5	3.81	.748	.480	.360	.562	4
T7665	**T7665C**	5/8 - 18 UNF	H5	3.81	.512	.480	.360	.562	4
T7705	**T7705C**	3/4 - 10 UNC	H5	4.25	.827	.590	.442	.688	4
T7725	**T7725C**	3/4 - 16 UNF	H5	4.25	.591	.590	.442	.688	4
T7746	**T7746C**	7/8 - 9 UNC	H6	4.69	.827	.697	.523	.750	4
T7766	**T7766C**	7/8 - 14 UNF	H6	4.69	.709	.697	.523	.750	4
T7786	**T7786C**	1" - 8 UNC	H6	5.13	.984	.800	.600	.812	4
T7806	**T7806C**	1" - 12 UNF	H6	5.13	.709	.800	.600	.812	4

▶Coating(TiN, TiAlN or Hardslick) or Surface Treatment(Steam Oxide) is available on your request.
Coating Codes for Combo Tap
Bright Finish No. + N(TiN), F(TiAlN), H(Hardslick), S(Steam Oxide)

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

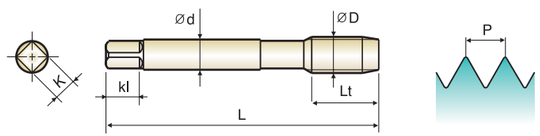
COMBO TAPS

Combo TAP

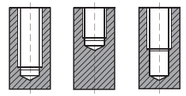
T9 / T9-C SERIES

SPIRAL FLUTE TAPS for Multi-Purpose

Short Chamfer



Hole type
2.5×D



MU | HSS-EX | M | USCTI 302A | D3~D8 | 60° | 1P~2P | Bright | TiCN | R40

Unit : Inch

EDP No. Bright	EDP No. TiCN	SIZE & TPI	Limit	Overall Length L	Thread Length Lt	Shank Diameter D	Square Size K	Square Length kl	No. of Flute
T9203	T9203C	M3 x 0.5	D3	1.94	.197	.141	.110	.188	3
T9224	T9224C	M3.5 x 0.6	D4	2.00	.276	.141	.110	.188	3
T9244	T9244C	M4 x 0.7	D4	2.13	.276	.168	.131	.250	3
T9284	T9284C	M5 x 0.8	D4	2.38	.354	.194	.152	.250	3
T9315	T9315C	M6 x 1.0	D5	2.50	.433	.255	.191	.312	3
T9345	T9345C	M7 x 1.0	D5	2.72	.433	.318	.238	.375	3
T9365	T9365C	M8 x 1.2	D5	2.72	.472	.318	.238	.375	3
T9375	T9375C	M8 x 1.0	D5	2.72	.433	.318	.238	.375	3
T9426	T9426C	M10 x 1.5	D6	2.94	.512	.381	.286	.438	3
T9435	T9435C	M10 x 1.25	D5	2.94	.472	.381	.286	.438	3
T9506	T9506C	M12 x 1.75	D6	3.38	.591	.367	.275	.438	3
T9525	T9525C	M12 x 1.25	D5	3.38	.551	.367	.275	.438	3
T9547	T9547C	M14 x 2.0	D7	3.59	.709	.429	.322	.500	3
T9556	T9556C	M14 x 1.5	D6	3.59	.551	.429	.322	.500	3
T9607	T9607C	M16 x 2.0	D7	3.81	.709	.480	.360	.562	3
T9616	T9616C	M16 x 1.5	D6	3.81	.551	.480	.360	.562	3
T9657	T9657C	M18 x 2.5	D7	4.03	.787	.542	.406	.625	4
T9676	T9676C	M18 x 1.5	D6	4.03	.551	.542	.406	.625	4
T9707	T9707C	M20 x 2.5	D7	4.47	.787	.652	.489	.688	4
T9726	T9726C	M20 x 1.5	D6	4.47	.551	.652	.489	.688	4
T9747	T9747C	M22 x 2.5	D7	4.69	.787	.697	.523	.750	4
T9766	T9766C	M22 x 1.5	D6	4.69	.551	.697	.523	.750	4
T9788	T9788C	M24 x 3.0	D8	4.91	.945	.760	.570	.750	4

▶Coating(TiN, TiAlN or Hardslick) or Surface Treatment(Steam Oxide) is available on your request.
Coating Codes for Combo Tap
Bright Finish No. + N(TiN), F(TiAlN), H(Hardslick), S(Steam Oxide)

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

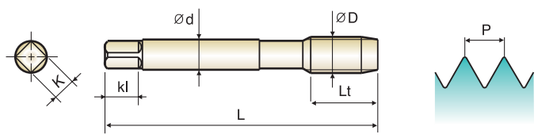
COMBO TAPS

Combo TAP

T1-S / T1-C SERIES

SPIRAL FLUTE TAPS for Multi-Purpose

DIN-ANSI Shank



Hole type
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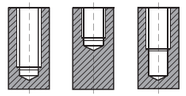


MU | HSS-EX | UNC UNF | H2~H6 | 60° | 2P~3P | Steam Oxide | TiCN | R40

Unit : Inch

EDP No. Steam Oxide	EDP No. TiCN	SIZE & TPI	Limit	Overall Length L	Thread Length Lt	Shank Diameter D	Square Size K	Square Length kl	No. of Flute
T1162S	T1162C	#4 - 40 UNC	H2	2.21	.236	.141	.110	.188	2
T1202S	T1202C	#5 - 40 UNC	H2	2.21	.236	.141	.110	.188	3
T1243S	T1243C	#6 - 32 UNC	H3	2.21	.276	.141	.110	.188	3
T1283S	T1283C	#8 - 32 UNC	H3	2.48	.276	.168	.131	.250	3
T1323S	T1323C	#10 - 24 UNC	H3	2.76	.354	.194	.152	.250	3
T1343S	T1343C	#10 - 32 UNF	H3	2.76	.276	.194	.152	.250	3
T1363S	T1363C	#12 - 24 UNC	H3	3.15	.354	.220	.165	.281	3
T1383S	T1383C	#12 - 28 UNF	H3	3.15	.276	.220	.165	.281	3
T1405S	T1405C	1/4 - 20 UNC	H5	3.15	.433	.255	.191	.312	3
T1424S	T1424C	1/4 - 28 UNF	H4	3.15	.354	.255	.191	.312	3
T1445S	T1445C	5/16 - 18 UNC	H5	3.54	.472	.318	.238	.375	3
T1464S	T1464C	5/16 - 24 UNF	H4	3.54	.394	.318	.238	.375	3
T1485S	T1485C	3/8 - 16 UNC	H5	3.94	.551	.381	.286	.438	3
T1504S	T1504C	3/8 - 24 UNF	H4	3.94	.394	.381	.286	.438	3
T1525S	T1525C	7/16 - 14 UNC	H5	3.94	.591	.323	.242	.406	3
T1545S	T1545C	7/16 - 20 UNF	H5	3.94	.472	.323	.242	.406	3
T1565S	T1565C	1/2 - 13 UNC	H5	4.33	.630	.367	.275	.438	3
T1585S	T1585C	1/2 - 20 UNF	H5	3.94	.472	.367	.275	.438	3
T1605S	T1605C	9/16 - 12 UNC	H5	4.33	.709	.429	.322	.500	3
T1625S	T1625C	9/16 - 18 UNF	H5	3.94	.512	.429	.322	.500	3
T1645S	T1645C	5/8 - 11 UNC	H5	4.33	.748	.480	.360	.562	4
T1665S	T1665C	5/8 - 18 UNF	H5	3.94	.512	.480	.360	.562	4
T1705S	T1705C	3/4 - 10 UNC	H5	4.92	.827	.590	.442	.688	4
T1725S	T1725C	3/4 - 16 UNF	H5	4.33	.591	.590	.442	.688	4
T1746S	T1746C	7/8 - 9 UNC	H6	5.51	.827	.697	.523	.750	4
T1766S	T1766C	7/8 - 14 UNF	H6	4.92	.709	.697	.523	.750	4
T1786S	T1786C	1" - 8 UNC	H6	6.30	.984	.800	.600	.812	4
T1806S	T1806C	1" - 12 UNF	H6	5.51	.709	.800	.600	.812	4

▶Steam Oxide is not recommended for Aluminum and Aluminum alloys.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

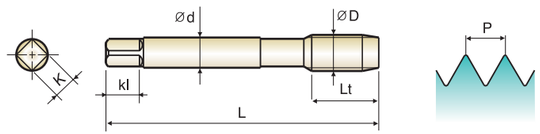
COMBO TAPS

Combo TAP

TA-S / TA-C SERIES

SPIRAL FLUTE TAPS for Multi-Purpose

DIN-ANSI Shank



Hole type
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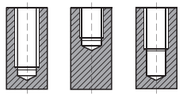


MU | HSS-EX | M | D3~D7 | 60° | 2P~3P | Steam Oxide | TiCN | R40

Unit : Inch

EDP No.		SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN			L	Lt	D	K	kl	
TA203S	TA203C	M3 x 0.5	D3	2.21	.197	.141	.110	.188	3
TA224S	TA224C	M3.5 x 0.6	D4	2.21	.276	.141	.110	.188	3
TA244S	TA244C	M4 x 0.7	D4	2.48	.276	.168	.131	.250	3
TA284S	TA284C	M5 x 0.8	D4	2.76	.354	.194	.152	.250	3
TA315S	TA315C	M6 x 1.0	D5	3.15	.433	.255	.191	.312	3
TA365S	TA365C	M8 x 1.25	D5	3.54	.472	.318	.238	.375	3
TA426S	TA426C	M10 x 1.5	D6	3.94	.512	.381	.286	.438	3
TA435S	TA435C	M10 x 1.25	D5	3.94	.472	.381	.286	.438	3
TA506S	TA506C	M12 x 1.75	D6	4.33	.591	.367	.275	.438	3
TA525S	TA525C	M12 x 1.25	D5	3.94	.551	.367	.275	.438	3
TA547S	TA547C	M14 x 2.0	D7	4.33	.709	.429	.322	.500	3
TA556S	TA556C	M14 x 1.5	D6	3.94	.551	.429	.322	.500	3
TA607S	TA607C	M16 x 2.0	D7	4.33	.709	.480	.360	.562	3
TA616S	TA616C	M16 x 1.5	D6	3.94	.551	.480	.360	.562	3
TA657S	TA657C	M18 x 2.5	D7	4.92	.787	.542	.406	.625	4
TA676S	TA676C	M18 x 1.5	D6	4.33	.551	.542	.406	.625	4

▶Steam Oxide is not recommended for Aluminum and Aluminum alloys.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

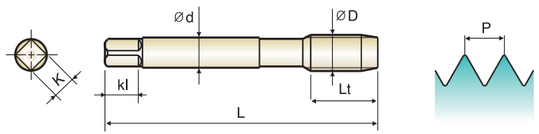
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

COMBO TAPS

Combo TAP

TCA-S/TCB-S/TCA-C/TCB-C SERIES

SPIRAL FLUTE TAPS for Stainless Steels



Hole type
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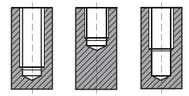


VA | Super HSS | HSS-EX | UNC UNF | USCTI 302A | H2~H6 | 60° | 2P~3P | Steam Oxide | TiCN | R45

Unit : Inch

EDP No.		SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN			L	Lt	D	K	kl	
TCA202S	TCA202C	#5 - 40 UNC	H2	1.94	.236	.141	.110	.188	3
TCA243S	TCA243C	#6 - 32 UNC	H3	2.00	.276	.141	.110	.188	3
TCA283S	TCA283C	#8 - 32 UNC	H3	2.13	.276	.141	.131	.250	3
TCA323S	TCA323C	#10 - 24 UNC	H3	2.38	.354	.141	.152	.250	3
TCA343S	TCA343C	#10 - 32 UNF	H3	2.38	.276	.141	.152	.250	3
TCA403S	TCA403C	1/4 - 20 UNC	H3	2.50	.433	.141	.191	.312	3
TCA405S	TCA405C	1/4 - 20 UNC	H5	2.50	.433	.168	.191	.312	3
TCA423S	TCA423C	1/4 - 28 UNF	H3	2.50	.354	.168	.191	.312	3
TCA443S	TCA443C	5/16 - 18 UNC	H3	2.72	.472	.194	.238	.375	3
TCA445S	TCA445C	5/16 - 18 UNC	H5	2.72	.472	.194	.238	.375	3
TCA463S	TCA463C	5/16 - 24 UNF	H3	2.72	.394	.220	.238	.375	3
TCA483S	TCA483C	3/8 - 16 UNC	H3	2.94	.551	.220	.286	.438	3
TCA485S	TCA485C	3/8 - 16 UNC	H5	2.94	.551	.255	.286	.438	3
TCA503S	TCA503C	3/8 - 24 UNF	H3	2.94	.394	.255	.286	.438	3
TCA523S	TCA523C	7/16 - 14 UNC	H3	3.16	.591	.255	.242	.406	3
TCA525S	TCA525C	7/16 - 14 UNC	H5	3.16	.591	.255	.242	.406	3
TCA543S	TCA543C	7/16 - 20 UNF	H3	3.16	.472	.318	.242	.406	3
TCA545S	TCA545C	7/16 - 20 UNF	H5	3.16	.472	.318	.242	.406	3
TCA563S	TCA563C	1/2 - 13 UNC	H3	3.38	.630	.318	.275	.438	3
TCA565S	TCA565C	1/2 - 13 UNC	H5	3.38	.630	.318	.275	.438	3
TCA583S	TCA583C	1/2 - 20 UNF	H3	3.38	.472	.381	.275	.438	3
TCB603S	TCB603C	9/16 - 12 UNC	H3	3.59	.709	.381	.322	.500	3
TCB623S	TCB623C	9/16 - 18 UNF	H3	3.59	.512	.381	.322	.500	3
TCB625S	TCB625C	9/16 - 18 UNF	H5	3.59	.512	.381	.322	.500	3
TCB643S	TCB643C	5/8 - 11 UNC	H3	3.81	.748	.323	.360	.562	4
TCB645S	TCB645C	5/8 - 11 UNC	H5	3.81	.748	.323	.360	.562	4
TCB663S	TCB663C	5/8 - 18 UNF	H3	3.81	.512	.323	.360	.562	4

▶Super HSS(#5~1/2) and HSS-EX(9/16~1″)

▶ NEXT PAGE

◎ : Excellent ○: Good

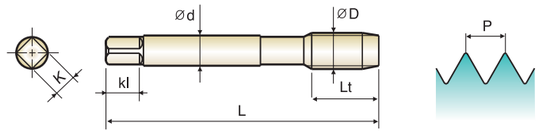
Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○			◎			

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium

COMBO TAPS

Combo TAP — TCA-S/TCB-S/TCA-C/TCB-C SERIES

SPIRAL FLUTE TAPS for Stainless Steels



Hole type
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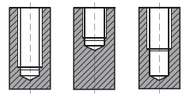


VA | Super HSS | HSS-EX | UNC UNF | USCTI 302A | H2~H6 | 60° | 2P~3P | Steam Oxide | TiCN | R45

Unit : Inch

EDP No.		SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN			L	Lt	D	K	kl	
TCB665S	**TCB665C**	5/8 - 18 UNF	H5	3.81	.512	.323	.360	.562	4
TCB703S	**TCB703C**	3/4 - 10 UNC	H3	4.25	.827	.367	.442	.688	4
TCB705S	**TCB705C**	3/4 - 10 UNC	H5	4.25	.827	.367	.442	.688	4
TCB723S	**TCB723C**	3/4 - 16 UNF	H3	4.25	.591	.429	.442	.688	4
TCB725S	**TCB725C**	3/4 - 16 UNF	H5	4.25	.591	.429	.442	.688	4
TCB744S	**TCB744C**	7/8 - 9 UNC	H4	4.69	.827	.480	.523	.750	4
TCB746S	**TCB746C**	7/8 - 9 UNC	H6	4.69	.827	.480	.523	.750	4
TCB764S	**TCB764C**	7/8 - 14 UNF	H4	4.69	.709	.590	.523	.750	4
TCB766S	**TCB766C**	7/8 - 14 UNF	H6	4.69	.709	.590	.523	.750	4
TCB784S	**TCB784C**	1" - 8 UNC	H4	5.13	.984	.697	.600	.812	4
TCB786S	**TCB786C**	1" - 8 UNC	H6	5.13	.984	.697	.600	.812	4
TCB804S	**TCB804C**	1" - 12 UNF	H4	5.13	.709	.800	.600	.812	4
TCB806S	**TCB806C**	1" - 12 UNF	H6	5.13	.709	.800	.600	.812	4

▶Super HSS(#5~1/2) and HSS-EX(9/16~1")

◎ : Excellent ○: Good

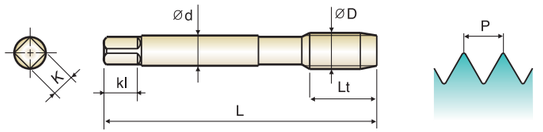
Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○			◎			

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium

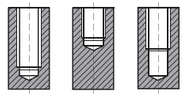
COMBO TAPS

Combo TAP — TCC-S/TCD-S/TCC-C/TCD-C SERIES

SPIRAL FLUTE TAPS for Stainless Steels



Hole type
2.5×D



VA | Super HSS | HSS-EX | M | USCTI 302A | D3~D7 | 60° | 2P~3P | Steam Oxide | TiCN | R45

Unit : Inch

EDP No.		SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN			L	Lt	D	K	kl	
TCC203S	**TCC203C**	M3 x 0.5	D3	1.94	.197	.141	.110	.188	3
TCC224S	**TCC224C**	M3.5 x 0.6	D4	2.00	.276	.141	.110	.188	3
TCC244S	**TCC244C**	M4 x 0.7	D4	2.13	.276	.168	.131	.250	3
TCC284S	**TCC284C**	M5 x 0.8	D4	2.38	.354	.194	.152	.250	3
TCC315S	**TCC315C**	M6 x 1.0	D5	2.50	.433	.255	.191	.312	3
TCC345S	**TCC345C**	M7 x 1.0	D5	2.72	.433	.318	.238	.375	3
TCC365S	**TCC365C**	M8 x 1.25	D5	2.72	.472	.318	.238	.375	3
TCC375S	**TCC375C**	M8 x 1.0	D5	2.72	.433	.318	.238	.375	3
TCC426S	**TCC426C**	M10 x 1.5	D6	2.94	.512	.381	.286	.438	3
TCC435S	**TCC435C**	M10 x 1.25	D5	2.94	.472	.381	.286	.438	3
TCC506S	**TCC506C**	M12 x 1.75	D6	3.38	.591	.367	.275	.438	3
TCC525S	**TCC525C**	M12 x 1.25	D5	3.38	.551	.367	.275	.438	3
TCD547S	**TCD547C**	M14 x 2.0	D7	3.59	.709	.429	.322	.500	3
TCD556S	**TCD556C**	M14 x 1.5	D6	3.59	.551	.429	.322	.500	3
TCD607S	**TCD607C**	M16 x 2.0	D7	3.81	.709	.480	.360	.562	3
TCD616S	**TCD616C**	M16 x 1.5	D6	3.81	.551	.480	.360	.562	3
TCD657S	**TCD657C**	M18 x 2.5	D7	4.03	.787	.542	.406	.625	4
TCD676S	**TCD676C**	M18 x 1.5	D6	4.03	.551	.542	.406	.625	4

▶Super HSS(M3~M12) and HSS-EX(M14~M18)

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○			◎			

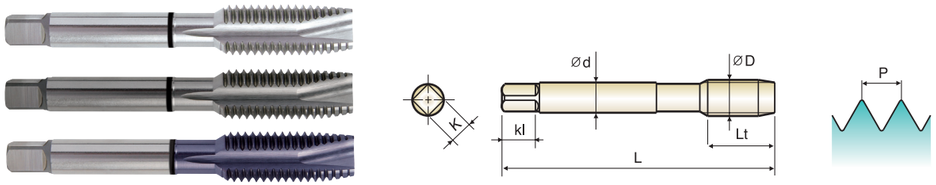
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium

COMBO TAPS

Combo TAP

T4/T4-S/T4-C SERIES

SPIRAL POINT TAPS for Multi-Purpose



Hole type
3.0×D

MU | HSS-EX | UNC UNF | USCTI 302A | H2~H6 | 60° | 4P~5P | Bright | Steam Oxide | TiCN

Unit : Inch

EDP No. Bright	EDP No. Steam Oxide	EDP No. TiCN	SIZE & TPI	Limit	Overall Length L	Thread Length Lt	Shank Diameter D	Square Size K	Square Length kl	No. of Flute
T4162	T4162S	T4162C	#4 - 40 UNC	H2	1.88	.335	.141	.110	.188	2
T4182	T4182S	T4182C	#4 - 48 UNF	H2	1.88	.335	.141	.110	.188	2
T4202	T4202S	T4202C	#5 - 40 UNC	H2	1.94	.374	.141	.110	.188	3
T4222	T4222S	T4222C	#5 - 44 UNF	H2	1.94	.374	.141	.110	.188	3
T4243	T4243S	T4243C	#6 - 32 UNC	H3	2.00	.413	.141	.110	.188	3
T4262	T4262S	T4262C	#6 - 40 UNF	H2	2.00	.413	.141	.110	.188	3
T4283	T4283S	T4283C	#8 - 32 UNC	H3	2.13	.453	.168	.131	.250	3
T4302	T4302S	T4302C	#8 - 36 UNF	H2	2.13	.453	.168	.131	.250	3
T4323	T4323S	T4323C	#10 - 24 UNC	H3	2.38	.531	.194	.152	.250	3
T4343	T4343S	T4343C	#10 - 32 UNF	H3	2.38	.531	.194	.152	.250	3
T4363	T4363S	T4363C	#12 - 24 UNC	H3	2.38	.571	.220	.165	.281	3
T4383	T4383S	T4383C	#12 - 28 UNF	H3	2.38	.571	.220	.165	.281	3
T4403	T4403S	T4403C	1/4 - 20 UNC	H3	2.50	.591	.255	.191	.312	3
T4405	T4405S	T4405C	1/4 - 20 UNC	H5	2.50	.591	.255	.191	.312	3
T4423	T4423S	T4423C	1/4 - 28 UNF	H3	2.50	.591	.255	.191	.312	3
T4424	T4424S	T4424C	1/4 - 28 UNF	H4	2.50	.591	.255	.191	.312	3
T4443	T4443S	T4443C	5/16 - 18 UNC	H3	2.72	.669	.318	.238	.375	3
T4445	T4445S	T4445C	5/16 - 18 UNC	H5	2.72	.669	.318	.238	.375	3
T4463	T4463S	T4463C	5/16 - 24 UNF	H3	2.72	.669	.318	.238	.375	3
T4465	T4465S	T4465C	5/16 - 24 UNF	H5	2.72	.669	.318	.238	.375	3
T4483	T4483S	T4483C	3/8 - 16 UNC	H3	2.94	.748	.381	.286	.438	3
T4485	T4485S	T4485C	3/8 - 16 UNC	H5	2.94	.748	.381	.286	.438	3
T4503	T4503S	T4503C	3/8 - 24 UNF	H3	2.94	.748	.381	.286	.438	3
T4504	T4504S	T4504C	3/8 - 24 UNF	H4	2.94	.748	.381	.286	.438	3
T4523	T4523S	T4523C	7/16 - 14 UNC	H3	3.16	.866	.323	.242	.406	3
T4525	T4525S	T4525C	7/16 - 14 UNC	H5	3.16	.866	.323	.242	.406	3

▶Coating(TiN, TiAlN or Hardslick) is available on your request.
Coating Codes for Combo Tap
Bright Finish No. + N(TiN), F(TiAlN), H(Hardslick)

▶ NEXT PAGE

▶Steam Oxide is not recommended for Aluminum and Aluminum alloys.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

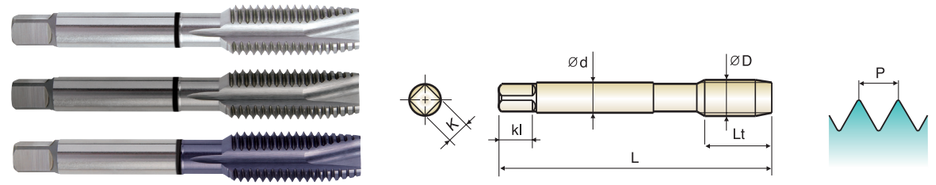
HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

COMBO TAPS

Combo TAP

T4/T4-S/T4-C SERIES

SPIRAL POINT TAPS for Multi-Purpose



Hole type
3.0×D

MU | HSS-EX | UNC UNF | USCTI 302A | H2~H6 | 60° | 4P~5P | Bright | Steam Oxide | TiCN

Unit : Inch

EDP No. Bright	EDP No. Steam Oxide	EDP No. TiCN	SIZE & TPI	Limit	Overall Length L	Thread Length Lt	Shank Diameter D	Square Size K	Square Length kl	No. of Flute
T4543	T4543S	T4543C	7/16 - 20UNF	H3	3.16	.866	.323	.242	.406	3
T4545	T4545S	T4545C	7/16 - 20 UNF	H5	3.16	.866	.323	.242	.406	3
T4565	T4565S	T4565C	1/2 - 13 UNC	H5	3.38	.984	.367	.275	.438	3
T4585	T4585S	T4585C	1/2 - 20 UNF	H5	3.38	.984	.367	.275	.438	3
T4605	T4605S	T4605C	9/16 - 12 UNC	H5	3.59	.984	.429	.322	.500	3
T4625	T4625S	T4625C	9/16 - 18 UNF	H5	3.59	.984	.429	.322	.500	3
T4645	T4645S	T4645C	5/8 - 11 UNC	H5	3.81	1.083	.480	.360	.562	3
T4665	T4665S	T4665C	5/8 - 18 UNF	H5	3.81	1.083	.480	.360	.562	3
T4705	T4705S	T4705C	3/4 - 10 UNC	H5	4.25	1.201	.590	.442	.688	3
T4725	T4725S	T4725C	3/4 - 16 UNF	H5	4.25	1.201	.590	.442	.688	3
T4746	T4746S	T4746C	7/8 - 9 UNC	H6	4.69	1.339	.697	.523	.750	3
T4766	T4766S	T4766C	7/8 - 14 UNF	H6	4.69	1.339	.697	.523	.750	3
T4786	T4786S	T4786C	1" - 8 UNC	H6	5.13	1.496	.800	.600	.812	3
T4806	T4806S	T4806C	1" - 12 UNF	H6	5.13	1.496	.800	.600	.812	3

▶Coating(TiN, TiAlN or Hardslick) is available on your request.
Coating Codes for Combo Tap
Bright Finish No. + N(TiN), F(TiAlN), H(Hardslick)

▶Steam Oxide is not recommended for Aluminum and Aluminum alloys.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

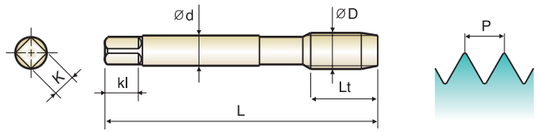
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

COMBO TAPS

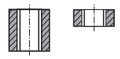
Combo TAP

T3 / T3-S / T3-C SERIES

SPIRAL POINT TAPS for Multi-Purpose



Hole type
3.0×D



MU | HSS-EX | M | USCTI 302A | D3~D8 | 60° | 4P~5P | Bright | Steam Oxide | TiCN

Unit : Inch

EDP No. Bright	EDP No. Steam Oxide	EDP No. TiCN	SIZE & TPI	Limit	Overall Length L	Thread Length Lt	Shank Diameter D	Square Size K	Square Length kl	No. of Flute
T3203	T3203S	T3203C	M3 x 0.5	D3	1.94	.374	.141	.110	.188	3
T3224	T3224S	T3224C	M3.5 x 0.6	D4	2.00	.413	.141	.110	.188	3
T3244	T3244S	T3244C	M4 x 0.7	D4	2.13	.453	.168	.131	.250	3
T3284	T3284S	T3284C	M5 x 0.8	D4	2.38	.531	.194	.152	.250	3
T3315	T3315S	T3315C	M6 x 1.0	D5	2.50	.591	.255	.191	.312	3
T3345	T3345S	T3345C	M7 x 1.0	D5	2.72	.669	.318	.238	.375	3
T3365	T3365S	T3365C	M8 x 1.25	D5	2.72	.669	.318	.238	.375	3
T3375	T3375S	T3375C	M8 x 1.0	D5	2.72	.669	.318	.238	.375	3
T3426	T3426S	T3426C	M10 x 1.5	D6	2.94	.748	.381	.286	.438	3
T3435	T3435S	T3435C	M10 x 1.25	D5	2.94	.748	.381	.286	.438	3
T3506	T3506S	T3506C	M12 x 1.75	D6	3.38	.984	.367	.275	.438	3
T3525	T3525S	T3525C	M12 x 1.25	D5	3.38	.984	.367	.275	.438	3
T3547	T3547S	T3547C	M14 x 2.0	D7	3.59	.984	.429	.322	.500	3
T3556	T3556S	T3556C	M14 x 1.5	D6	3.59	.984	.429	.322	.500	3
T3607	T3607S	T3607C	M16 x 2.0	D7	3.81	1.083	.480	.360	.562	3
T3616	T3616S	T3616C	M16 x 1.5	D6	3.81	1.083	.480	.360	.562	3
T3657	T3657S	T3657C	M18 x 2.5	D7	4.03	1.083	.542	.406	.625	3
T3676	T3676S	T3676C	M18 x 1.5	D6	4.03	1.083	.542	.406	.625	3
T3707	T3707S	T3707C	M20 x 2.5	D7	4.47	1.201	.652	.489	.688	3
T3726	T3726S	T3726C	M20 x 1.5	D6	4.47	1.201	.652	.489	.688	3
T3747	T3747S	T3747C	M22 x 2.5	D7	4.69	1.339	.697	.523	.750	3
T3766	T3766S	T3766C	M22 x 1.5	D6	4.69	1.339	.697	.523	.750	3
T3788	T3788S	T3788C	M24 x 3.0	D8	4.91	1.339	.760	.570	.750	3

▶Coating(TiN, TiAlN or Hardslick) is available on your request.
Coating Codes for Combo Tap
Bright Finish No. + N(TiN), F(TiAlN), H(Hardslick)

▶Steam Oxide is not recommended for Aluminum and Aluminum alloys.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

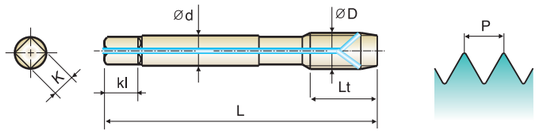
COMBO TAPS

Combo TAP

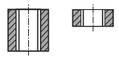
TB / TB-N SERIES

SPIRAL POINT TAPS for Multi-Purpose

with Internal Coolant



Hole type
3.0×D



MU | HSS-EX | UNC UNF | USCTI 302A | H4~H6 | 60° | 4P~5P | Bright | TiN

Unit : Inch

EDP No. Bright	EDP No. TiN	SIZE & TPI	Limit	Overall Length L	Thread Length Lt	Shank Diameter D	Square Size K	Square Length kl	No. of Flute
TB405	TB405N	1/4 - 20 UNC	H5	2.50	.591	.255	.191	.312	2
TB424	TB424N	1/4 - 28 UNF	H4	2.50	.591	.255	.191	.312	2
TB445	TB445N	5/16 - 18 UNC	H5	2.72	.669	.318	.238	.375	3
TB464	TB464N	5/16 - 24 UNF	H4	2.72	.669	.318	.238	.375	3
TB485	TB485N	3/8 - 16 UNC	H5	2.94	.748	.381	.286	.438	3
TB504	TB504N	3/8 - 24 UNF	H4	2.94	.748	.381	.286	.438	3
TB525	TB525N	7/16 - 14 UNC	H5	3.16	.866	.323	.242	.406	3
TB545	TB545N	7/16 - 20 UNF	H5	3.16	.866	.323	.242	.406	3
TB565	TB565N	1/2 - 13 UNC	H5	3.38	.984	.367	.275	.438	3
TB585	TB585N	1/2 - 20 UNF	H5	3.38	.984	.367	.275	.438	3
TB605	TB605N	9/16 - 12 UNC	H5	3.59	.984	.429	.322	.500	3
TB625	TB625N	9/16 - 18 UNF	H5	3.59	.984	.429	.322	.500	3
TB645	TB645N	5/8 - 11 UNC	H5	3.81	1.083	.480	.360	.562	3
TB665	TB665N	5/8 - 18 UNF	H5	3.81	1.083	.480	.360	.562	3
TB705	TB705N	3/4 - 10 UNC	H5	4.25	1.201	.590	.442	.688	3
TB725	TB725N	3/4 - 16 UNF	H5	4.25	1.201	.590	.442	.688	3
TB746	TB746N	7/8 - 9 UNC	H6	4.69	1.339	.697	.523	.750	3
TB766	TB766N	7/8 - 14 UNF	H6	4.69	1.339	.697	.523	.750	3
TB786	TB786N	1" - 8 UNC	H6	5.13	1.496	.800	.600	.812	3
TB806	TB806N	1" - 12 UNF	H6	5.13	1.496	.800	.600	.812	3

▶Coating(TiCN, TiAlN or Hardslick) or Surface Treatment(Steam Oxide) is available on your request.
Coating Codes for Combo Tap
Bright Finish No. + C(TiCN), F(TiAlN), H(Hardslick), S(Steam Oxide)

◎ : Excellent ○: Good

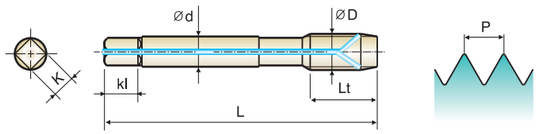
Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

YG COMBO TAPS — Combo TAP — TH / TH-N SERIES

SPIRAL POINT TAPS for Multi-Purpose

with Internal Coolant



Hole type
3.0×D

MU | HSS-EX | M | USCTI 302A | D5~D7 | 60° | 4P~5P | Bright | TiN

Unit : Inch

EDP No. Bright	EDP No. TiN	SIZE & TPI	Limit	Overall Length L	Thread Length Lt	Shank Diameter D	Square Size K	Square Length kl	No. of Flute
TH315	TH315N	M6 x 1.0	D5	2.50	.591	.255	.191	.312	3
TH365	TH365N	M8 x 1.25	D5	2.72	.669	.318	.238	.375	3
TH426	TH426N	M10 x 1.5	D6	2.94	.748	.381	.286	.438	3
TH506	TH506N	M12 x 1.75	D6	3.38	.984	.367	.275	.438	3
TH547	TH547N	M14 x 2.0	D7	3.59	.984	.429	.322	.500	3
TH607	TH607N	M16 x 2.0	D7	3.81	1.083	.480	.360	.562	3
TH657	TH657N	M18 x 2.5	D7	4.03	1.083	.542	.406	.625	3
TH707	TH707N	M20 x 2.5	D7	4.47	1.201	.652	.489	.688	3

▶Coating(TiCN, TiAlN or Hardslick) or Surface Treatment(Steam Oxide) is available on your request.
Coating Codes for Combo Tap
Bright Finish No. + C(TiCN), F(TiAlN), H(Hardslick), S(Steam Oxide)

◎ : Excellent ○: Good

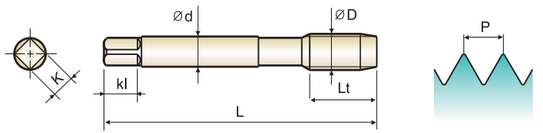
Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

YG COMBO TAPS — Combo TAP — TC-S / TC-C SERIES

SPIRAL POINT TAPS for Multi-Purpose

DIN-ANSI Shank



Hole type
3.0×D

MU | HSS-EX | UNC UNF | H2~H6 | 60° | 4P~5P | Steam Oxide | TiCN

Unit : Inch

EDP No. Steam Oxide	EDP No. TiCN	SIZE & TPI	Limit	Overall Length L	Thread Length Lt	Shank Diameter D	Square Size K	Square Length kl	No. of Flute
TC162S	TC162C	#4 - 40 UNC	H2	2.21	.335	.141	.110	.188	2
TC202S	TC202C	#5 - 40 UNC	H2	2.21	.374	.141	.110	.188	3
TC243S	TC243C	#6 - 32 UNC	H3	2.21	.413	.141	.110	.188	3
TC283S	TC283C	#8 - 32 UNC	H3	2.48	.453	.168	.131	.250	3
TC323S	TC323C	#10 - 24 UNC	H3	2.76	.531	.194	.152	.250	3
TC343S	TC343C	#10 - 32 UNF	H3	2.76	.531	.194	.152	.250	3
TC363S	TC363C	#12 - 24 UNC	H3	3.15	.571	.220	.165	.281	3
TC383S	TC383C	#12 - 28 UNF	H3	3.15	.571	.220	.165	.281	3
TC405S	TC405C	1/4 - 20 UNC	H5	3.15	.591	.255	.191	.312	3
TC424S	TC424C	1/4 - 28 UNF	H4	3.15	.591	.255	.191	.312	3
TC445S	TC445C	5/16 - 18 UNC	H5	3.54	.669	.318	.238	.375	3
TC464S	TC464C	5/16 - 24 UNF	H4	3.54	.669	.318	.238	.375	3
TC485S	TC485C	3/8 - 16 UNC	H5	3.94	.748	.381	.286	.438	3
TC504S	TC504C	3/8 - 24 UNF	H4	3.94	.748	.381	.286	.438	3
TC525S	TC525C	7/16 - 14 UNC	H5	3.94	.866	.323	.242	.406	3
TC545S	TC545C	7/16 - 20 UNF	H5	3.94	.866	.323	.242	.406	3
TC565S	TC565C	1/2 - 13 UNC	H5	4.33	.984	.367	.275	.438	3
TC585S	TC585C	1/2 - 20 UNF	H5	3.94	.984	.367	.275	.438	3
TC605S	TC605C	9/16 - 12 UNC	H5	4.33	.984	.429	.322	.500	3
TC625S	TC625C	9/16 - 18 UNF	H5	3.94	.984	.429	.322	.500	3
TC645S	TC645C	5/8 - 11 UNC	H5	4.33	1.083	.480	.360	.562	3
TC665S	TC665C	5/8 - 18 UNF	H5	3.94	1.083	.480	.360	.562	3
TC705S	TC705C	3/4 - 10 UNC	H5	4.92	1.201	.590	.442	.688	3
TC725S	TC725C	3/4 - 16 UNF	H5	4.33	1.201	.590	.442	.688	3
TC746S	TC746C	7/8 - 9 UNC	H6	5.51	1.339	.697	.523	.750	3
TC766S	TC766C	7/8 - 14 UNF	H6	4.92	1.339	.697	.523	.750	3
TC786S	TC786C	1" - 8 UNC	H6	6.30	1.496	.800	.600	.812	3
TC806S	TC806C	1" - 12 UNF	H6	5.51	1.496	.800	.600	.812	3

▶Steam Oxide is not recommended for Aluminum and Aluminum alloys.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

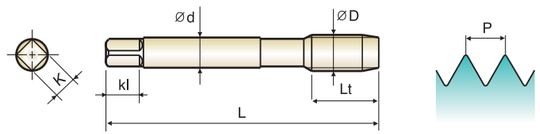
COMBO TAPS

Combo TAP

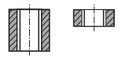
TK-S / TK-C SERIES

SPIRAL POINT TAPS for Multi-Purpose

DIN-ANSI Shank



Hole type
3.0×D



MU | HSS-EX | M | D3~D7 | 60° | 4P~5P | Steam Oxide | TiCN

Unit : Inch

EDP No.		SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN			L	Lt	D	K	kl	
TK203S	TK203C	M3 x 0.5	D3	.374	.374	.141	.110	.188	3
TK224S	TK224C	M3.5 x 0.6	D4	.413	.413	.141	.110	.188	3
TK244S	TK244C	M4 x 0.7	D4	.453	.453	.168	.131	.250	3
TK284S	TK284C	M5 x 0.8	D4	.531	.531	.194	.152	.250	3
TK315S	TK315C	M6 x 1.0	D5	.591	.591	.255	.191	.312	3
TK365S	TK365C	M8 x 1.25	D5	.669	.669	.318	.238	.375	3
TK426S	TK426C	M10 x 1.5	D6	.748	.748	.381	.286	.438	3
TK435S	TK435C	M10 x 1.25	D5	.748	.748	.381	.286	.438	3
TK506S	TK506C	M12 x 1.75	D6	.984	.984	.367	.275	.438	3
TK525S	TK525C	M12 x 1.25	D5	.984	.984	.367	.275	.438	3
TK547S	TK547C	M14 x 2.0	D7	.984	.984	.429	.322	.500	3
TK556S	TK556C	M14 x 1.5	D6	.984	.984	.429	.322	.500	3
TK607S	TK607C	M16 x 2.0	D7	1.083	1.083	.480	.360	.562	3
TK616S	TK616C	M16 x 1.5	D6	1.083	1.083	.480	.360	.562	3
TK657S	TK657C	M18 x 2.5	D7	1.083	1.083	.542	.406	.625	3
TK676S	TK676C	M18 x 1.5	D6	1.083	1.083	.542	.406	.625	3

▶Steam Oxide is not recommended for Aluminum and Aluminum alloys.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	◎	◎	◎	◎	◎	◎

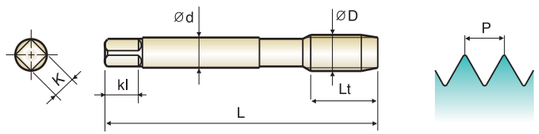
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎	○		○	◎	◎	◎	◎	◎

COMBO TAPS

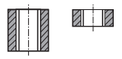
Combo TAP

TCE-S / TCF-S / TCE-C / TCF-C SERIES

SPIRAL POINT TAPS for Stainless Steels



Hole type
3.0×D



VA | Super HSS | HSS-EX | UNC UNF | USCTI 302A | H2~H6 | 60° | 4P | Steam Oxide | TiCN

Unit : Inch

EDP No.		SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN			L	Lt	D	K	kl	
TCE202S	TCE202C	#5 - 40 UNC	H2	1.94	.374	.141	.110	.188	3
TCE203S	TCE203C	#5 - 40 UNC	H3	1.94	.374	.141	.110	.188	3
TCE243S	TCE243C	#6 - 32 UNC	H3	2.00	.413	.141	.110	.188	3
TCE283S	TCE283C	#8 - 32 UNC	H3	2.13	.453	.168	.131	.250	3
TCE323S	TCE323C	#10 - 24 UNC	H3	2.38	.531	.194	.152	.250	3
TCE343S	TCE343C	#10 - 32 UNF	H3	2.38	.531	.194	.152	.250	3
TCE403S	TCE403C	1/4 - 20 UNC	H3	2.50	.591	.255	.191	.312	3
TCE405S	TCE405C	1/4 - 20 UNC	H5	2.50	.591	.255	.191	.312	3
TCE423S	TCE423C	1/4 - 28 UNF	H3	2.50	.591	.255	.191	.312	3
TCE443S	TCE443C	5/16 - 18 UNC	H3	2.72	.669	.318	.238	.375	3
TCE445S	TCE445C	5/16 - 18 UNC	H5	2.72	.669	.318	.238	.375	3
TCE463S	TCE463C	5/16 - 24 UNF	H3	2.72	.669	.318	.238	.375	3
TCE483S	TCE483C	3/8 - 16 UNC	H3	2.94	.748	.381	.286	.438	3
TCE485S	TCE485C	3/8 - 16 UNC	H5	2.94	.748	.381	.286	.438	3
TCE503S	TCE503C	3/8 - 24 UNF	H3	2.94	.748	.381	.286	.438	3
TCE523S	TCE523C	7/16 - 14 UNC	H3	3.16	.866	.323	.242	.406	3
TCE525S	TCE525C	7/16 - 14 UNC	H5	3.16	.866	.323	.242	.406	3
TCE543S	TCE543C	7/16 - 20 UNF	H3	3.16	.866	.323	.242	.406	3
TCE545S	TCE545C	7/16 - 20 UNF	H5	3.16	.866	.323	.242	.406	3
TCE563S	TCE563C	1/2 - 13 UNC	H3	3.38	.984	.367	.275	.438	3
TCE565S	TCE565C	1/2 - 13 UNC	H5	3.38	.984	.367	.275	.438	3
TCE583S	TCE583C	1/2 - 20 UNF	H3	3.38	.984	.367	.275	.438	3
TCF603S	TCF603C	9/16 - 12 UNC	H3	3.59	.984	.429	.322	.500	3
TCF623S	TCF623C	9/16 - 18 UNF	H3	3.59	.984	.429	.322	.500	3
TCF643S	TCF643C	5/8 - 11 UNC	H3	3.81	1.083	.480	.360	.562	3
TCF645S	TCF645C	5/8 - 11 UNC	H5	3.81	1.083	.480	.360	.562	3

▶Super HSS(#5~1/2) and HSS-EX(9/16~1")

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○			◎			

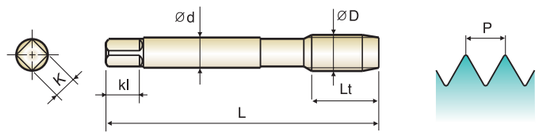
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium

COMBO TAPS

Combo TAP

TCE-S/TCF-S/TCE-C/TCF-C SERIES

SPIRAL POINT TAPS for Stainless Steels



Hole type
3.0×D

VA | Super HSS | HSS-EX | UNC UNF | USCTI 302A | H2~H6 | 60° | 4P | Steam Oxide | TiCN

Unit : Inch

EDP No.		SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN			L	Lt	D	K	kl	
TCF665S	**TCF665C**	5/8 - 18 UNF	H5	3.81	1.083	.480	.360	.562	3
TCF703S	**TCF703C**	3/4 - 10 UNC	H3	4.25	1.201	.590	.442	.688	3
TCF705S	**TCF705C**	3/4 - 10 UNC	H5	4.25	1.201	.590	.442	.688	3
TCF744S	**TCF744C**	7/8 - 9 UNC	H4	4.69	1.339	.697	.523	.750	3
TCF746S	**TCF746C**	7/8 - 9 UNC	H6	4.69	1.339	.697	.523	.750	3
TCF766S	**TCF766C**	7/8 - 14 UNF	H6	4.69	1.339	.697	.523	.750	3
TCF784S	**TCF784C**	1" - 8 UNC	H4	5.13	1.496	.800	.600	.812	3
TCF786S	**TCF786C**	1" - 8 UNC	H6	5.13	1.496	.800	.600	.812	3
TCF806S	**TCF806C**	1" - 12 UNF	H6	5.13	1.496	.800	.600	.812	3

▶Super HSS(#5~1/2) and HSS-EX(9/16~1")

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○			◎			

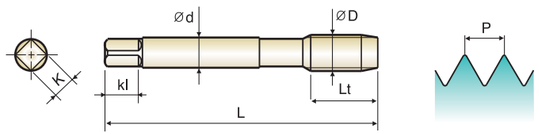
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium

COMBO TAPS

Combo TAP

TCG-S/TCH-S/TCG-C/TCH-C SERIES

SPIRAL POINT TAPS for Stainless Steels



Hole type
3.0×D

VA | Super HSS | HSS-EX | M | USCTI 302A | D3~D7 | 60° | 4P | Steam Oxide | TiCN

Unit : Inch

EDP No.		SIZE & TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN			L	Lt	D	K	kl	
TCG203S	**TCG203C**	M3 x 0.5	D3	1.94	.374	.141	.110	.188	3
TCG224S	**TCG224C**	M3.5 x 0.6	D4	2.00	.413	.141	.110	.188	3
TCG244S	**TCG244C**	M4 x 0.7	D4	2.13	.453	.168	.131	.250	3
TCG284S	**TCG284C**	M5 x 0.8	D4	2.38	.531	.194	.152	.250	3
TCG315S	**TCG315C**	M6 x 1.0	D5	2.50	.591	.255	.191	.312	3
TCG345S	**TCG345C**	M7 x 1.0	D5	2.72	.669	.318	.238	.375	3
TCG365S	**TCG365C**	M8 x 1.25	D5	2.72	.669	.318	.238	.375	3
TCG375S	**TCG375C**	M8 x 1.0	D5	2.72	.669	.318	.238	.375	3
TCG426S	**TCG426C**	M10 x 1.5	D6	2.94	.748	.381	.286	.438	3
TCG435S	**TCG435C**	M10 x 1.25	D5	2.94	.748	.381	.286	.438	3
TCG506S	**TCG506C**	M12 x 1.75	D6	3.38	.984	.367	.275	.438	3
TCG525S	**TCG525C**	M12 x 1.25	D5	3.38	.984	.367	.275	.438	3
TCH547S	**TCH547C**	M14 x 2.0	D7	3.59	.984	.429	.322	.500	3
TCH556S	**TCH556C**	M14 x 1.5	D6	3.59	.984	.429	.322	.500	3
TCH607S	**TCH607C**	M16 x 2.0	D7	3.81	1.083	.480	.360	.562	3
TCH616S	**TCH616C**	M16 x 1.5	D6	3.81	1.083	.480	.360	.562	3
TCH657S	**TCH657C**	M18 x 2.5	D7	4.03	1.083	.542	.406	.625	3
TCH676S	**TCH676C**	M18 x 1.5	D6	4.03	1.083	.542	.406	.625	3

▶Super HSS(M3~M12) and HSS-EX(M14~M18)

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○			◎			

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium

COMBO TAPS

Combo TAP

SPIRAL FLUTE COMBO TAP SETS

TAP SETS SPIRAL FLUTE COMBO

Series	Series	Standard	Surface Treatment	Size	Q'ty
T2836SET8	T2	UNC/F	Bright	1/4-20, 1/4-28, 5/16-18, 5-16-24, 3/8-16, 3/8-24, 7/16 -14, 7/16 -20	8 pcs
TG836SET8	T2-C	UNC/F	TiCN	1/4-20, 1/4-28, 5/16-18, 5-16-24, 3/8-16, 3/8-24, 7/16 -14, 7/16 -20	8 pcs
T2836SET8 -1	T2	UNC/F	Bright	1/4-20, 1/4-28, 5/16-18, 5-16-24, 3/8-16, 3/8-24, 1/2-13, 1/2-20	8 pcs
TG836SET8 -1	T2-C	UNC/F	TiCN	1/4-20, 1/4-28, 5/16-18, 5-16-24, 3/8-16, 3/8-24, 1/2-13, 1/2-20	8 pcs
T2805SET7	T5	M	Bright	M3, M4, M5, M6, M8, M10, M12	7 pcs
TG805SET7	T5-C	M	TiCN	M3, M4, M5, M6, M8, M10, M12	7 pcs

* Hardslick Coated Set available upon request

HSS

Being the best through innovation

SPIRAL FLUTE TAPS

- Tapping Blind Holes / Super HSS, HSS-E, HSS-PM, HSS-V & HSS

SELECTION GUIDE

SPIRAL FLUTE TAPS

Tapping Blind Holes / Super HSS, HSS-E, HSS-PM, HSS-V & HSS

INCH

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
BB/BI		Super HSS	UNC/UNF	**VG**	USCTI 302A	H2~H6	2 ~ 3P	2.5D	Steam Oxide Hardslick	68
BH/BM		Super HSS	M/MF	**VG**	USCTI 302A	D3~D7	2 ~ 3P		Steam Oxide Hardslick	70
BF/BK		Super HSS	UNC/UNF	**VG**	DIN-ANSI Shank	H2~H6	2 ~ 3P		Steam Oxide Hardslick	71
BD/BO		Super HSS	M/MF	**VG**	DIN-ANSI Shank	D3~D7	2 ~ 3P		Steam Oxide Hardslick	72
H5/H7/H8		P-HSS	UNC/UNF	**HR**	USCTI 302A	H2~H5	2 ~ 3P		Steam Oxide TiCN Hardslick	73
TQ858/ TK858/TR858		P-HSS	M/MF	**HR**	USCTI 302A	H2~H5	2 ~ 3P		Steam Oxide TiCN Hardslick	74
B3/B5/D6		P-HSS	UNC/UNF	**Ti Ni**	USCTI 302A	H2~H5	2 ~ 3P		Steam Oxide TiCN Hardslick	75
G9/H0		P-HSS	UNC/UNF	**VA**	USCTI Long Shank	H2~H3	2 ~ 3P		Hardslick	77
H2/H4		P-HSS	UNC/UNF	**VA**	USCTI Long Shank	H3	4 ~ 5P	3.0D	TiN Hardslick	78
BG/BG-GB		HSSE-V3	UNC/UN8	**VG**	DIN-ANSI Shank	2B	2 ~ 3P	2.5D	Hardslick Gold & Black	79
B1/B0/B2/D2		HSSE-V3	UNC/UNF	**VA**	USCTI 302A	H2~H7	2 ~ 3P		Bright Steam Oxide TiN/Hardslick	80
BS/BT		HSSE-V3	M/MF	**VA**	USCTI 302A	D3~D7	2 ~ 3P		Steam Oxide Hardslick	83
E6/E8/E9		HSSE-V3	M/MF	**VA**	DIN-ANSI Shank	D3~D7	2 ~ 3P		Steam Oxide TiCN Hardslick	84
D3/E0		HSSE-V3	UNC/UNF	**VG**	USCTI 302A	H2~H11	2 ~ 3P		Hardslick Steam Oxide	85
BU/BV		HSSE-V3	M/MF	**VG**	USCTI 302A	D3~D11	2 ~ 3P		Steam Oxide Hardslick	88
E2/E4/E5		HSSE-V3	M/MF	**VG**	DIN-ANSI Shank	D3~D7	2 ~ 3P		Steam Oxide TiCN Hardslick	90
C0/D8		HSSE-V3	UNC/UNF	**AI**	USCTI 302A	H2~H5	2 ~ 3P		Bright Hardslick	91
BW/BX		HSSE-V3	M/MF	**AI**	USCTI 302A	D3~D6	2 ~ 3P		Bright Hardslick	92

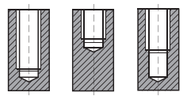
EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
C2/C3/C4/D9		HSSE-V3	UNC/UNF	**GS**	USCTI 302	H2~H6	1.5 ~ 2P	2.5D	Steam Oxide Bright/TiN Hardslick	93
F4/F8/F6		HSS-V	UNC/UNF	**GS**	USCTI 302A	H2~H6	1.5 ~ 2P		Steam Oxide TiN Hardslick	94
G4/G5/G6		HSS-V	M/MF	**GS**	USCTI 302A	D3~D6	1.5 ~ 2P		Bright TiCN Hardslick	96
G0/G1/G2		HSS-V	UNC/UNF	**GS**	DIN-ANSI Shank	H2~H6	2 ~ 3P		Bright TiN Hardslick	97
T7A96/T6A96/ T8A96 T7295/T6295/ T8295		HSS	UNC/UNF	**GS**	USCTI 302	H2~H5	4 ~ 5P 1.5 ~ 2P		Bright Steam Oxide TiN	99
T7A86/T6A86/ T8A86 T7A85/T6A85/ T8A85		HSS	M/MF	**GS**	USCTI 302	D3~D6	4 ~ 5P 1.5 ~ 2P		Bright Steam Oxide TiN	100
T7D01/T8D01 T7D02/T8D02		HSS	UNC/UNF	**GS**	USCTI Long Shank	H3	4 ~ 5P 1.5 ~ 2P		Bright TiN	101

SPIRAL FLUTE TAPS

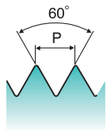
BB/BI SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Steels & Stainless Steels up to 35HRc

Hole type 2.5×D



USCTI



* NEW SIZE

VG | Super HSS | UNC UNF | USCTI 302A | H2~H6 | 60° | 2P~3P | Steam Oxide | Hardslick | R40

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF		
BB082	BI082	2	56	—	H2	2
BB162	BI162	4	40	—	H2	2
* BB163	* BI163	4	40	—	H3	2
* BB164	* BI164	4	40	—	H4	2
BB202	BI202	5	40	—	H2	3
* BB242	* BI242	6	32	—	H2	3
BB243	BI243	6	32	—	H3	3
* BB244	* BI244	6	32	—	H4	3
* BB245	* BI245	6	32	—	H5	3
* BB282	* BI282	8	32	—	H2	3
BB283	BI283	8	32	—	H3	3
* BB284	* BI284	8	32	—	H4	3
* BB285	* BI285	8	32	—	H5	3
* BB286	* BI286	8	32	—	H6	3
BB323	BI323	10	24	—	H3	3
* BB325	* BI325	10	24	—	H5	3
* BB342	* BI342	10	—	32	H2	3
BB343	BI343	10	—	32	H3	3
* BB344	* BI344	10	—	32	H4	3
* BB345	* BI345	10	—	32	H5	3
* BB346	* BI346	10	—	32	H6	3
BB403	BI403	1/4	20	—	H3	3
BB405	BI405	1/4	20	—	H5	3
BB423	BI423	1/4	—	28	H3	3
BB424	BI424	1/4	—	28	H4	3
* BB425	* BI425	1/4	—	28	H5	3
* BB426	* BI426	1/4	—	28	H6	3
* BB443	* BI443	5/16	18	—	H3	3
BB445	BI445	5/16	18	—	H5	3
* BB463	* BI463	5/16	—	24	H3	3
BB464	BI464	5/16	—	24	H4	3
* BB465	* BI465	5/16	—	24	H5	3
* BB466	* BI466	5/16	—	24	H6	3

▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎	◎		◎	◎		○

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

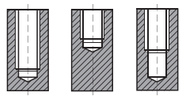
HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

SPIRAL FLUTE TAPS

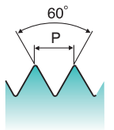
BB/BI SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Steels & Stainless Steels up to 35HRc

Hole type 2.5×D



USCTI



* NEW SIZE

VG | Super HSS | UNC UNF | USCTI 302A | H2~H6 | 60° | 2P~3P | Steam Oxide | Hardslick | R40

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF		
* BB483	* BI483	3/8	16	—	H3	3
BB485	BI485	3/8	16	—	H5	3
* BB503	* BI503	3/8	—	24	H3	3
BB504	BI504	3/8	—	24	H4	3
* BB505	* BI505	3/8	—	24	H5	3
* BB506	* BI506	3/8	—	24	H6	3
* BB523	* BI523	7/16	14	—	H3	3
BB525	BI525	7/16	14	—	H5	3
* BB543	* BI543	7/16	—	20	H3	3
BB545	BI545	7/16	—	20	H5	3
* BB563	* BI563	1/2	13	—	H3	3
BB565	BI565	1/2	13	—	H5	3
* BB583	* BI583	1/2	—	20	H3	3
BB585	BI585	1/2	—	20	H5	3
BB605	BI605	9/16	12	—	H5	3
BB625	BI625	9/16	—	18	H5	3
* BB643	* BI643	5/8	11	—	H3	4
BB645	BI645	5/8	11	—	H5	4
* BB663	* BI663	5/8	—	18	H3	4
BB665	BI665	5/8	—	18	H5	4
* BB703	* BI703	3/4	10	—	H3	4
BB705	BI705	3/4	10	—	H5	4
* BB723	* BI723	3/4	—	16	H3	4
BB725	BI725	3/4	—	16	H5	4
BB746	BI746	7/8	9	—	H6	4
BB766	BI766	7/8	—	14	H6	4
BB786	BI786	1	8	—	H6	4
BB806	BI806	1	—	12	H6	4
BB836	BI836	1-1/8	8	—	H6	4
BB876	BI876	1-1/4	8	—	H6	4
BB916	BI916	1-3/8	8	—	H6	4
BB956	BI956	1-1/2	8	—	H6	4

▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎	◎		◎	◎		○

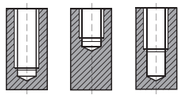
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL FLUTE TAPS

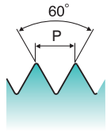
BH / BM SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Steels & Stainless Steels up to 35HRc

Hole type 2.5×D



USCTI



VG | Super HSS | M MF | USCTI 302A | D3~D7 | 60° | 2P~3P | Steam Oxide | Hardslick | R40

EDP No.		SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick				
BH203	**BM203**	M3	0.5	D3	3
BH224	**BM224**	M3.5	0.6	D4	3
BH244	**BM244**	M4	0.7	D4	3
BH284	**BM284**	M5	0.8	D4	3
BH315	**BM315**	M6	1.0	D5	3
BH345	**BM345**	M7	1.0	D5	3
BH365	**BM365**	M8	1.25	D5	3
BH375	**BM375**	M8	1.0	D5	3
BH426	**BM426**	M10	1.5	D6	3
BH435	**BM435**	M10	1.25	D5	3
BH506	**BM506**	M12	1.75	D6	3
BH525	**BM525**	M12	1.25	D5	3
BH547	**BM547**	M14	2.0	D7	3
BH556	**BM556**	M14	1.5	D6	3
BH607	**BM607**	M16	2.0	D7	3
BH616	**BM616**	M16	1.5	D6	3
BH657	**BM657**	M18	2.5	D7	4
BH676	**BM676**	M18	1.5	D6	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎	◎		◎	◎		○

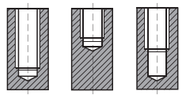
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL FLUTE TAPS

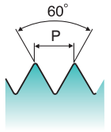
BF / BK SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Steels & Stainless Steels up to 35HRc

Hole type 2.5×D



DIN-ANSI Shank



VG | Super HSS | UNC UNF | H2~H6 | 60° | 2P~3P | Steam Oxide | Hardslick | R40

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF		
BF082	**BK082**	2	56	—	H2	2
BF162	**BK162**	4	40	—	H2	2
BF202	**BK202**	5	40	—	H2	3
BF243	**BK243**	6	32	—	H3	3
BF283	**BK283**	8	32	—	H3	3
BF323	**BK323**	10	24	—	H3	3
BF343	**BK343**	10	—	32	H3	3
BF403	**BK403**	1/4	20	—	H3	3
BF405	**BK405**	1/4	20	—	H5	3
BF423	**BK423**	1/4	—	28	H3	3
BF424	**BK424**	1/4	—	28	H4	3
BF445	**BK445**	5/16	18	—	H5	3
BF464	**BK464**	5/16	—	24	H4	3
BF485	**BK485**	3/8	16	—	H5	3
BF504	**BK504**	3/8	—	24	H4	3
BF525	**BK525**	7/16	14	—	H5	3
BF545	**BK545**	7/16	—	20	H5	3
BF565	**BK565**	1/2	13	—	H5	3
BF585	**BK585**	1/2	—	20	H5	3
BF605	**BK605**	9/16	12	—	H5	3
BF625	**BK625**	9/16	—	18	H5	3
BF645	**BK645**	5/8	11	—	H5	4
BF665	**BK665**	5/8	—	18	H5	4
BF705	**BK705**	3/4	10	—	H5	4
BF725	**BK725**	3/4	—	16	H5	4
BF746	**BK746**	7/8	9	—	H6	4
BF766	**BK766**	7/8	—	14	H6	4
BF786	**BK786**	1	8	—	H6	4
BF806	**BK806**	1	—	12	H6	4
BF836	**BK836**	1-1/8	8	—	H6	4
BF876	**BK876**	1-1/4	8	—	H6	4
BF916	**BK916**	1-3/8	8	—	H6	4
BF956	**BK956**	1-1/2	8	—	H6	4

▶ For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎	◎		◎	◎		○

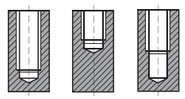
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL FLUTE TAPS

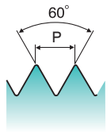
BD / BO SERIES

METRIC SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Steels & Stainless Steels up to 35HRc

Hole type 2.5×D



DIN-ANSI Shank



VG | Super HSS | M MF | D3~D7 | 60° | 2P~3P | Steam Oxide | Hardslick | R40

EDP No.		SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick				
BD203	**BO203**	M3	0.5	D3	3
BD224	**BO224**	M3.5	0.6	D4	3
BD244	**BO244**	M4	0.7	D4	3
BD284	**BO284**	M5	0.8	D4	3
BD315	**BO315**	M6	1.0	D5	3
BD345	**BO345**	M7	1.0	D5	3
BD365	**BO365**	M8	1.25	D5	3
BD375	**BO375**	M8	1.0	D5	3
BD426	**BO426**	M10	1.5	D6	3
BD435	**BO435**	M10	1.25	D5	3
BD506	**BO506**	M12	1.75	D6	3
BD525	**BO525**	M12	1.25	D5	3
BD547	**BO547**	M14	2.0	D7	3
BD556	**BO556**	M14	1.5	D6	3
BD607	**BO607**	M16	2.0	D7	3
BD616	**BO616**	M16	1.5	D6	3
BD657	**BO657**	M18	2.5	D7	4
BD676	**BO676**	M18	1.5	D6	4

▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎	◎		◎	◎		○

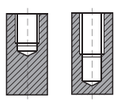
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL FLUTE TAPS

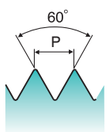
H5 / H7 / H8 SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE Steels up to 45HRc

Hole type 2.5×D



USCTI



* New Surface Treatment

HR | P-HSS | UNC UNF | USCTI 302A | H2~H5 | 60° | 2P~3P | Steam Oxide | TiCN | Hardslick | R15

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiCN	Hardslick		UNC	UNF		
* **H5082**	**H7082**	**H8082**	2	56	—	H2	3
* **H5162**	**H7162**	**H8162**	4	40	—	H2	3
* **H5202**	**H7202**	**H8202**	5	40	—	H2	3
* **H5243**	**H7243**	**H8243**	6	32	—	H3	3
* **H5283**	**H7283**	**H8283**	8	32	—	H3	3
* **H5323**	**H7323**	**H8323**	10	24	—	H3	3
* **H5343**	**H7343**	**H8343**	10	—	32	H3	3
* **H5405**	**H7405**	**H8405**	1/4	20	—	H5	3
* **H5424**	**H7424**	**H8424**	1/4	—	28	H4	3
* **H5445**	**H7445**	**H8445**	5/16	18	—	H5	3
* **H5464**	**H7464**	**H8464**	5/16	—	24	H4	3
* **H5485**	**H7485**	**H8485**	3/8	16	—	H5	3
* **H5504**	**H7504**	**H8504**	3/8	—	24	H4	3
* **H5525**	**H7525**	**H8525**	7/16	14	—	H5	3
* **H5545**	**H7545**	**H8545**	7/16	—	20	H5	3
* **H5565**	**H7565**	**H8565**	1/2	13	—	H5	3
* **H5585**	**H7585**	**H8585**	1/2	—	20	H5	3
* **H5645**	**H7645**	**H8645**	5/8	11	—	H5	4
* **H5665**	**H7665**	**H8665**	5/8	—	18	H5	4
* **H5705**	**H7705**	**H8705**	3/4	10	—	H5	4
* **H5725**	**H7725**	**H8725**	3/4	—	16	H5	4

▶Bright Finish Available: H6 Series
▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
		○	◎		○	◎	

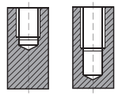
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○	○	○			◎		

SPIRAL FLUTE TAPS

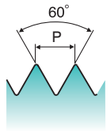
TQ858 / TK858 / TR858 SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE
Steels up to 45HRc

Hole type 2.5×D



USCTI



◇ Call for Availability

HR | P-HSS | M MF | USCTI 302A | H2~H5 | 60° | 2P~3P | Steam Oxide | TiCN | Hardslick | R15

EDP No.			SIZE	Pitch	Limit	No. of Flute
Steam Oxide	TiCN	Hardslick				
TQ858203	TK858203	TR858203HAR	M3	0.50	D3	3
TQ858253	TK858253	TR858253HAR	M4	0.50	D3	3
TQ858244	TK858244	TR858244HAR	M4	0.70	D4	3
TQ858293	TK858293	TR858293HAR	M5	0.50	D3	3
TQ858284	TK858284	TR858284HAR	M5	0.80	D4	3
TQ858333	TK858333	TR858333HAR	M6	0.50	D3	3
TQ858324	TK858324	TR858324HAR	M6	0.75	D4	3
TQ858315	TK858315	TR858315HAR	M6	1.00	D5	3
TQ858375	TK858375	TR858375HAR	M8	1.00	D5	3
TQ858365	TK858365	TR858365HAR	M8	1.25	D5	3
TQ858445	TK858445	TR858445HAR	M10	1.00	D5	3
TQ858435	TK858435	TR858435HAR	M10	1.25	D5	3
TQ858426	TK858426	TR858426HAR	M10	1.50	D6	3
TQ858535	TK858535	TR858535HAR	M12	1.00	D5	3
TQ858526	TK858526	TR858526HAR	M12	1.25	D6	3
TQ858516	TK858516	TR858516HAR	M12	1.50	D6	3
TQ858506	TK858506	TR858506HAR	M12	1.75	D6	3
TQ858556	TK858556	TR858556HAR	M14	1.50	D6	3
TQ858547	TK858547	TR858547HAR	M14	2.00	D7	3
TQ858616	TK858616	TR858616HAR	M16	1.5	D6	4
TQ858607	TK858607	TR858607HAR	M16	2.0	D7	4
TQ858676	TK858676	TR858676HAR	M18	1.5	D6	4
TQ858657	TK858657	TR858657HAR	M18	2.5	D7	4
TQ858726	TK858726	TR858726HAR	M20	1.5	D6	4
TQ858707	TK858707	TR858707HAR	M20	2.5	D7	4
TQ858766	TK858766	TR858766HAR	M22	1.5	D6	4
TQ858747	TK858747	TR858747HAR	M22	2.5	D7	4
TQ858806	TK858806	TR858806HAR	M24	1.5	D6	4
TQ858788	TK858788	TR858788HAR	M24	3.0	D8	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
		○	◎		○	◎	

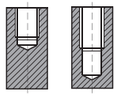
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○	○	○			◎		

SPIRAL FLUTE TAPS

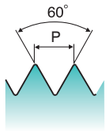
B3 / B5 / D6 SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE
for Titanium Alloys & Nickel Base Alloys up to 44HRc

Hole type 2.5×D



USCTI



Ti Ni | P-HSS | UNC UNF | USCTI 302A | H2~H5 | 60° | 2P~3P | Steam Oxide | TiCN | Hardslick | R15

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiCN	Hardslick		UNC	UNF		
B3082	B5082	D6082	2	56	—	H2	3
B3162	B5162	D6162	4	40	—	H2	3
B3202	B5202	D6202	5	40	—	H2	3
B3243	B5243	D6243	6	32	—	H3	3
B3283	B5283	D6283	8	32	—	H3	3
B3323	B5323	D6323	10	24	—	H3	3
B3343	B5343	D6343	10	—	32	H3	3
B3403	B5403	D6403	1/4	20	—	H3	3
B3405	B5405	D6405	1/4	20	—	H5	3
B3423	B5423	D6423	1/4	—	28	H3	3
B3424	B5424	D6424	1/4	—	28	H4	3
B3443	B5443	D6443	5/16	18	—	H3	3
B3445	B5445	D6445	5/16	18	—	H5	3
B3463	B5463	D6463	5/16	—	24	H3	3
B3483	B5483	D6483	3/8	16	—	H3	3
B3485	B5485	D6485	3/8	16	—	H5	3
B3503	B5503	D6503	3/8	—	24	H3	3
B3504	B5504	D6504	3/8	—	24	H4	3
B3523	B5523	D6523	7/16	14	—	H3	3
B3525	B5525	D6525	7/16	14	—	H5	3
B3543	B5543	D6543	7/16	—	20	H3	3
B3545	B5545	D6545	7/16	—	20	H5	3
B3563	B5563	D6563	1/2	13	—	H3	3
B3565	B5565	D6565	1/2	13	—	H5	3
B3583	B5583	D6583	1/2	—	20	H3	3
B3585	B5585	D6585	1/2	—	20	H5	3
B3603	B5603	D6603	9/16	12	—	H3	3
B3605	B5605	D6605	9/16	12	—	H5	3
B3623	B5623	D6623	9/16	—	18	H3	3
B3625	B5625	D6625	9/16	—	18	H5	3

▶TiN Coated Available: H9 Series
▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.
▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys

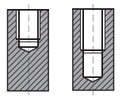
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			◎	◎	◎					

SPIRAL FLUTE TAPS

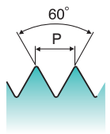
B3 / B5 / D6 SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Titanium Alloys & Nickel Base Alloys up to 44HRc

Hole type 2.5×D



USCTI



Ti Ni | P-HSS | UNC UNF | USCTI 302A | H2~H5 | 60° | 2P~3P | Steam Oxide | TiCN | Hardslick | R15

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiCN	Hardslick		UNC	UNF		
B3643	**B5643**	**D6643**	5/8	11	—	H3	4
B3645	**B5645**	**D6645**	5/8	11	—	H5	4
B3663	**B5663**	**D6663**	5/8	—	18	H3	4
B3665	**B5665**	**D6665**	5/8	—	18	H5	4
B3703	**B5703**	**D6703**	3/4	10	—	H3	4
B3705	**B5705**	**D6705**	3/4	10	—	H5	4
B3723	**B5723**	**D6723**	3/4	—	16	H3	4
B3725	**B5725**	**D6725**	3/4	—	16	H5	4

▶TiN Coated Available: H9 Series
▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			◎	◎	◎					

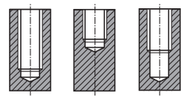
SPIRAL FLUTE TAPS

G9 / H0 SERIES

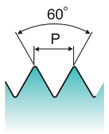
SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Stainless Steels up to 28HRc

Maximum Tapping Depth is 50% Deeper than Standard USCTI Taps.

Hole type 2.5×D



USCTI Long Shank



VA | P-HSS | UNC UNF | USCTI Long Shank | H2~H3 | 60° | 2P~3P | Hardslick | R45

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Hardslick Coated 4" OAL	Hardslick Coated 6" OAL		UNC	UNF		
G9162	—	4	40	—	H2	3
G9243	**H0243**	6	32	—	H3	3
G9283	**H0283**	8	32	—	H3	3
G9323	**H0323**	10	24	—	H3	3
G9343	**H0343**	10	—	32	H3	3
G9403	**H0403**	1/4	20	—	H3	3
—	**H0423**	1/4	—	28	H3	3
—	**H0443**	5/16	18	—	H3	3
—	**H0463**	5/16	—	24	H3	3
—	**H0483**	3/8	16	—	H3	3
—	**H0503**	3/8	—	24	H3	3
—	**H0523**	7/16	14	—	H3	3
—	**H0543**	7/16	—	20	H3	3
—	**H0563**	1/2	13	—	H3	3
—	**H0583**	1/2	—	20	H3	3
—	**H0643**	5/8	11	—	H3	4

▶TiN Coated Available: 4" OAL G7 Series & 6" OAL G8 Series
▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

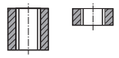
SPIRAL FLUTE TAPS

H2 / H4 SERIES

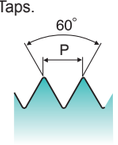
SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE
Machining Center Tap (Left hand spiral)

Left hand spiral, right hand cut. Reduces chip packing in deep holes Maximum. Tapping Depth is 50% Deeper than Standard USCTI Taps.

Hole type 3.0×D



USCTI Long Shank



VA | P-HSS | UNC UNF | USCTI Long Shank | H3 | 60° | 4P~5P | TiN | Hardslick | L15

EDP No.		SIZE	Thread Per Inch		Limit	Overall	No. of Flute
TiN	Hardslick		UNC	UNF			
H2403	**H4403**	1/4	20	—	H3	6"	2
H2423	**H4423**	1/4	—	28	H3	6"	3
H2443	**H4443**	5/16	18	—	H3	6"	3
H2483	**H4483**	3/8	16	—	H3	6"	3
H2523	**H4523**	7/16	14	—	H3	6"	3
H2563	**H4563**	1/2	13	—	H3	6"	3
H2643	**H4643**	5/8	11	—	H3	6"	3

▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

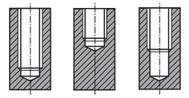
SPIRAL FLUTE TAPS

BG / BG-GB SERIES

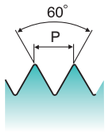
SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE
for Stainless Steel up to 35HRc

Oil Field

Hole type 2.5×D



DIN-ANSI Shank



VG | HSSE-V3 | UNC UN8 | 2B | 60° | 2P~3P | Hardslick | Gold& Black | R40

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Hardslick	Gold-Black		UNC	UN		
BG562H	**BG562GB**	1/2	13	—	2B	3
BG642H	**BG642GB**	5/8	11	—	2B	3
BG702H	**BG702GB**	3/4	10	—	2B	3
BG742H	**BG742GB**	7/8	9	—	2B	4
BG782H	**BG782GB**	1	—	8	2B	4
BG822H	**BG822GB**	1-1/8	7	—	2B	4
BG832H	**BG832GB**	1-1/8	—	8	2B	4
BG862H	**BG862GB**	1-1/4	7	—	2B	4
BG872H	**BG872GB**	1-1/4	—	8	2B	4
BG912H	**BG912GB**	1-3/8	—	8	2B	5
BG952H	**BG952GB**	1-1/2	—	8	2B	5
BGB22H	**BGB22GB**	1-5/8	—	8	2B	5
BGC02H	**BGC02GB**	1-3/4	—	8	2B	6
BGC62H	**BGC62GB**	1-7/8	—	8	2B	6
BGD42H	**BGD42GB**	2	—	8	2B	6

▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	○	◎		◎	◎		

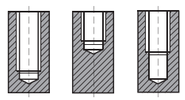
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎										

SPIRAL FLUTE TAPS

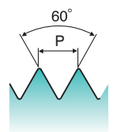
B1/B0/B2/D2 SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Stainless Steels up to 28HRc

Hole type 2.5×D



USCTI



* NEW SIZE

VA | HSSE-V3 | UNC UNF | USCTI 302A | H2~H7 | 60° | 2P~3P | Bright | Steam Oxide | TiN | Hardslick | R45

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Bright	Steam Oxide	TiN	Hardslick		UNC	UNF		
B1082	B0082	B2082	D2082	2	56	—	H2	2
—	* B0122	—	* D2122	3	48	—	H2	2
B1162	B0162	B2162	D2162	4	40	—	H2	2
—	* B0163	—	* D2163	4	40	—	H3	2
—	* B0164	—	* D2164	4	40	—	H4	2
B1162	B0162	B2162	D2162	4	40	—	H5	2
B1162	B0162	B2162	D2162	4	40	—	H6	2
—	* B0182	—	* D2182	4	—	48	H2	2
B1202	B0202	B2202	D2202	5	40	—	H2	3
—	* B0242	—	* D2242	6	32	—	H2	3
B1243	B0243	B2243	D2243	6	32	—	H3	3
—	* B0244	—	* D2244	6	32	—	H4	3
—	* B0245	—	* D2245	6	32	—	H5	3
—	* B0247	—	* D2247	6	32	—	H7	3
—	* B0262	—	* D2262	6	—	40	H2	3
—	* B0263	—	* D2263	6	—	40	H3	3
—	* B0282	—	* D2282	8	32	—	H2	3
B1283	B0283	B2283	D2283	8	32	—	H3	3
—	* B0284	—	* D2284	8	32	—	H4	3
—	* B0285	—	* D2285	8	32	—	H5	3
—	* B0286	—	* D2286	8	32	—	H6	3
—	* B0287	—	* D2287	8	32	—	H7	3
—	* B0303	—	* D2303	8	—	36	H3	3
—	* B0322	—	* D2322	10	24	—	H2	3
B1323	B0323	B2323	D2323	10	24	—	H3	3
—	* B0325	—	* D2325	10	24	—	H5	3
—	* B0327	—	* D2327	10	24	—	H7	3
—	* B0342	—	* D2342	10	—	32	H2	3
B1343	B0343	B2343	D2343	10	—	32	H3	3
—	* B0344	—	* D2344	10	—	32	H4	3
—	* B0345	—	* D2345	10	—	32	H5	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

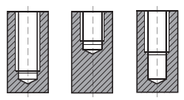
HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

SPIRAL FLUTE TAPS

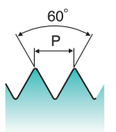
B1/B0/B2/D2 SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Stainless Steels up to 28HRc

Hole type 2.5×D



USCTI



* NEW SIZE

VA | HSSE-V3 | UNC UNF | USCTI 302A | H2~H7 | 60° | 2P~3P | Bright | Steam Oxide | TiN | Hardslick | R45

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Bright	Steam Oxide	TiN	Hardslick		UNC	UNF		
—	* B0346	—	* D2346	10	—	32	H6	3
—	* B0347	—	* D2347	10	—	32	H7	3
—	* B0363	—	* D2363	12	24	—	H3	3
—	* B0383	—	* D2383	12	28	—	H3	3
—	* B0402	—	* D2402	1/4	20	—	H2	3
B1403	B0403	B2403	D2403	1/4	20	—	H3	3
B1405	B0405	B2405	D2405	1/4	20	—	H5	3
—	* B0407	—	* D2407	1/4	20	—	H7	3
—	* B0422	—	* D2422	1/4	—	28	H2	3
B1423	B0423	B2423	D2423	1/4	—	28	H3	3
—	* B0424	—	* D2424	1/4	—	28	H4	3
—	* B0425	—	* D2425	1/4	—	28	H5	3
—	* B0426	—	* D2426	1/4	—	28	H6	3
—	* B0427	—	* D2427	1/4	—	28	H7	3
B1443	B0443	B2443	D2443	5/16	18	—	H3	3
B1445	B0445	B2445	D2445	5/16	18	—	H5	3
—	* B0447	—	* D2447	5/16	18	—	H7	3
B1463	B0463	B2463	D2463	5/16	—	24	H3	3
—	* B0464	—	* D2464	5/16	—	24	H4	3
—	* B0465	—	* D2465	5/16	—	24	H5	3
—	* B0467	—	* D2467	5/16	—	24	H7	3
B1483	B0483	B2483	D2483	3/8	16	—	H3	3
B1485	B0485	B2485	D2485	3/8	16	—	H5	3
—	* B0487	—	* D2487	3/8	16	—	H7	3
B1503	B0503	B2503	D2503	3/8	—	24	H3	3
—	* B0504	—	* D2504	3/8	—	24	H4	3
—	* B0505	—	* D2505	3/8	—	24	H5	3
B1523	B0523	B2523	D2523	7/16	14	—	H3	3
B1525	B0525	B2525	D2525	7/16	14	—	H5	3
—	* B0527	—	* D2527	7/16	14	—	H7	3
B1543	B0543	B2543	D2543	7/16	—	20	H3	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

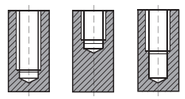
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL FLUTE TAPS

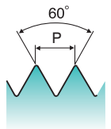
B1/B0/B2/D2 SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Stainless Steels up to 28HRc

Hole type 2.5×D



USCTI



* NEW SIZE

VA | HSSE-V3 | UNC UNF | USCTI 302A | H2~H7 | 60° | 2P~3P | Bright | Steam Oxide | TiN | Hardslick | R45

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Bright	Steam Oxide	TiN	Hardslick		UNC	UNF		
B1545	**B0545**	**B2545**	**D2545**	7/16	—	20	H5	3
—	* **B0547**	—	* **D2547**	7/16	—	20	H7	3
B1563	**B0563**	**B2563**	**D2563**	1/2	13	—	H3	3
B1565	**B0565**	**B2565**	**D2565**	1/2	13	—	H5	3
—	* **B0567**	—	* **D2567**	1/2	13	—	H7	3
B1583	**B0583**	**B2583**	**D2583**	1/2	—	20	H3	3
—	* **B0585**	—	* **D2585**	1/2	—	20	H5	3
—	* **B0586**	—	* **D2586**	1/2	—	20	H6	3
—	* **B0587**	—	* **D2587**	1/2	—	20	H7	3
B1603	**B0603**	**B2603**	**D2603**	9/16	12	—	H3	3
B1623	**B0623**	**B2623**	**D2623**	9/16	—	18	H3	3
B1643	**B0643**	**B2643**	**D2643**	5/8	11	—	H3	4
B1645	**B0645**	**B2645**	**D2645**	5/8	11	—	H5	4
B1663	**B0663**	**B2663**	**D2663**	5/8	—	18	H3	4
B1665	**B0665**	**B2665**	**D2665**	5/8	—	18	H5	4
B1703	**B0703**	**B2703**	**D2703**	3/4	10	—	H3	4
—	* **B0706**	—	* **D2706**	3/4	10	—	H6	4
B1723	**B0723**	**B2723**	**D2723**	3/4	—	16	H3	4
B1725	**B0725**	**B2725**	**D2725**	3/4	—	16	H5	4
B1744	**B0744**	**B2744**	**D2744**	7/8	9	—	H4	4
B1764	**B0764**	**B2764**	**D2764**	7/8	—	14	H4	4
B1784	**B0784**	**B2784**	**D2784**	1	8	—	H4	4
B1804	**B0804**	**B2804**	**D2804**	1	—	12	H4	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

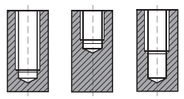
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL FLUTE TAPS

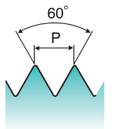
BS/BT SERIES

METRIC SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Stainless Steels up to 28HRc

Hole type 2.5×D



USCTI



VA | HSSE-V3 | M MF | USCTI 302A | D3~D7 | 60° | 2P~3P | Steam Oxide | Hardslick | R45

EDP No.		SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick				
BS203	**BT203**	M3	0.5	D3	3
BS224	**BT224**	M3.5	0.6	D4	3
BS244	**BT244**	M4	0.7	D4	3
BS284	**BT284**	M5	0.8	D4	3
BS315	**BT315**	M6	1.0	D5	3
BS345	**BT345**	M7	1.0	D5	3
BS365	**BT365**	M8	1.25	D5	3
BS375	**BT375**	M8	1.0	D5	3
BS426	**BT426**	M10	1.5	D6	3
BS435	**BT435**	M10	1.25	D5	3
BS506	**BT506**	M12	1.75	D6	3
BS525	**BT525**	M12	1.25	D5	3
BS547	**BT547**	M14	2.0	D7	3
BS556	**BT556**	M14	1.5	D6	3
BS607	**BT607**	M16	2.0	D7	3
BS616	**BT616**	M16	1.5	D6	3
BS657	**BT657**	M18	2.5	D7	4
BS676	**BT676**	M18	1.5	D6	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

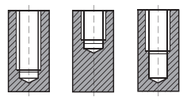
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL FLUTE TAPS

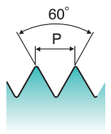
E6/E8/E9 SERIES

METRIC SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Stainless Steels up to 28HRc

Hole type 2.5×D



DIN-ANSI Shank



VA | HSSE-V3 | M MF | D3~D7 | 60° | 2P~3P | Steam Oxide | TiCN | Hardslick | R45

EDP No.			SIZE	Pitch	Limit	No. of Flute
Steam Oxide	TiCN	Hardslick				
E6203	**E8203**	**E9203**	M3	0.5	D3	3
E6224	**E8224**	**E9224**	M3.5	0.6	D4	3
E6244	**E8244**	**E9244**	M4	0.7	D4	3
E6284	**E8284**	**E9284**	M5	0.8	D4	3
E6315	**E8315**	**E9315**	M6	1.0	D5	3
E6345	**E8345**	**E9345**	M7	1.0	D5	3
E6365	**E8365**	**E9365**	M8	1.25	D5	3
E6375	**E8375**	**E9375**	M8	1.0	D5	3
E6426	**E8426**	**E9426**	M10	1.5	D6	3
E6435	**E8435**	**E9435**	M10	1.25	D5	3
E6506	**E8506**	**E9506**	M12	1.75	D6	3
E6525	**E8525**	**E9525**	M12	1.25	D5	3
E6547	**E8547**	**E9547**	M14	2.0	D7	3
E6556	**E8556**	**E9556**	M14	1.5	D6	3
E6607	**E8607**	**E9607**	M16	2.0	D7	3
E6616	**E8616**	**E9616**	M16	1.5	D6	4
E6657	**E8657**	**E9657**	M18	2.5	D7	4
E6676	**E8676**	**E9676**	M18	1.5	D6	4

▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

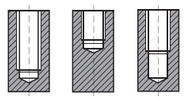
SPIRAL FLUTE TAPS

D3/E0 SERIES

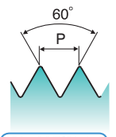
SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE Steels up to 38HRc

A variety of H Limit

Hole type 2.5×D



USCTI



* NEW SIZE

VG | HSSE-V3 | UNC UNF | USCTI 302A | H2~H11 | 60° | 2P~3P | Steam Oxide | Hardslick | R45

EDP No.		SIZE	Thread Per Inch			Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF	8 Pitch		
D3082	**E0082**	2	56	—	—	H2	2
* **D3122**	* **E0122**	3	48	—	—	H2	2
D3162	**E0162**	4	40	—	—	H2	3
* **D3163**	* **E0163**	4	40	—	—	H3	3
* **D3164**	* **E0164**	4	40	—	—	H4	3
* **D3165**	* **E0165**	4	40	—	—	H5	3
D3162	**E0162**	4	—	48	—	H2	3
D3202	**E0202**	5	40	—	—	H2	3
* **D3242**	* **E0242**	6	32	—	—	H2	3
D3243	**E0243**	6	32	—	—	H3	3
* **D3245**	* **E0245**	6	32	—	—	H5	3
* **D3247**	* **E0247**	6	32	—	—	H7	3
* **D324A**	* **E024A**	6	32	—	—	H11	3
* **D3262**	* **E0262**	6	—	40	—	H2	3
* **D3282**	* **E0282**	8	32	—	—	H2	3
D3283	**E0283**	8	32	—	—	H3	3
* **D3285**	* **E0285**	8	32	—	—	H5	3
* **D3287**	* **E0287**	8	32	—	—	H7	3
* **D328A**	* **E028A**	8	32	—	—	H11	3
D3323	**E0323**	10	24	—	—	H3	3
* **D3325**	* **E0325**	10	24	—	—	H5	3
* **D332A**	* **E032A**	10	24	—	—	H11	3
* **D3342**	* **E0342**	10	—	32	—	H2	3
D3343	**E0343**	10	—	32	—	H3	3
* **D3345**	* **E0345**	10	—	32	—	H5	3
* **D3347**	* **E0347**	10	—	32	—	H7	3
* **D334A**	* **E034A**	10	—	32	—	H11	3
* **D3363**	* **E0363**	12	24	—	—	H3	3
* **D3383**	* **E0383**	12	—	28	—	H3	3
* **D3402**	* **E0402**	1/4	20	—	—	H2	3
D3403	**E0403**	1/4	20	—	—	H3	3
D3405	**E0405**	1/4	20	—	—	H5	3
* **D3407**	* **E0407**	1/4	20	—	—	H7	3
* **D340A**	* **E040A**	1/4	20	—	—	H11	3
* **D3422**	* **E0422**	1/4	—	28	—	H2	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.
▶Bright Finish Available: D4 Series
▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

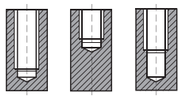
SPIRAL FLUTE TAPS

D3 / E0 SERIES

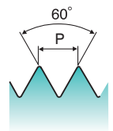
SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE
Steels up to 38HRc

A variety of H Limit

Hole type 2.5×D



USCTI



* NEW SIZE

VG | HSSE-V3 | UNC UNF | USCTI 302A | H2~H11 | 60° | 2P~3P | Steam Oxide | Hardslick | R45

EDP No.		SIZE	Thread Per Inch			Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF	8 Pitch		
D3423	E0423	1/4	—	28	—	H3	3
* D3424	* E0424	1/4	—	28	—	H4	3
D3425	E0425	1/4	—	28	—	H5	3
* D3427	* E0427	1/4	—	28	—	H7	3
* D342A	* E042A	1/4	—	28	—	H11	3
* D3442	* E0442	5/16	18	—	—	H2	3
D3443	E0443	5/16	18	—	—	H3	3
D3445	E0445	5/16	18	—	—	H5	3
* D3447	* E0447	5/16	18	—	—	H7	3
* D344A	* E044A	5/16	18	—	—	H11	3
* D3462	* E0462	5/16	—	24	—	H2	3
D3463	E0463	5/16	—	24	—	H3	3
* D3464	* E0464	5/16	—	24	—	H4	3
D3465	E0465	5/16	—	24	—	H5	3
* D3466	* E0466	5/16	—	24	—	H6	3
* D3467	* E0467	5/16	—	24	—	H7	3
* D346A	* E046A	5/16	—	24	—	H11	3
* D3482	* E0482	3/8	16	—	—	H2	3
D3483	E0483	3/8	16	—	—	H3	3
D3485	E0485	3/8	16	—	—	H5	3
* D3487	* E0487	3/8	16	—	—	H7	3
* D348A	* E048A	3/8	16	—	—	H11	3
* D3502	* E0502	3/8	—	24	—	H2	3
D3503	E0503	3/8	—	24	—	H3	3
* D3504	* E0504	3/8	—	24	—	H4	3
D3505	E0505	3/8	—	24	—	H5	3
* D3507	* E0507	3/8	—	24	—	H7	3
* D350A	* E050A	3/8	—	24	—	H11	3
D3523	E0523	7/16	14	—	—	H3	3
D3525	E0525	7/16	14	—	—	H5	3
* D3527	* E0527	7/16	14	—	—	H7	3
* D352A	* E052A	7/16	14	—	—	H11	3
D3543	E0543	7/16	—	20	—	H3	3
D3545	E0545	7/16	—	20	—	H5	3
* D3547	* E0547	7/16	—	20	—	H7	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.
▶Bright Finish Available: D4 Series

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

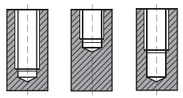
SPIRAL FLUTE TAPS

D3 / E0 SERIES

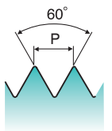
SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE
Steels up to 38HRc

A variety of H Limit

Hole type 2.5×D



USCTI



* NEW SIZE

VG | HSSE-V3 | UNC UNF | USCTI 302A | H2~H11 | 60° | 2P~3P | Steam Oxide | Hardslick | R45

EDP No.		SIZE	Thread Per Inch			Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF	8 Pitch		
* D354A	* E054A	7/16	—	20	—	H11	3
D3563	E0563	1/2	13	—	—	H3	3
D3565	E0565	1/2	13	—	—	H5	3
* D3567	* E0567	1/2	13	—	—	H7	3
* D356A	* E056A	1/2	13	—	—	H11	3
D3583	E0583	1/2	—	20	—	H3	3
D3585	E0585	1/2	—	20	—	H5	3
* D3587	* E0587	1/2	—	20	—	H7	3
* D358A	* E058A	1/2	—	20	—	H11	3
* D3603	* E0603	9/16	12	—	—	H3	4
* D3623	* E0623	9/16	—	18	—	H3	4
D3643	E0643	5/8	11	—	—	H3	4
D3645	E0645	5/8	11	—	—	H5	4
D3663	E0663	5/8	—	18	—	H3	4
D3703	E0703	3/4	10	—	—	H3	4
D3705	E0705	3/4	10	—	—	H5	4
D3723	E0723	3/4	—	16	—	H3	4
D3725	E0725	3/4	—	16	—	H5	4
* D3745	* E0745	7/8	9	—	—	H5	4
* D3764	* E0764	7/8	—	14	—	H4	4
* D3785	* E0785	1	8	—	—	H5	4
D3804	E0804	1	—	12	—	H4	4
* D3826	* E0826	1-1/8	7	—	—	H6	4
* D3845	* E0845	1-1/8	—	12	—	H5	4
* D3836	* E0836	1-1/8	—	—	8	H6	4
* D3866	* E0866	1-1/4	7	—	—	H6	4
* D3885	* E0885	1-1/4	—	12	—	H5	4
* D3876	* E0876	1-1/4	—	—	8	H6	4
* D3906	* E0906	1-3/8	6	—	—	H6	4
* D3925	* E0925	1-3/8	—	12	—	H5	4
* D3916	* E0916	1-3/8	—	—	8	H6	4
* D3946	* E0946	1-1/2	6	—	—	H6	4
* D3965	* E0965	1-1/2	—	12	—	H5	4
* D3956	* E0956	1-1/2	—	—	8	H6	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.
▶Bright Finish Available: D4 Series

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

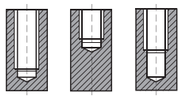
SPIRAL FLUTE TAPS

BU / BV SERIES

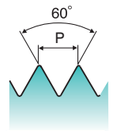
SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE
Steels up to 38HRc

A variety of D Limit

Hole type 2.5×D



USCTI



* NEW SIZE

VG | HSSE-V3 | M MF | USCTI 302A | D3~D11 | 60° | 2P~3P | Steam Oxide | Hardslick | R45

EDP No.		SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick				
BU203	BV203	M3	0.50	D3	3
* BU20A	* BV20A	M3	0.50	D11	3
BU224	BV224	M3.5	0.60	D4	3
* BU22A	* BV22A	M3.5	0.60	D11	3
BU244	BV244	M4	0.70	D4	3
* BU24A	* BV24A	M4	0.70	D11	3
BU284	BV284	M5	0.80	D4	3
* BU28A	* BV28A	M5	0.80	D11	3
BU315	BV315	M6	1.00	D5	3
* BU31A	* BV31A	M6	1.00	D11	3
BU345	BV345	M7	1.00	D5	3
* BU34A	* BV34A	M7	1.00	D11	3
BU375	BV375	M8	1.00	D5	3
* BU37A	* BV37A	M8	1.00	D11	3
BU365	BV365	M8	1.25	D5	3
* BU36A	* BV36A	M8	1.25	D11	3
* BU445	* BV445	M10	1.00	D5	3
* BU44A	* BV44A	M10	1.00	D11	3
BU435	BV435	M10	1.25	D5	3
* BU43A	* BV43A	M10	1.25	D11	3
BU426	BV426	M10	1.50	D6	3
* BU42A	* BV42A	M10	1.50	D11	3
BU525	BV525	M12	1.25	D5	3
* BU52A	* BV52A	M12	1.25	D11	3
* BU516	* BV516	M12	1.50	D6	3
* BU51A	* BV51A	M12	1.50	D11	3
BU506	BV506	M12	1.75	D6	3
* BU50A	* BV50A	M12	1.75	D11	3
BU556	BV556	M14	1.50	D6	3
BU547	BV547	M14	2.00	D7	3
BU616	BV616	M16	1.50	D6	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

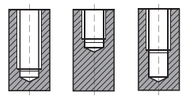
SPIRAL FLUTE TAPS

BU / BV SERIES

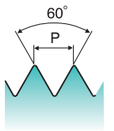
SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE
Steels up to 38HRc

A variety of D Limit

Hole type 2.5×D



USCTI



* NEW SIZE

VG | HSSE-V3 | M MF | USCTI 302A | D3~D11 | 60° | 2P~3P | Steam Oxide | Hardslick | R45

EDP No.		SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick				
BU607	BV607	M16	2.00	D7	3
BU676	BV676	M18	1.50	D6	4
BU657	BV657	M18	2.50	D7	4
* BU726	* BV726	M20	1.50	D6	4
* BU708	* BV708	M20	2.50	D8	4
* BU766	* BV766	M22	1.50	D6	4
* BU748	* BV748	M22	2.50	D8	4
* BU806	* BV806	M24	1.50	D6	4
* BU788	* BV788	M24	3.00	D8	4
* BU886	* BV886	M27	1.50	D6	4
* BU868	* BV868	M27	3.00	D8	4
* BU976	* BV976	M30	1.50	D6	4
* BU949	* BV949	M30	3.50	D9	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

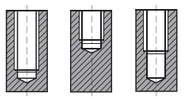
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

SPIRAL FLUTE TAPS

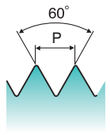
E2 / E4 / E5 SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE
Steels up to 38HRc

Hole type 2.5×D



DIN-ANSI Shank



VG | HSSE-V3 | M MF | D3~D7 | 60° | 2P~3P | Steam Oxide | TiCN | Hardslick | R45

EDP No.			SIZE	Pitch	Limit	No. of Flute
Steam Oxide	TiCN	Hardslick				
E2203	**E4203**	**E5203**	M3	0.5	D3	3
E2224	**E4224**	**E5224**	M3.5	0.6	D4	3
E2244	**E4244**	**E5244**	M4	0.7	D4	3
E2284	**E4284**	**E5284**	M5	0.8	D4	3
E2315	**E4315**	**E5315**	M6	1.0	D5	3
E2345	**E4345**	**E5345**	M7	1.0	D5	3
E2365	**E4365**	**E5365**	M8	1.25	D5	3
E2375	**E4375**	**E5375**	M8	1.0	D5	3
E2426	**E4426**	**E5426**	M10	1.5	D6	3
E2435	**E4435**	**E5435**	M10	1.25	D5	3
E2506	**E4506**	**E5506**	M12	1.75	D6	3
E2525	**E4525**	**E5525**	M12	1.25	D5	3
E2547	**E4547**	**E5547**	M14	2.0	D7	3
E2556	**E4556**	**E5556**	M14	1.5	D6	3
E2607	**E4607**	**E5607**	M16	2.0	D7	3
E2616	**E4616**	**E5616**	M16	1.5	D6	3
E2657	**E4657**	**E5657**	M18	2.5	D7	4
E2676	**E4676**	**E5676**	M18	1.5	D6	4

▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

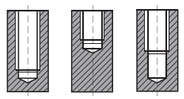
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

SPIRAL FLUTE TAPS

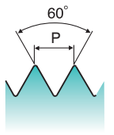
C0 / D8 SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE
for Aluminum Alloys or Die Cast Aluminum

Hole type 2.5×D



USCTI



AI | HSSE-V3 | UNC UNF | USCTI 302A | H2~H5 | 60° | 2P~3P | Bright | Hardslick | R50

◇ Call for Availability

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Bright	Hardslick		UNC	UNF		
C0162	**D8162**	4	40	—	H2	2
◇ **C0163**	**D8163**	4	40	—	H3	2
C0242	**D8242**	6	32	—	H2	2
C0243	**D8243**	6	32	—	H3	2
◇ **C0282**	**D8282**	8	32	—	H2	2
C0283	**D8283**	8	32	—	H3	2
C0323	**D8323**	10	24	—	H3	2
◇ **C0342**	**D8342**	10	32	—	H2	2
C0343	**D8343**	10	—	32	H3	2
◇ **C0345**	**D8345**	10	—	32	H5	2
C0403	**D8403**	1/4	20	—	H3	2
C0405	**D8405**	1/4	20	—	H5	2
C0423	**D8423**	1/4	—	28	H3	2
C0443	**D8443**	5/16	18	—	H3	2
C0445	**D8445**	5/16	18	—	H5	2
C0463	**D8463**	5/16	—	24	H3	2
C0465	**D8465**	5/16	—	24	H5	2
C0483	**D8483**	3/8	16	—	H3	2
C0485	**D8485**	3/8	16	—	H5	2
C0503	**D8503**	3/8	—	24	H3	2
C0505	**D8505**	3/8	—	24	H5	2
◇ **C0563**	**D8563**	1/2	13	—	H3	2
◇ **C0565**	**D8565**	1/2	13	—	H5	2
◇ **C0583**	**D8583**	1/2	—	20	H3	2
◇ **C0643**	**D8643**	5/8	11	—	H3	3
◇ **C0663**	**D8663**	5/8	—	18	H3	3
◇ **C0703**	**D8703**	3/4	10	—	H3	3
◇ **C0723**	**D8723**	3/4	—	16	H3	3
◇ **C0744**	**D8744**	7/8	9	—	H4	3
◇ **C0764**	**D8764**	7/8	—	14	H4	3
◇ **C0784**	**D8784**	1	8	—	H4	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
							◎

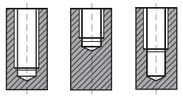
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎										

SPIRAL FLUTE TAPS

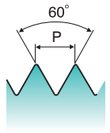
BW / BX SERIES

SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE for Aluminum Alloys or Die Cast Aluminum

Hole type 2.5×D



USCTI



AI | HSSE-V3 | M MF | USCTI 302A | D3~D6 | 60° | 2P~3P | Bright | Hardslick | R50

◇ Call for Availability

EDP No.		SIZE	Pitch	Thread Limit	No. of Flute
Bright	Hardslick				
BW203	**BX203**	M3	0.5	D3	2
BW244	**BX244**	M4	0.7	D4	2
BW285	**BX285**	M5	0.8	D5	2
BW315	**BX315**	M6	1.0	D5	2
BW365	**BX365**	M8	1.25	D5	2
BW426	**BX426**	M10	1.50	D6	2
BW435	**BX435**	**M10**	1.25	D5	2
◇ **BW506**	**BX506**	M12	1.75	D6	2
◇ **BW515**	**BX515**	M12	1.50	D5	2
◇ **BW525**	**BX525**	M12	1.25	D5	2

▶DIN Length available: Bright Finish F1 Series & Hardslick coated F3 Series
▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
							◎

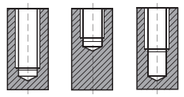
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎										

SPIRAL FLUTE TAPS

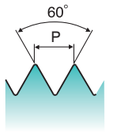
C2/C3/C4/D9 SERIES

STANDARD TAPS : SPIRAL FLUTE TAPS BOTTOMING STYLE for General Purpose

Hole type 2.5×D



USCTI



GS | HSSE-V3 | UNC UNF | USCTI 302 | H2~H6 | 60° | 1.5P~2P | Steam Oxide | Bright | TiN | Hardslick | R45

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	Bright	TiN	Hardslick		UNC	UNF		
C2162	**C3162**	**C4162**	**D9162**	4	40	—	H2	2
C2202	**C3202**	**C4202**	**D9202**	5	40	—	H2	3
C2243	**C3243**	**C4243**	**D9243**	6	32	—	H3	3
C2283	**C3283**	**C4283**	**D9283**	8	32	—	H3	3
C2323	**C3323**	**C4323**	**D9323**	10	24	—	H3	3
C2343	**C3343**	**C4343**	**D9343**	10	—	32	H3	3
C2403	**C3403**	**C4403**	**D9403**	1/4	20	—	H3	3
C2405	**C3405**	**C4405**	**D9405**	1/4	20	—	H5	3
C2423	**C3423**	**C4423**	**D9423**	1/4	—	28	H3	3
C2443	**C3443**	**C4443**	**D9443**	5/16	18	—	H3	3
C2445	**C3445**	**C4445**	**D9445**	5/16	18	—	H5	3
C2463	**C3463**	**C4463**	**D9463**	5/16	—	24	H3	3
C2483	**C3483**	**C4483**	**D9483**	3/8	16	—	H3	3
C2485	**C3485**	**C4485**	**D9485**	3/8	16	—	H5	3
C2503	**C3503**	**C4503**	**D9503**	3/8	—	24	H3	3
C2523	**C3523**	**C4523**	**D9523**	7/16	14	—	H3	3
C2525	**C3525**	**C4525**	**D9525**	7/16	14	—	H5	3
C2543	**C3543**	**C4543**	**D9543**	7/16	—	20	H3	3
C2545	**C3545**	**C4545**	**D9545**	7/16	—	20	H5	3
C2563	**C3563**	**C4563**	**D9563**	1/2	13	—	H3	3
C2565	**C3565**	**C4565**	**D9565**	1/2	13	—	H5	3
C2583	**C3583**	**C4583**	**D9583**	1/2	—	20	H3	3
C2585	**C3585**	**C4585**	**D9585**	1/2	—	20	H5	3
C2605	**C3605**	**C4605**	**D9605**	9/16	12	—	H5	3
C2625	**C3625**	**C4625**	**D9625**	9/16	—	18	H5	3
C2643	**C3643**	**C4643**	**D9643**	5/8	11	—	H3	4
C2645	**C3645**	**C4645**	**D9645**	5/8	11	—	H5	4
C2663	**C3663**	**C4663**	**D9663**	5/8	—	18	H3	4
C2703	**C3703**	**C4703**	**D9703**	3/4	10	—	H3	4
C2705	**C3705**	**C4705**	**D9705**	3/4	10	—	H5	4
C2723	**C3723**	**C4723**	**D9723**	3/4	—	16	H3	4
C2744	**C3744**	**C4744**	**D9744**	7/8	9	—	H4	4
C2766	**C3766**	**C4766**	**D9766**	7/8	—	14	H6	4
C2784	**C3784**	**C4784**	**D9784**	1	8	—	H4	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

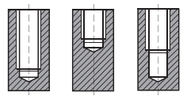
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL FLUTE TAPS

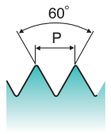
F4/F8/F6 SERIES

SPIRAL FLUTE TAPS BOTTOMING STYLE for General Purpose

Hole type 2.5×D



USCTI



GS | HSS-V | UNC UNF | USCTI 302A | H2~H6 | 60° | 1.5P~2P | Steam Oxide | TiN | Hardslick | R50

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiN	Hardslick		UNC	UNF		
F4082	F8082	F6082	2	56	—	H2	2
F4162	F8162	F6162	4	40	—	H2	2
F4202	F8202	F6202	5	40	—	H2	2
F4243	F8243	F6243	6	32	—	H3	3
F4283	F8283	F6283	8	32	—	H3	3
F4323	F8323	F6323	10	24	—	H3	3
F4343	F8343	F6343	10	—	32	H3	3
F4403	F8403	F6403	1/4	20	—	H3	3
F4405	F8405	F6405	1/4	20	—	H5	3
F4423	F8423	F6423	1/4	—	28	H3	3
F4443	F8443	F6443	5/16	18	—	H3	3
F4445	F8445	F6445	5/16	18	—	H5	3
F4463	F8463	F6463	5/16	—	24	H3	3
F4483	F8483	F6483	3/8	16	—	H3	3
F4485	F8485	F6485	3/8	16	—	H5	3
F4503	F8503	F6503	3/8	—	24	H3	3
F4523	F8523	F6523	7/16	14	—	H3	3
F4525	F8525	F6525	7/16	14	—	H5	3
F4543	F8543	F6543	7/16	—	20	H3	3
F4545	F8545	F6545	7/16	—	20	H5	3
F4563	F8563	F6563	1/2	13	—	H3	3
F4565	F8565	F6565	1/2	13	—	H5	3
F4583	F8583	F6583	1/2	—	20	H3	3
F4585	F8585	F6585	1/2	—	20	H5	3
F4603	F8603	F6603	9/16	12	—	H3	3
F4605	F8605	F6605	9/16	12	—	H5	3
F4623	F8623	F6623	9/16	—	18	H3	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

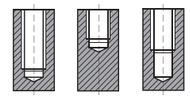
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL FLUTE TAPS

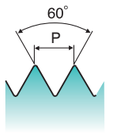
F4/F8/F6 SERIES

SPIRAL FLUTE TAPS BOTTOMING STYLE for General Purpose

Hole type 2.5×D



USCTI



GS | HSS-V | UNC UNF | USCTI 302A | H2~H6 | 60° | 1.5P~2P | Steam Oxide | TiN | Hardslick | R50

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiN	Hardslick		UNC	UNF		
F4625	F8625	F6625	9/16	—	18	H5	3
F4643	F8643	F6643	5/8	11	—	H3	4
F4645	F8645	F6645	5/8	11	—	H5	4
F4663	F8663	F6663	5/8	—	18	H3	4
F4665	F8665	F6665	5/8	—	18	H5	4
F4703	F8703	F6703	3/4	10	—	H3	4
F4705	F8705	F6705	3/4	10	—	H5	4
F4723	F8723	F6723	3/4	—	16	H3	4
F4725	F8725	F6725	3/4	—	16	H5	4
F4744	F8744	F6744	7/8	9	—	H4	4
F4746	F8746	F6746	7/8	9	—	H6	4
F4764	F8764	F6764	7/8	—	14	H4	4
F4766	F8766	F6766	7/8	—	14	H6	4
F4784	F8784	F6784	1	8	—	H4	4
F4786	F8786	F6786	1	8	—	H6	4
F4806	F8806	F6806	1	—	12	H6	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

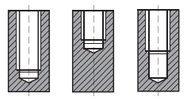
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL FLUTE TAPS

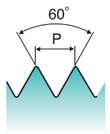
G4 / G5 / G6 SERIES

SPIRAL FLUTE TAPS BOTTOMING STYLE for General Purpose

Hole type 2.5×D



USCTI



GS | HSS-V | M MF | USCTI 302A | D3~D6 | 60° | 1.5P~2P | Bright | TiCN | Hardslick | R50

EDP No.			SIZE	Pitch	Limit	No. of Flute
Bright	TiCN	Hardslick				
G4203	**G5203**	**G6203**	M3	0.5	D3	2
G4224	**G5224**	**G6224**	M3.5	0.6	D4	2
G4244	**G5244**	**G6244**	M4	0.7	D4	3
G4284	**G5284**	**G6284**	M5	0.8	D4	3
G4315	**G5315**	**G6315**	M6	1.0	D5	3
G4345	**G5345**	**G6345**	M7	1.0	D5	3
G4365	**G5365**	**G6365**	M8	1.25	D5	3
G4375	**G5375**	**G6375**	M8	1.0	D5	3
G4426	**G5426**	**G6426**	M10	1.5	D6	3
G4435	**G5435**	**G6435**	M10	1.25	D5	3
G4506	**G5506**	**G6506**	M12	1.75	D6	3
G4525	**G5525**	**G6525**	M12	1.25	D5	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

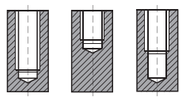
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL FLUTE TAPS

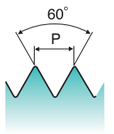
G0 / G1 / G2 SERIES

SPIRAL FLUTE TAPS BOTTOMING STYLE for General Purpose

Hole type 2.5×D



DIN-ANSI Shank



GS | HSS-V | UNC UNF | H2~H6 | 60° | 2P~3P | Bright | TiN | Hardslick | R45

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Bright	TiN	Hardslick		UNC	UNF		
G0082	**G1082**	**G2082**	2	56	—	H2	2
G0162	**G1162**	**G2162**	4	40	—	H2	2
G0202	**G1202**	**G2202**	5	40	—	H2	3
G0243	**G1243**	**G2243**	6	32	—	H3	3
G0283	**G1283**	**G2283**	8	32	—	H3	3
G0323	**G1323**	**G2323**	10	24	—	H3	3
G0343	**G1343**	**G2343**	10	—	32	H3	3
G0403	**G1403**	**G2403**	1/4	20	—	H3	3
G0405	**G1405**	**G2405**	1/4	20	—	H5	3
G0423	**G1423**	**G2423**	1/4	—	28	H3	3
G0443	**G1443**	**G2443**	5/16	18	—	H3	3
G0445	**G1445**	**G2445**	5/16	18	—	H5	3
G0463	**G1463**	**G2463**	5/16	—	24	H3	3
G0483	**G1483**	**G2483**	3/8	16	—	H3	3
G0485	**G1485**	**G2485**	3/8	16	—	H5	3
G0503	**G1503**	**G2503**	3/8	—	24	H3	3
G0523	**G1523**	**G2523**	7/16	14	—	H3	3
G0525	**G1525**	**G2525**	7/16	14	—	H5	3
G0543	**G1543**	**G2543**	7/16	—	20	H3	3
G0545	**G1545**	**G2545**	7/16	—	20	H5	3
G0563	**G1563**	**G2563**	1/2	13	—	H3	3
G0565	**G1565**	**G2565**	1/2	13	—	H5	3
G0583	**G1583**	**G2583**	1/2	—	20	H3	3
G0585	**G1585**	**G2585**	1/2	—	20	H5	3
G0603	**G1603**	**G2603**	9/16	12	—	H3	3
G0605	**G1605**	**G2605**	9/16	12	—	H5	3
G0623	**G1623**	**G2623**	9/16	—	18	H3	3

▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

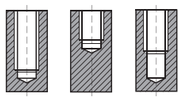
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL FLUTE TAPS

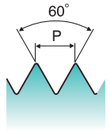
G0 / G1 / G2 SERIES

SPIRAL FLUTE TAPS BOTTOMING STYLE for General Purpose

Hole type 2.5×D



DIN-ANSI Shank



GS | HSS-V | UNC UNF | H2~H6 | 60° | 2P~3P | Bright | TiN | Hardslick | R45

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Bright	TiN	Hardslick		UNC	UNF		
G0625	**G1625**	**G2625**	9/16	—	18	H5	3
G0643	**G1643**	**G2643**	5/8	11	—	H3	4
G0645	**G1645**	**G2645**	5/8	11	—	H5	4
G0663	**G1663**	**G2663**	5/8	—	18	H3	4
G0665	**G1665**	**G2665**	5/8	—	18	H5	4
G0703	**G1703**	**G2703**	3/4	10	—	H3	4
G0705	**G1705**	**G2705**	3/4	10	—	H5	4
G0723	**G1723**	**G2723**	3/4	—	16	H3	4
G0725	**G1725**	**G2725**	3/4	—	16	H5	4
G0746	**G1746**	**G2746**	7/8	9	—	H6	4
G0764	**G1764**	**G2764**	7/8	—	14	H4	4
G0766	**G1766**	**G2766**	7/8	—	14	H6	4
G0786	**G1786**	**G2786**	1	8	—	H6	4
G0804	**G1804**	**G2804**	1	—	12	H4	4
G0806	**G1806**	**G2806**	1	—	12	H6	4

▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

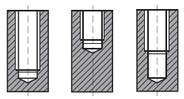
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

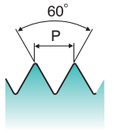
SPIRAL FLUTE TAPS

T7A96 / T6A96 / T8A96 SERIES
T7295 / T6295 / T8295 SERIES

STANDARD TAPS : SPIRAL FLUTE TAPS for General Purpose

Hole type 2.5×D





GS | HSS | UNC UNF | USCTI 302 | H2~H5 | 60° | 4P~5P Plug | 1.5P~2P Bottoming | Bright | Steam Oxide | TiN | R50

EDP No.						SIZE	Thread Per Inch		Limit	No. of Flute
Plug			Bottom							
Bright	Steam Oxide	TiN	Bright	Steam Oxide	TiN		UNC	UNF		
T7A96122	**T6A96122**	**T8A96122**	**T7295122**	**T6295122**	**T8295122**	3	48	—	H2	2
T7A96162	**T6A96162**	**T8A96162**	**T7295162**	**T6295162**	**T8295162**	4	40	—	H2	2
T7A96202	**T6A96202**	**T8A96202**	**T7295202**	**T6295202**	**T8295202**	5	40	—	H2	2
T7A96242	**T6A96242**	**T8A96242**	**T7295242**	**T6295242**	**T8295242**	6	32	—	H2	2
T7A96243	**T6A96243**	**T8A96243**	**T7295243**	**T6295243**	**T8295243**	6	32	—	H3	2
T7A96282	**T6A96282**	**T8A96282**	**T7295282**	**T6295282**	**T8295282**	8	32	—	H2	3
T7A96283	**T6A96283**	**T8A96283**	**T7295283**	**T6295283**	**T8295283**	8	32	—	H3	3
T7A96323	**T6A96323**	**T8A96323**	**T7295323**	**T6295323**	**T8295323**	10	24	—	H3	3
T7A96342	**T6A96342**	**T8A96342**	**T7295342**	**T6295342**	**T8295342**	10	—	32	H2	3
T7A96343	**T6A96343**	**T8A96343**	**T7295343**	**T6295343**	**T8295343**	10	—	32	H3	3
T7A96363	**T6A96363**	**T8A96363**	**T7295363**	**T6295363**	**T8295363**	12	24	—	H3	3
T7A96403	**T6A96403**	**T8A96403**	**T7295403**	**T6295403**	**T8295403**	1/4	20	—	H3	3
T7A96405	**T6A96405**	**T8A96405**	**T7295405**	**T6295405**	**T8295405**	1/4	20	—	H5	3
T7A96423	**T6A96423**	**T8A96423**	**T7295423**	**T6295423**	**T8295423**	1/4	—	28	H3	3
T7A96443	**T6A96443**	**T8A96443**	**T7295443**	**T6295443**	**T8295443**	5/16	18	—	H3	3
T7A96445	**T6A96445**	**T8A96445**	**T7295445**	**T6295445**	**T8295445**	5/16	18	—	H5	3
T7A96463	**T6A96463**	**T8A96463**	**T7295463**	**T6295463**	**T8295463**	5/16	—	24	H3	3
T7A96483	**T6A96483**	**T8A96483**	**T7295483**	**T6295483**	**T8295483**	3/8	16	—	H3	3
T7A96485	**T6A96485**	**T8A96485**	**T7295485**	**T6295485**	**T8295485**	3/8	16	—	H5	3
T7A96503	**T6A96503**	**T8A96503**	**T7295503**	**T6295503**	**T8295503**	3/8	—	24	H3	3
T7A96523	**T6A96523**	**T8A96523**	**T7295523**	**T6295523**	**T8295523**	7/16	14	—	H3	3
—	—	—	**T7295525**	**T6295525**	**T8295525**	7/16	14	—	H5	3
T7A96543	**T6A96543**	**T8A96543**	**T7295543**	**T6295543**	**T8295543**	7/16	—	20	H3	3
T7A96563	**T6A96563**	**T8A96563**	**T7295563**	**T6295563**	**T8295563**	1/2	13	—	H3	3
T7A96565	**T6A96565**	**T8A96565**	**T7295565**	**T6295565**	**T8295565**	1/2	13	—	H5	3
T7A96583	**T6A96583**	**T8A96583**	**T7295583**	**T6295583**	**T8295583**	1/2	—	20	H3	3
T7A96643	**T6A96643**	**T8A96643**	**T7295643**	**T6295643**	**T8295643**	5/8	11	—	H3	4
T7A96663	**T6A96663**	**T8A96663**	**T7295663**	**T6295663**	**T8295663**	5/8	—	18	H3	4
T7A96703	**T6A96703**	**T8A96703**	**T7295703**	**T6295703**	**T8295703**	3/4	10	—	H3	4
T7A96723	**T6A96723**	**T8A96723**	**T7295723**	**T6295723**	**T8295723**	3/4	—	16	H3	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

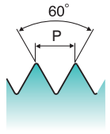
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL FLUTE TAPS

T7A86/T6A86/T8A86 SERIES
T7A85/T6A85/T8A85 SERIES

STANDARD TAPS : METRIC SPIRAL FLUTE TAPS for General Purpose

Hole type 2.5×D



GS | HSS | M MF | USCTI 302 | D3~D6 | 60° | 4P~5P Plug | 1.5P~2P Bottoming | Bright | Steam Oxide | TiN | R50

EDP No.						SIZE	Pitch	Limit	No. of Flute
Plug			Bottom						
Bright	Steam Oxide	TiN	Bright	Steam Oxide	TiN				
T7A86203	T6A86203	T8A86203	T7A85203	T6A85203	T8A85203	M3	0.5	D3	2
T7A86244	T6A86244	T8A86244	T7A85244	T6A85244	T8A85244	M4	0.7	D4	3
T7A86284	T6A86284	T8A86284	T7A85284	T6A85284	T8A85284	M5	0.8	D4	3
T7A86315	T6A86315	T8A86315	T7A85315	T6A85315	T8A85315	M6	1.0	D5	3
T7A86365	T6A86365	T8A86365	T7A85365	T6A85365	T8A85365	M8	1.25	D5	3
T7A86426	T6A86426	T8A86426	T7A85426	T6A85426	T8A85426	M10	1.5	D6	3
T7A86506	T6A86506	T8A86506	T7A85506	T6A85506	T8A85506	M12	1.75	D6	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

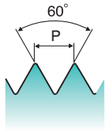
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL FLUTE TAPS

T7D01/T8D01 SERIES
T7D02/T8D02 SERIES

SPIRAL FLUTE TAP, 6″ EXTENSION

Hole type 2.5×D



GS | HSS | UNC UNF | USCTI Long Shank | H3 | 60° | 4P~5P Plug | 1.5P~2P Bottoming | Bright | TiN | R50

EDP No.				SIZE	UNC	UNF	Thread Limit	Overall Length	No. of Flutes
Plug		Bottom							
Bright	TiN	Bright	TiN						
T7D01243	T8D01243	T7D02243	T8D02243	6	32	—	H3	6"	2
T7D01283	T8D01283	T7D02283	T8D02283	8	32	—	H3	6"	3
T7D01323	T8D01323	T7D02323	T8D02323	10	24	—	H3	6"	3
T7D01343	T8D01343	T7D02343	T8D02343	10	—	32	H3	6"	3
T7D01403	T8D01403	T7D02403	T8D02403	1/4	20	—	H3	6"	3
T7D01423	T8D01423	T7D02423	T8D02423	1/4	—	28	H3	6"	3
T7D01443	T8D01443	T7D02443	T8D02443	5/16	18	—	H3	6"	3
T7D01483	T8D01483	T7D02483	T8D02483	3/8	16	—	H3	6"	3
T7D01523	T8D01523	T7D02523	T8D02523	7/16	14	—	H3	6"	3
T7D01563	T8D01563	T7D02563	T8D02563	1/2	13	—	H3	6"	3
T7D01643	T8D01643	T7D02643	T8D02643	5/8	11	—	H3	6"	4

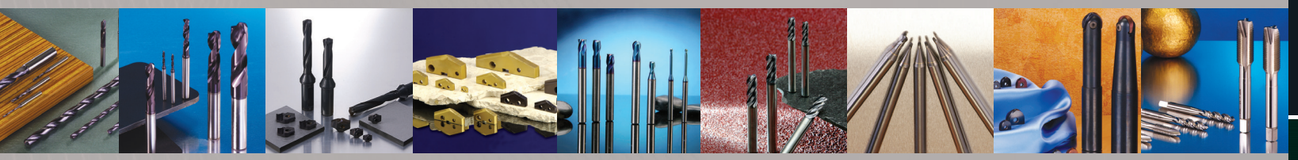
▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

Global Cutting Tool Leader **YG-1**



HSS

Being the best through innovation

SPIRAL POINT TAPS

- Tapping Through Holes / Super HSS, HSS-E, HSS-PM, HSS-V & HSS

SELECTION GUIDE

SPIRAL POINT TAPS

Tapping Through Holes / Super HSS, HSS-E, HSS-PM, HSS-V & HSS

INCH

EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
M9/O1		Super HSS	UNC/UNF	**VG**	USCTI 302A	H2~H6	4 ~ 5P		Steam Oxide Hardslick	106
N7/N8		Super HSS	M/MF	**VG**	USCTI 302A	D3~D7	4 ~ 5P		Steam Oxide Hardslick	108
N4/O5		Super HSS	UNC/UNF	**VG**	DIN-ANSI Shank	H2~H6	4 ~ 5P		Steam Oxide Hardslick	109
N3/O3		Super HSS	M/MF	**VG**	DIN-ANSI Shank	D3~D7	4 ~ 5P		Steam Oxide Hardslick	110
M4/M6/M7		P-HSS	UNC/UNF	**HR**	USCTI 302A	H2~H5	4 ~ 5P		Steam Oxide TiCN Hardslick	111
TQ808/ TK808/TR808		P-HSS	M/MF	**HR**	USCTI 302A	H2~H5	4 ~ 5P		Steam Oxide TiCN Hardslick	112
I3/I5/J6		P-HSS	UNC/UNF	**Ti Ni**	USCTI 302A	H2~H5	4 ~ 5P		Steam Oxide TiCN Hardslick	113
M2/M3		P-HSS	UNC/UNF	**VA**	USCTI Long Shank	H2~H3	4 ~ 5P		Hardslick	115
I0/I2/J2		HSSE-V3	UNC/UNF	**VA**	USCTI 302A	H2~H7	4 ~ 5P		Steam Oxide TiN Hardslick	116
O9/IA		HSSE-V3	M/MF	**VA**	USCTI 302A	D3~D7	4 ~ 5P		Steam Oxide Hardslick	119
K3/K5/K6		HSSE-V3	M/MF	**VA**	DIN-ANSI Shank	D3~D7	4 ~ 5P		Steam Oxide TiCN Hardslick	120
J3/J8		HSSE-V3	UNC/UNF	**VG**	USCTI 302A	H2~H11	4 ~ 5P		Steam Oxide Hardslick	121
IB/IC		HSSE-V3	M/MF	**VG**	USCTI 302A	D3~D11	4 ~ 5P		Steam Oxide Hardslick	125
J9/K7/K2		HSSE-V3	M/MF	**VG**	DIN-ANSI Shank	D3~D7	4 ~ 5P		Steam Oxide TiCN Hardslick	127
T2496		HSSE-V3	UNC/UNF	**AI**	USCTI 302A	H2~H5	4 ~ 5P		Bright	128
T2K01		HSSE-V3	M/MF	**AI**	USCTI 302A	D3~D6	4 ~ 5P		Bright	129
I9/J0/J1/J7		HSSE-V3	UNC/UNF	**GS**	USCTI	H2~H6	4 ~ 5P		Steam Oxide Bright/TiN Hardslick	130
K9/L0/L1		HSS-V	UNC/UNF	**GS**	USCTI 302A	H2~H6	4 ~ 5P		Bright TiN Hardslick	131

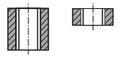
EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
L7/L8/L9		HSS-V	M/MF	**GS**	USCTI 302A	D3~D6	4 ~ 5P		Bright TiCN Hardslick	132
L3/L4/L5		HSS-V	UNC/UNF	**GS**	DIN-ANSI Shank	H2~H6	4 ~ 5P		Bright TiN Hardslick	133
T7216/T6216/ T8216 T7C16/T6C16/ T8C16		HSS	UNC/UNF	**GS**	USCTI 302	H1~H7	4 ~ 5P		Bright Finish Steam Oxide TiN	134
T7256/T6256		HSS	UNC/UNF	**GS**	USCTI 302	H1~H7	1.5 ~ 2P		Bright Finish Steam Oxide	138
T7217/T6217/ T8217		HSS	M/MF	**GS**	USCTI 302	D3~D7	4 ~ 5P	3.0D	Bright Finish Steam Oxide TiN	140
T7226/T6226/ T8226		HSS	UNC/UNF	**GS**	USCTI 302	+.005" oversize	4 ~ 5P		Bright Finish Steam Oxide TiN	141
T7B17/T6B17/ T8B17		HSS	M/MF	**GS**	USCTI 302	+.127mm oversize	4 ~ 5P		Bright Finish Steam Oxide TiN	142
T7236/T6236/ T8236 T7G36/ T6G36/T8G36		HSS	UNC/UNF	**GS**	USCTI Long Shank	H3	4 ~ 5P		Bright Finish Steam Oxide TiN	143

SPIRAL POINT TAPS

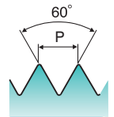
M9/01 SERIES

SPIRAL POINT TAPS PLUG STYLE
for Steels & Stainless Steels up to 35HRc

Hole type 3.0×D



USCTI



* NEW SIZE

VG | Super HSS | UNC UNF | USCTI 302A | H2~H6 | 60° | 4P~5P | Steam Oxide | Hardslick

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF		
M9082	O1082	2	56	—	H2	2
M9162	O1162	4	40	—	H2	2
* M9163	O1163	4	40	—	H3	2
* M9164	O1164	4	40	—	H4	2
* M9165	O1165	4	40	—	H5	2
M9202	O1202	5	40	—	H2	3
* M9242	O1242	6	32	—	H2	3
M9243	O1243	6	32	—	H3	3
* M9244	O1244	6	32	—	H4	3
* M9245	O1245	6	32	—	H5	3
* M9246	O1246	6	32	—	H6	3
* M9282	O1282	8	32	—	H2	3
M9283	O1283	8	32	—	H3	3
* M9284	O1284	8	32	—	H4	3
* M9285	O1285	8	32	—	H5	3
* M9286	O1286	8	32	—	H6	3
M9323	O1323	10	24	—	H3	3
* M9325	O1325	10	24	—	H5	3
* M9342	O1342	10	—	32	H2	3
M9343	O1343	10	—	32	H3	3
* M9344	O1344	10	—	32	H4	3
* M9345	O1345	10	—	32	H5	3
* M9346	O1346	10	—	32	H6	3
M9403	O1403	1/4	20	—	H3	3
M9405	O1405	1/4	20	—	H5	3
M9423	O1423	1/4	—	28	H3	3
* M9424	O1424	1/4	—	28	H4	3
* M9425	O1425	1/4	—	28	H5	3
* M9426	O1426	1/4	—	28	H6	3
* M9443	O1443	5/16	18	—	H3	3
M9445	O1445	5/16	18	—	H5	3
* M9463	O1463	5/16	—	24	H3	3
M9464	O1464	5/16	—	24	H4	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎	◎		◎	◎		○

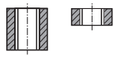
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL POINT TAPS

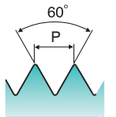
M9/01 SERIES

SPIRAL POINT TAPS PLUG STYLE
for Steels & Stainless Steels up to 35HRc

Hole type 3.0×D



USCTI



* NEW SIZE

VG | Super HSS | UNC UNF | USCTI 302A | H2~H6 | 60° | 4P~5P | Steam Oxide | Hardslick

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF		
* M9465	O1465	5/16	—	24	H5	3
* M9466	O1466	5/16	—	24	H6	3
* M9483	O1483	3/8	16	—	H3	3
M9485	O1485	3/8	16	—	H5	3
* M9503	O1503	3/8	—	24	H3	3
M9504	O1504	3/8	—	24	H4	3
* M9505	O1505	3/8	—	24	H5	3
* M9506	O1506	3/8	—	24	H6	3
* M9523	O1523	7/16	14	—	H3	3
M9525	O1525	7/16	14	—	H5	3
* M9543	O1543	7/16	—	20	H3	3
M9545	O1545	7/16	—	20	H5	3
* M9563	O1563	1/2	13	—	H3	3
M9565	O1565	1/2	13	—	H5	3
* M9583	O1583	1/2	—	20	H3	3
M9585	O1585	1/2	—	20	H5	3
M9605	O1605	9/16	12	—	H5	3
M9625	O1625	9/16	—	18	H5	3
* M9643	O1643	5/8	11	—	H3	3
M9645	O1645	5/8	11	—	H5	3
* M9663	O1663	5/8	—	18	H3	3
M9665	O1665	5/8	—	18	H5	3
* M9703	O1703	3/4	10	—	H3	3
M9705	O1705	3/4	10	—	H5	3
* M9723	O1723	3/4	—	16	H3	3
M9725	O1725	3/4	—	16	H5	3
M9746	O1746	7/8	9	—	H6	3
M9766	O1766	7/8	—	14	H6	3
M9786	O1786	1	8	—	H6	3
M9806	O1806	1	—	12	H6	3
M9836	O1836	1-1/8	8	—	H6	4
M9876	O1876	1-1/4	8	—	H6	4
M9916	O1916	1-3/8	8	—	H6	4
M9956	O1956	1-1/2	8	—	H6	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎	◎		◎	◎		○

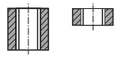
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL POINT TAPS

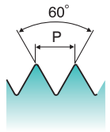
N7/N8 SERIES

METRIC SPIRAL POINT TAPS PLUG STYLE for Steels & Stainless Steels up to 35HRc

Hole type 3.0×D



USCTI



VG | Super HSS | M MF | USCTI 302A | D3~D7 | 60° | 4P~5P | Steam Oxide | Hardslick

EDP No.		SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick				
N7203	**N8203**	M3	0.5	D3	3
N7224	**N8224**	M3.5	0.6	D4	3
N7244	**N8244**	M4	0.7	D4	3
N7284	**N8284**	M5	0.8	D4	3
N7315	**N8315**	M6	1.0	D5	3
N7345	**N8345**	M7	1.0	D5	3
N7365	**N8365**	M8	1.25	D5	3
N7375	**N8375**	M8	1.0	D5	3
N7426	**N8426**	M10	1.5	D6	3
N7435	**N8435**	M10	1.25	D5	3
N7506	**N8506**	M12	1.75	D6	3
N7525	**N8525**	M12	1.25	D5	3
N7547	**N8547**	M14	2.0	D7	3
N7556	**N8556**	M14	1.5	D6	3
N7607	**N8607**	M16	2.0	D7	3
N7616	**N8616**	M16	1.5	D6	3
N7657	**N8657**	M18	2.5	D7	3
N7676	**N8676**	M18	1.5	D6	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎	◎		◎	◎		○

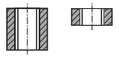
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL POINT TAPS

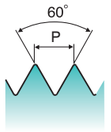
N4/O5 SERIES

SPIRAL POINT TAPS PLUG STYLE for Steels & Stainless Steels up to 35HRc

Hole type 3.0×D



DIN-ANSI Shank



VG | Super HSS | UNC UNF | H2~H6 | 60° | 4P~5P | Steam Oxide | Hardslick

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF		
N4082	**O5082**	2	56	—	H2	2
N4162	**O5162**	4	40	—	H2	2
N4202	**O5202**	5	40	—	H2	3
N4243	**O5243**	6	32	—	H3	3
N4283	**O5283**	8	32	—	H3	3
N4323	**O5323**	10	24	—	H3	3
N4343	**O5343**	10	—	32	H3	3
N4403	**O5403**	1/4	20	—	H3	3
N4405	**O5405**	1/4	20	—	H5	3
N4423	**O5423**	1/4	—	28	H3	3
N4445	**O5445**	5/16	18	—	H5	3
N4464	**O5464**	5/16	—	24	H4	3
N4485	**O5485**	3/8	16	—	H5	3
N4504	**O5504**	3/8	—	24	H4	3
N4525	**O5525**	7/16	14	—	H5	3
N4545	**O5545**	7/16	—	20	H5	3
N4565	**O5565**	1/2	13	—	H5	3
N4585	**O5585**	1/2	—	20	H5	3
N4605	**O5605**	9/16	12	—	H5	3
N4625	**O5625**	9/16	—	18	H5	3
N4645	**O5645**	5/8	11	—	H5	3
N4665	**O5665**	5/8	—	18	H5	3
N4705	**O5705**	3/4	10	—	H5	3
N4725	**O5725**	3/4	—	16	H5	3
N4746	**O5746**	7/8	9	—	H6	3
N4766	**O5766**	7/8	—	14	H6	3
N4786	**O5786**	1	8	—	H6	3
N4806	**O5806**	1	—	12	H6	3
N4836	**O5836**	1-1/8	8	—	H6	4
N4876	**O5876**	1-1/4	8	—	H6	4
N4916	**O5916**	1-3/8	8	—	H6	4
N4956	**O5956**	1-1/2	8	—	H6	4

▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎	◎		◎	◎		○

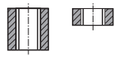
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL POINT TAPS

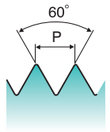
N3/O3 SERIES

METRIC SPIRAL POINT TAPS PLUG STYLE
for Steels & Stainless Steels up to 35HRc

Hole type 3.0×D



DIN-ANSI Shank



VG | Super HSS | M MF | D3~D7 | 60° | 4P~5P | Steam Oxide | Hardslick

EDP No.		SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick				
N3203	**O3203**	M3	0.5	D3	3
N3224	**O3224**	M3.5	0.6	D4	3
N3244	**O3244**	M4	0.7	D4	3
N3284	**O3284**	M5	0.8	D4	3
N3315	**O3315**	M6	1.0	D5	3
N3345	**O3345**	M7	1.0	D5	3
N3365	**O3365**	M8	1.25	D5	3
N3375	**O3375**	M8	1.0	D5	3
N3426	**O3426**	M10	1.5	D6	3
N3435	**O3435**	M10	1.25	D5	3
N3506	**O3506**	M12	1.75	D6	3
N3525	**O3525**	M12	1.25	D5	3
N3547	**O3547**	M14	2.0	D7	3
N3556	**O3556**	M14	1.5	D6	3
N3607	**O3607**	M16	2.0	D7	3
N3616	**O3616**	M16	1.5	D6	3
N3657	**O3657**	M18	2.5	D7	3
N3676	**O3676**	M18	1.5	D6	3

▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎	◎		◎	◎		○

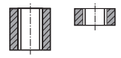
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL POINT TAPS

M4/M6/M7 SERIES

SPIRAL POINT TAPS PLUG STYLE
Steels up to 45HRc

Hole type 3.0×D



USCTI

* New Surface Treatment

HR | P-HSS | UNC UNF | USCTI 302A | H2~H5 | 60° | 4P~5P | Steam Oxide | TiCN | Hardslick

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiCN	Hardslick		UNC	UNF		
* **M4082**	**M6082**	**M7082**	2	56	—	H2	2
* **M4162**	**M6162**	**M7162**	4	40	—	H2	2
* **M4202**	**M6202**	**M7202**	5	40	—	H2	3
* **M4243**	**M6243**	**M7243**	6	32	—	H3	3
* **M4283**	**M6283**	**M7283**	8	32	—	H3	3
* **M4323**	**M6323**	**M7323**	10	24	—	H3	3
* **M4343**	**M6343**	**M7343**	10	—	32	H3	3
* **M4405**	**M6405**	**M7405**	1/4	20	—	H5	3
* **M4424**	**M6424**	**M7424**	1/4	—	28	H4	3
* **M4445**	**M6445**	**M7445**	5/16	18	—	H5	3
* **M4464**	**M6464**	**M7464**	5/16	—	24	H4	3
* **M4485**	**M6485**	**M7485**	3/8	16	—	H5	3
* **M4504**	**M6504**	**M7504**	3/8	—	24	H4	3
* **M4525**	**M6525**	**M7525**	7/16	14	—	H5	3
* **M4545**	**M6545**	**M7545**	7/16	—	20	H5	3
* **M4565**	**M6565**	**M7565**	1/2	13	—	H5	3
* **M4585**	**M6585**	**M7585**	1/2	—	20	H5	3
* **M4605**	**M6605**	**M7605**	9/16	12	—	H5	3
* **M4625**	**M6625**	**M7625**	9/16	—	18	H5	3
* **M4645**	**M6645**	**M7645**	5/8	11	—	H5	3
* **M4665**	**M6665**	**M7665**	5/8	—	18	H5	3
* **M4705**	**M6705**	**M7705**	3/4	10	—	H5	3
* **M4725**	**M6725**	**M7725**	3/4	—	16	H5	3

▶Bright Finish Available : M5 series
▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
		○	◎		○	◎	

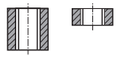
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○	○	○			◎		

SPIRAL POINT TAPS

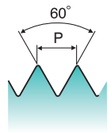
TQ808 / TK808 / TR808 SERIES

SPIRAL POINT TAPS PLUG STYLE
Steels up to 45HRc

Hole type 3.0×D



USCTI



HR | P-HSS | M MF | USCTI 302A | H2~H5 | 60° | 4P~5P | Steam Oxide | TiCN | Hardslick

◇ Call for Availability

EDP No.			SIZE	Pitch	Limit	No. of Flute
Steam Oxide	TiCN	Hardslick				
TQ808203	TK808203	TR808203HAR	M3	0.5	D3	3
TQ808253	TK808253	TR808253HAR	M4	0.5	D3	3
TQ808244	TK808244	TR808244HAR	M4	0.7	D4	3
TQ808293	TK808293	TR808293HAR	M5	0.5	D3	3
TQ808284	TK808284	TR808284HAR	M5	0.8	D4	3
TQ808333	TK808333	TR808333HAR	M6	0.5	D3	3
TQ808324	TK808324	TR808324HAR	M6	0.75	D4	3
TQ808315	TK808315	TR808315HAR	M6	1	D5	3
TQ808375	TK808375	TR808375HAR	M8	1	D5	3
TQ808365	TK808365	TR808365HAR	M8	1.25	D5	3
TQ808445	TK808445	TR808445HAR	M10	1	D5	3
TQ808435	TK808435	TR808435HAR	M10	1.25	D5	3
TQ808426	TK808426	TR808426HAR	M10	1.5	D6	3
TQ808535	TK808535	TR808535HAR	M12	1	D5	3
TQ808526	TK808526	TR808526HAR	M12	1.25	D6	3
TQ808516	TK808516	TR808516HAR	M12	1.5	D6	3
TQ808506	TK808506	TR808506HAR	M12	1.75	D6	3
TQ808556	TK808556	TR808556HAR	M14	1.5	D6	3
TQ808547	TK808547	TR808547HAR	M14	2	D7	3
TQ808616	TK808616	TR808616HAR	M16	1.5	D6	4
TQ808607	TK808607	TR808607HAR	M16	2	D7	4
TQ808676	TK808676	TR808676HAR	M18	1.5	D6	4
TQ808657	TK808657	TR808657HAR	M18	2.5	D7	4
TQ808726	TK808726	TR808726HAR	M20	1.5	D6	4
TQ808707	TK808707	TR808707HAR	M20	2.5	D7	4
TQ808766	TK808766	TR808766HAR	M22	1.5	D6	4
TQ808747	TK808747	TR808747HAR	M22	2.5	D7	4
TQ808806	TK808806	TR808806HAR	M24	1.5	D6	4
TQ808788	TK808788	TR808788HAR	M24	3	D8	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
		○	◎		○	◎	

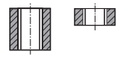
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○	○	○			◎		

SPIRAL POINT TAPS

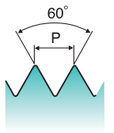
I3 / I5 / J6 SERIES

SPIRAL POINT TAPS PLUG STYLE
for Titanium Alloys & Nickel Base Alloys up to 44HRc

Hole type 3.0×D



USCTI



Ti Ni | P-HSS | UNC UNF | USCTI 302A | H2~H5 | 60° | 4P~5P | Steam Oxide | TiCN | Hardslick

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiCN	Hardslick		UNC	UNF		
I3082	I5082	J6082	2	56	—	H2	2
I3162	I5162	J6162	4	40	—	H2	2
I3202	I5202	J6202	5	40	—	H2	3
I3243	I5243	J6243	6	32	—	H3	3
I3283	I5283	J6283	8	32	—	H3	3
I3323	I5323	J6323	10	24	—	H3	3
I3343	I5343	J6343	10	—	32	H3	3
I3403	I5403	J6403	1/4	20	—	H3	3
I3405	I5405	J6405	1/4	20	—	H5	3
I3423	I5423	J6423	1/4	—	28	H3	3
I3424	I5424	J6424	1/4	—	28	H4	3
I3443	I5443	J6443	5/16	18	—	H3	3
I3445	I5445	J6445	5/16	18	—	H5	3
I3463	I5463	J6463	5/16	—	24	H3	3
I3483	I5483	J6483	3/8	16	—	H3	3
I3485	I5485	J6485	3/8	16	—	H5	3
I3503	I5503	J6503	3/8	—	24	H3	3
I3504	I5504	J6504	3/8	—	24	H4	3
I3523	I5523	J6523	7/16	14	—	H3	3
I3525	I5525	J6525	7/16	14	—	H5	3
I3543	I5543	J6543	7/16	—	20	H3	3
I3545	I5545	J6545	7/16	—	20	H5	3
I3563	I5563	J6563	1/2	13	—	H3	3
I3565	I5565	J6565	1/2	13	—	H5	3
I3583	I5583	J6583	1/2	—	20	H3	3
I3585	I5585	J6585	1/2	—	20	H5	3
I3603	I5603	J6603	9/16	12	—	H3	3
I3605	I5605	J6605	9/16	12	—	H5	3
I3623	I5623	J6623	9/16	—	18	H3	3
I3625	I5625	J6625	9/16	—	18	H5	3
I3643	I5643	J6643	5/8	11	—	H3	3

▶TiN Coated Available: M8 Series

▶ NEXT PAGE

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys

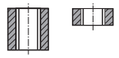
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			◎	◎	◎					

SPIRAL POINT TAPS

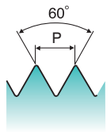
I3/I5/J6 SERIES

SPIRAL POINT TAPS PLUG STYLE
for Titanium Alloys & Nickel Base Alloys up to 44HRc

Hole type 3.0×D



USCTI



Ti Ni | P-HSS | UNC UNF | USCTI 302A | H2~H5 | 60° | 4P~5P | Steam Oxide | TiCN | Hardslick

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiCN	Hardslick		UNC	UNF		
I3645	**I5645**	**J6645**	5/8	11	—	H5	3
I3663	**I5663**	**J6663**	5/8	—	18	H3	3
I3665	**I5665**	**J6665**	5/8	—	18	H5	3
I3703	**I5703**	**J6703**	3/4	10	—	H3	3
I3705	**I5705**	**J6705**	3/4	10	—	H5	3
I3723	**I5723**	**J6723**	3/4	—	16	H3	3
I3725	**I5725**	**J6725**	3/4	—	16	H5	3

▶TiN Coated Available : M8 Series
▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys

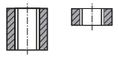
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			◎	◎	◎					

SPIRAL POINT TAPS

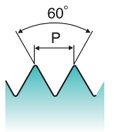
M2/M3 SERIES

SPIRAL POINT TAPS PLUG STYLE
for Stainless Steels up to 28HRc

Hole type 3.0×D



USCTI Long Shank



VA | P-HSS | UNC UNF | USCTI Long Shank | H2~H3 | 60° | 4P~5P | Hardslick

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute	Maximum Tapping Depth
Hardslick Coated 4" OAL	Hardslick Coated 6" OAL		UNC	UNF			
M2162	—	4	40	—	H2	2	0.844
M2243	**M3243**	6	32	—	H3	2	1.031
M2283	**M3283**	8	32	—	H3	3	1.125
M2323	**M3323**	10	24	—	H3	3	1.312
M2343	**M3343**	10	—	32	H3	3	1.312
M2403	**M3403**	1/4	20	—	H3	3	1.500
—	**M3423**	1/4	—	28	H3	3	1.500
—	**M3443**	5/16	18	—	H3	3	1.688
—	**M3463**	5/16	—	24	H3	3	1.688
—	**M3483**	3/8	16	—	H3	3	1.875
—	**M3503**	3/8	—	24	H3	3	—
—	**M3523**	7/16	14	—	H3	3	—
—	**M3543**	7/16	—	20	H3	3	—
—	**M3563**	1/2	13	—	H3	3	—
—	**M3583**	1/2	—	20	H3	3	—
—	**M3603**	9/16	12	—	H3	3	—
—	**M3623**	9/16	—	18	H3	3	—
—	**M3643**	5/8	11	—	H3	3	—

▶TiN Coated Available: 4" OAL M0 Series & 6" OAL M1 Series
▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

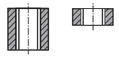
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL POINT TAPS

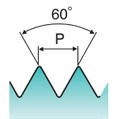
I0/I2/J2 SERIES

SPIRAL POINT TAPS PLUG STYLE for Stainless Steels up to 28HRc

Hole type 3.0×D



USCTI



* NEW SIZE

VA | HSSE-V3 | UNC UNF | USCTI 302A | H2~H7 | 60° | 4P~5P | Steam Oxide | TiN | Hardslick

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiN	Hardslick		UNC	UNF		
I0082	I2082	J2082	2	56	—	H2	2
* I0083	—	* J2083	2	56	—	H3	2
* I0084	—	* J2084	2	56	—	H4	2
* I0122	—	* J2122	3	48	—	H2	2
I0162	I2162	J2162	4	40	—	H2	2
* I0163	—	* J2163	4	40	—	H3	2
* I0164	—	* J2164	4	40	—	H4	2
* I0165	—	* J2165	4	40	—	H5	2
* I0166	—	* J2166	4	40	—	H6	2
* I0182	—	* J2182	4	—	48	H2	2
* I0184	—	* J2184	4	—	48	H4	2
I0202	I2202	J2202	5	40	—	H2	3
I0243	I2243	J2243	6	32	—	H3	3
* I0244	—	* J2244	6	32	—	H3	3
* I0245	—	* J2245	6	32	—	H4	3
* I0247	—	* J2247	6	32	—	H7	3
* I0262	—	* J2262	6	—	40	H2	3
* I0263	—	* J2263	6	—	40	H3	3
* I0282	—	* J2282	8	32	—	H2	3
I0283	I2283	J2283	8	32	—	H3	3
* I0284	—	* J2284	8	32	—	H4	3
* I0285	—	* J2286	8	32	—	H5	3
* I0287	—	* J2287	8	32	—	H7	3
* I0302	—	* J2302	8	—	36	H2	3
I0323	I2323	J2323	10	24	—	H3	3
* I0324	—	* J2324	10	24	—	H4	3
* I0325	—	* J2325	10	24	—	H5	3
* I0342	—	* J2342	10	—	32	H2	3
I0343	I2343	J2343	10	—	32	H3	3
* I0344	—	* J2344	10	—	32	H4	3
* I0345	—	* J2345	10	—	32	H5	3
* I0346	—	* J2346	10	—	32	H6	3
* I0347	—	* J2347	10	—	32	H7	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

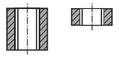
HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

SPIRAL POINT TAPS

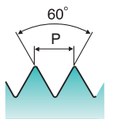
I0/I2/J2 SERIES

SPIRAL POINT TAPS PLUG STYLE for Stainless Steels up to 28HRc

Hole type 3.0×D



USCTI



* NEW SIZE

VA | HSSE-V3 | UNC UNF | USCTI 302A | H2~H7 | 60° | 4P~5P | Steam Oxide | TiN | Hardslick

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiN	Hardslick		UNC	UNF		
* I0363	—	* J2363	12	24	—	H3	3
* I0383	—	* J2383	12	—	28	H3	3
* I0402	—	* J2402	1/4	20	—	H2	3
I0403	I2403	J2403	1/4	20	—	H3	3
I0405	I2405	J2405	1/4	20	—	H5	3
* I0407	—	* J2407	1/4	20	—	H7	3
* I0422	—	* J2422	1/4	—	28	H2	3
I0423	I2423	J2423	1/4	—	28	H3	3
* I0424	—	* J2424	1/4	—	28	H4	3
* I0425	—	* J2425	1/4	—	28	H5	3
* I0426	—	* J2426	1/4	—	28	H6	3
* I0427	—	* J2427	1/4	—	28	H7	3
I0443	I2443	J2443	5/16	18	—	H3	3
I0445	I2445	J2445	5/16	18	—	H5	3
* I0447	—	* J2447	5/16	18	—	H7	3
I0463	I2463	J2463	5/16	—	24	H3	3
* I0464	—	* J2464	5/16	—	24	H4	3
* I0465	—	* J2465	5/16	—	24	H5	3
* I0466	—	* J2466	5/16	—	24	H6	3
* I0467	—	* J2467	5/16	—	24	H7	3
I0483	I2483	J2483	3/8	16	—	H3	3
I0485	I2485	J2485	3/8	16	—	H5	3
* I0487	—	* J2487	3/8	16	—	H7	3
I0503	I2503	J2503	3/8	—	24	H3	3
* I0504	—	* J2504	3/8	—	24	H4	3
* I0505	—	* J2505	3/8	—	24	H5	3
* I0507	—	* J2507	3/8	—	24	H7	3
I0523	I2523	J2523	7/16	14	—	H3	3
I0525	I2525	J2525	7/16	14	—	H5	3
I0543	I2543	J2543	7/16	—	20	H3	3
I0545	I2545	J2545	7/16	—	20	H5	3
I0563	I2563	J2563	1/2	13	—	H3	3
I0565	I2565	J2565	1/2	13	—	H5	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

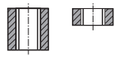
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL POINT TAPS

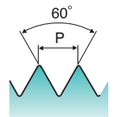
I0/I2/J2 SERIES

SPIRAL POINT TAPS PLUG STYLE
for Stainless Steels up to 28HRc

Hole type 3.0×D



USCTI



* NEW SIZE

VA | HSSE-V3 | UNC UNF | USCTI 302A | H2~H7 | 60° | 4P~5P | Steam Oxide | TiN | Hardslick

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiN	Hardslick		UNC	UNF		
* I0567	—	* J2567	1/2	13	—	H7	3
I0583	I2583	J2583	1/2	—	20	H3	3
* I0585	—	* J2585	1/2	—	20	H5	3
I0603	I2603	J2603	9/16	12	—	H3	3
I0623	I2623	J2623	9/16	—	18	H3	3
I0643	I2643	J2643	5/8	11	—	H3	3
I0645	I2645	J2645	5/8	11	—	H5	3
* I0647	—	J2647	5/8	11	—	H7	3
* I0663	—	* J2663	5/8	—	18	H3	3
I0665	I2665	* J2665	5/8	—	18	H5	3
* I0667	—	J2667	5/8	—	18	H7	3
I0703	I2703	* J2703	3/4	10	—	H3	3
I0725	I2725	J2725	3/4	—	16	H5	3
I0744	I2744	J2744	7/8	9	—	H4	3
I0766	I2766	J2766	7/8	—	14	H6	3
I0784	I2784	J2784	1	8	—	H4	3
I0806	I2806	J2806	1	—	12	H6	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

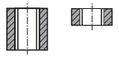
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL POINT TAPS

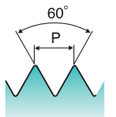
O9/IA SERIES

METRIC SPIRAL POINT TAPS PLUG STYLE
Stainless Steels up to 28HRc

Hole type 3.0×D



USCTI



VA | HSSE-V3 | M MF | USCTI 302A | D3~D7 | 60° | 4P~5P | Steam Oxide | Hardslick

EDP No.		SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick				
O9203	IA203	M3	0.5	D3	3
O9224	IA224	M3.5	0.6	D4	3
O9244	IA244	M4	0.7	D4	3
O9284	IA284	M5	0.8	D4	3
O9315	IA315	M6	1.0	D5	3
O9345	IA345	M7	1.0	D5	3
O9365	IA365	M8	1.25	D5	3
O9375	IA375	M8	1.0	D5	3
O9426	IA426	M10	1.5	D6	3
O9435	IA435	M10	1.25	D5	3
O9506	IA506	M12	1.75	D6	3
O9525	IA525	M12	1.25	D5	3
O9547	IA547	M14	2.0	D7	3
O9556	IA556	M14	1.5	D6	3
O9607	IA607	M16	2.0	D7	3
O9616	IA616	M16	1.5	D6	3
O9657	IA657	M18	2.5	D7	3
O9676	IA676	M18	1.5	D6	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

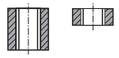
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL POINT TAPS

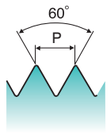
K3/K5/K6 SERIES

METRIC SPIRAL POINT TAPS PLUG STYLE
Stainless Steels up to 28HRc

Hole type 3.0×D



DIN-ANSI Shank



VA | HSSE-V3 | M MF | D3~D7 | 60° | 4P~5P | Steam Oxide | TiCN | Hardslick

EDP No.			SIZE	Pitch	Limit	No. of Flute
Steam Oxide	TiCN	Hardslick				
K3203	K5203	K6203	M3	0.5	D3	3
K3224	K5224	K6224	M3.5	0.6	D4	3
K3244	K5244	K6244	M4	0.7	D4	3
K3284	K5284	K6284	M5	0.8	D4	3
K3315	K5315	K6315	M6	1.0	D5	3
K3345	K5345	K6345	M7	1.0	D5	3
K3365	K5365	K6365	M8	1.25	D5	3
K3375	K5375	K6375	M8	1.0	D5	3
K3426	K5426	K6426	M10	1.5	D6	3
K3435	K5435	K6435	M10	1.25	D5	3
K3506	K5506	K6506	M12	1.75	D6	3
K3525	K5525	K6525	M12	1.25	D5	3
K3547	K5547	K6547	M14	2.0	D7	3
K3556	K5556	K6556	M14	1.5	D6	3
K3607	K5607	K6607	M16	2.0	D7	3
K3616	K5616	K6616	M16	1.5	D6	3
K3657	K5657	K6657	M18	2.5	D7	3
K3676	K5676	K6676	M18	1.5	D6	3

▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎			◎			○

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

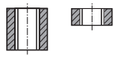
SPIRAL POINT TAPS

J3/J8 SERIES

SPIRAL POINT TAPS PLUG STYLE
Steels up to 38HRc

A variety of H Limit

Hole type 3.0×D



USCTI

* NEW SIZE

VG | HSSE-V3 | UNC UNF | USCTI 302A | H2~H11 | 60° | 4P~5P | Steam Oxide | Hardslick

EDP No.		SIZE	Thread Per Inch			Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF	8 Pitch		
J3082	J8082	2	56	—	—	H2	2
* J3122	J8122	3	48	—	—	H2	2
J3162	J8162	4	40	—	—	H2	2
* J3163	J8163	4	40	—	—	H3	2
* J3164	J8164	4	40	—	—	H4	2
* J3165	J8165	4	40	—	—	H5	2
* J3182	J8182	4	—	48	—	H2	2
J3202	J8202	5	40	—	—	H2	2
* J3242	J8242	6	32	—	—	H2	2
J3243	J8243	6	32	—	—	H3	2
* J3244	J8244	6	32	—	—	H4	2
* J3245	J8245	6	32	—	—	H5	2
* J3246	J8246	6	32	—	—	H6	2
* J3247	J8247	6	32	—	—	H7	2
* J324A	J824A	6	32	—	—	H11	2
* J3262	J8262	6	—	40	—	H2	2
* J3282	J8282	8	32	—	—	H2	3
J3283	J8283	8	32	—	—	H3	3
* J3284	J8284	8	32	—	—	H4	3
* J3285	J8285	8	32	—	—	H5	3
* J3286	J8286	8	32	—	—	H6	3
* J3287	J8287	8	32	—	—	H7	3
* J328A	J828A	8	32	—	—	H11	3
* J3302	J8302	8	—	36	—	H2	3
J3323	J8323	10	24	—	—	H3	3
* J3325	J8325	10	24	—	—	H5	3
* J332A	J832A	10	24	—	—	H11	3
* J3342	J8342	10	—	32	—	H2	3
J3343	J8343	10	—	32	—	H3	3
* J3344	J8344	10	—	32	—	H4	3
* J3345	J8345	10	—	32	—	H5	3
* J3346	J8346	10	—	32	—	H6	3

▶Bright Finish Available: J4 Series
▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.
▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

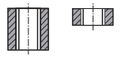
SPIRAL POINT TAPS

J3/J8 SERIES

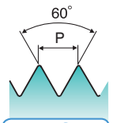
SPIRAL POINT TAPS PLUG STYLE
Steels up to 38HRc

A variety of H Limit

Hole type 3.0×D



USCTI



* NEW SIZE

VG | HSSE-V3 | UNC UNF | USCTI 302A | H2~H11 | 60° | 4P~5P | Steam Oxide | Hardslick

EDP No.		SIZE	Thread Per Inch			Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF	8 Pitch		
* J3347	J8347	10	—	32	—	H7	3
* J334A	J834A	10	—	32	—	H11	3
* J3363	J8363	12	24	—	—	H3	3
* J3383	J8383	12	—	28	—	H3	3
* J3402	J8402	1/4	20	—	—	H2	3
J3403	J8403	1/4	20	—	—	H3	3
J3405	J8405	1/4	20	—	—	H5	3
* J3407	J8407	1/4	20	—	—	H7	3
* J340A	J840A	1/4	20	—	—	H11	3
* J3422	J8422	1/4	—	28	—	H2	3
J3423	J8423	1/4	—	28	—	H3	3
* J3424	J8424	1/4	—	28	—	H4	3
J3425	J8425	1/4	—	28	—	H5	3
* J3426	J8426	1/4	—	28	—	H6	3
* J3427	J8427	1/4	—	28	—	H7	3
* J342A	J842A	1/4	—	28	—	H11	3
J3443	J8443	5/16	18	—	—	H3	3
J3445	J8445	5/16	18	—	—	H5	3
* J3447	J8447	5/16	18	—	—	H7	3
* J344A	J844A	5/16	18	—	—	H11	3
* J3462	J8462	5/16	—	24	—	H2	3
J3463	J8463	5/16	—	24	—	H3	3
* J3464	J8464	5/16	—	24	—	H4	3
J3465	J8465	5/16	—	24	—	H5	3
* J3466	J8466	5/16	—	24	—	H6	3
* J3467	J8467	5/16	—	24	—	H7	3
* J346A	J846A	5/16	—	24	—	H11	3
J3483	J8483	3/8	16	—	—	H3	3
J3485	J8485	3/8	16	—	—	H5	3
* J3487	J8487	3/8	16	—	—	H7	3
* J348A	J848A	3/8	16	—	—	H11	3
* J3502	J8502	3/8	—	24	—	H2	3

▶Bright Finish Available: J4 Series

▶ NEXT PAGE

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

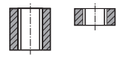
SPIRAL POINT TAPS

J3/J8 SERIES

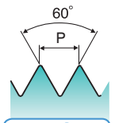
SPIRAL POINT TAPS PLUG STYLE
Steels up to 38HRc

A variety of H Limit

Hole type 3.0×D



USCTI



* NEW SIZE

VG | HSSE-V3 | UNC UNF | USCTI 302A | H2~H11 | 60° | 4P~5P | Steam Oxide | Hardslick

EDP No.		SIZE	Thread Per Inch			Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF	8 Pitch		
J3503	J8503	3/8	—	24	—	H3	3
* J3504	J8504	3/8	—	24	—	H4	3
J3505	J8505	3/8	—	24	—	H5	3
* J3506	J8506	3/8	—	24	—	H6	3
* J3507	J8507	3/8	—	24	—	H7	3
* J350A	J850A	3/8	—	24	—	H11	3
J3523	J8523	7/16	14	—	—	H3	3
J3525	J8525	7/16	14	—	—	H5	3
* J3527	J8527	7/16	14	—	—	H7	3
* J352A	J852A	7/16	14	—	—	H11	3
J3543	J8543	7/16	—	20	—	H3	3
J3545	J8545	7/16	—	20	—	H5	3
* J3547	J8547	7/16	—	20	—	H7	3
* J354A	J854A	7/16	—	20	—	H11	3
J3563	J8563	1/2	13	—	—	H3	3
J3565	J8565	1/2	13	—	—	H5	3
* J3567	J8567	1/2	13	—	—	H7	3
* J356A	J856A	1/2	13	—	—	H11	3
* J3582	J8582	1/2	—	20	—	H2	3
J3583	J8583	1/2	—	20	—	H3	3
J3585	J8585	1/2	—	20	—	H5	3
* J3587	J8587	1/2	—	20	—	H7	3
* J358A	J858A	1/2	—	20	—	H11	3
J3605	J8605	9/16	12	—	—	H5	3
J3625	J8625	9/16	—	18	—	H5	3
J3643	J8643	5/8	11	—	—	H3	3
J3645	J8645	5/8	11	—	—	H5	3
J3663	J8663	5/8	—	18	—	H3	3
J3665	J8665	5/8	—	18	—	H5	3
* J3667	J8667	5/8	—	18	—	H7	3
J3703	J8703	3/4	10	—	—	H3	3
J3705	J8705	3/4	10	—	—	H5	3

▶Bright Finish Available: J4 Series

▶ NEXT PAGE

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

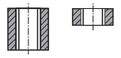
SPIRAL POINT TAPS

J3/J8 SERIES

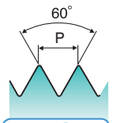
SPIRAL POINT TAPS PLUG STYLE
Steels up to 38HRc

A variety of H Limit

Hole type 3.0×D



USCTI



* NEW SIZE

VG | HSSE-V3 | UNC UNF | USCTI 302A | H2~H11 | 60° | 4P~5P | Steam Oxide | Hardslick

EDP No.		SIZE	Thread Per Inch			Limit	No. of Flute
Steam Oxide	Hardslick		UNC	UNF	8 Pitch		
J3723	**J8723**	3/4	—	16	—	H3	3
J3725	**J8725**	3/4	—	16	—	H5	3
* **J3745**	**J8745**	7/8	9	—	—	H5	3
* **J3764**	**J8764**	7/8	—	14	—	H4	3
J3784	**J8784**	1	8	—	—	H4	4
J3804	**J8804**	1	—	12	—	H4	4
* **J3826**	**J8826**	1-1/8	7	—	—	H6	4
* **J3845**	**J8845**	1-1/8	—	12	—	H5	4
* **J3836**	**J8836**	1-1/8	—	—	8	H6	4
* **J3866**	**J8866**	1-1/4	7	—	—	H6	4
* **J3885**	**J8885**	1-1/4	—	12	—	H5	4
* **J3876**	**J8876**	1-1/4	—	—	8	H6	4
* **J3906**	**J8906**	1-3/8	6	—	—	H6	4
* **J3925**	**J8925**	1-3/8	—	12	—	H5	4
* **J3916**	**J8916**	1-3/8	—	—	8	H6	4
* **J3946**	**J8946**	1-1/2	6	—	—	H6	4
* **J3965**	**J8965**	1-1/2	—	12	—	H5	4
* **J3956**	**J8956**	1-1/2	—	—	8	H6	4

▶Bright Finish Available: J4 Series
▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

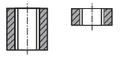
SPIRAL POINT TAPS

IB/IC SERIES

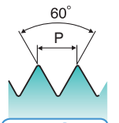
METRIC SPIRAL POINT TAPS PLUG STYLE
Steels up to 35HRc

A variety of D Limit

Hole type 3.0×D



USCTI



* NEW SIZE

VG | HSSE-V3 | M MF | USCTI 302A | D3~D11 | 60° | 4P~5P | Steam Oxide | Hardslick

EDP No.		SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick				
IB203	**IC203**	M3	0.5	D3	3
* **IB20A**	**IC20A**	M3	0.5	D11	3
IB224	**IC224**	M3.5	0.6	D4	3
* **IB22A**	**IC22A**	M3.5	0.6	D11	3
IB244	**IC244**	M4	0.7	D4	3
* **IB24A**	**IC24A**	M4	0.7	D11	3
IB284	**IC284**	M5	0.8	D4	3
* **IB28A**	**IC28A**	M5	0.8	D11	3
IB315	**IC315**	M6	1.0	D5	3
* **IB31A**	**IC31A**	M6	1.0	D11	3
IB345	**IC345**	M7	1.0	D5	3
* **IB34A**	**IC34A**	M7	1.0	D11	3
IB375	**IC375**	M8	1.0	D5	3
* **IB37A**	**IC37A**	M8	1.0	D11	3
IB365	**IC365**	M8	1.25	D5	3
* **IB36A**	**IC36A**	M8	1.25	D11	3
* **IB445**	**IC445**	M10	1.0	D5	3
* **IB44A**	**IC44A**	M10	1.0	D11	3
IB435	**IC435**	M10	1.25	D5	3
* **IB43A**	**IC43A**	M10	1.25	D11	3
IB426	**IC426**	M10	1.5	D6	3
* **IB42A**	**IC42A**	M10	1.5	D11	3
IB525	**IC525**	M12	1.25	D5	3
* **IB52A**	**IC52A**	M12	1.25	D11	3
* **IB516**	**IC516**	M12	1.5	D6	3
* **IB51A**	**IC51A**	M12	1.5	D11	3
IB506	**IC506**	M12	1.75	D6	3
* **IB50A**	**IC50A**	M12	1.75	D11	3
IB556	**IC556**	M14	1.5	D6	3
IB547	**IC547**	M14	2.0	D7	3
IB616	**IC616**	M16	1.5	D6	3
IB607	**IC607**	M16	2.0	D7	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

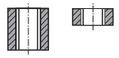
SPIRAL POINT TAPS

IB/IC SERIES

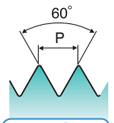
METRIC SPIRAL POINT TAPS PLUG STYLE
Steels up to 35HRc

A variety of D Limit

Hole type 3.0×D



USCTI



* NEW SIZE

VG | HSSE-V3 | M MF | USCTI 302A | D3~D11 | 60° | 4P~5P | Steam Oxide | Hardslick

EDP No.		SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick				
IB676	**IC676**	M18	1.5	D6	4
IB657	**IC657**	M18	2.5	D7	4
* **IB726**	**IC726**	M20	1.5	D6	3
* **IB708**	**IC708**	M20	2.5	D8	3
* **IB766**	**IC766**	M22	1.5	D6	3
* **IB748**	**IC748**	M22	2.5	D8	3
* **IB806**	**IC806**	M24	1.5	D6	4
* **IB788**	**IC788**	M24	3.0	D8	4
* **IB886**	**IC886**	M27	1.5	D6	4
* **IB868**	**IC868**	M27	3.0	D8	4
* **IB976**	**IC976**	M30	1.5	D6	4
* **IB949**	**IC949**	M30	3.5	D9	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

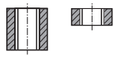
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

SPIRAL POINT TAPS

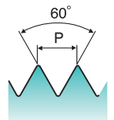
J9/K7/K2 SERIES

METRIC SPIRAL POINT TAPS PLUG STYLE
Steels up to 35HRc

Hole type 3.0×D



DIN-ANSI Shank



VG | HSSE-V3 | M MF | D3~D7 | 60° | 4P~5P | Steam Oxide | TiCN | Hardslick

EDP No.			SIZE	Pitch	Limit	No. of Flute
Steam Oxide	TiCN	Hardslick				
J9203	**K7203**	**K2203**	M3	0.5	D3	3
J9224	**K7224**	**K2224**	M3.5	0.6	D4	3
J9244	**K7244**	**K2244**	M4	0.7	D4	3
J9284	**K7284**	**K2284**	M5	0.8	D4	3
J9315	**K7315**	**K2315**	M6	1.0	D5	3
J9345	**K7345**	**K2345**	M7	1.0	D5	3
J9365	**K7365**	**K2365**	M8	1.25	D5	3
J9375	**K7375**	**K2375**	M8	1.0	D5	3
J9426	**K7426**	**K2426**	M10	1.5	D6	3
J9435	**K7435**	**K2435**	M10	1.25	D5	3
J9506	**K7506**	**K2506**	M12	1.75	D6	3
J9525	**K7525**	**K2525**	M12	1.25	D5	3
J9547	**K7547**	**K2547**	M14	2.0	D7	3
J9556	**K7556**	**K2556**	M14	1.5	D6	3
J9607	**K7607**	**K2607**	M16	2.0	D7	3
J9616	**K7616**	**K2616**	M16	1.5	D6	3
J9657	**K7657**	**K2657**	M18	2.5	D7	4
J9676	**K7676**	**K2676**	M18	1.5	D6	4

▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
	◎	◎		○	○		

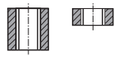
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

SPIRAL POINT TAPS

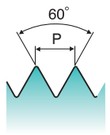
T2496 SERIES

SPIRAL POINT TAPS PLUG STYLE for Aluminum Alloy or Die Cast Aluminum

Hole type 3.0×D



USCTI



AI | HSSE-V3 | UNC UNF | USCTI 302A | H2~H5 | 60° | 4P~5P | Bright

◇ Call for Availability

EDP No. Bright	SIZE	Thread Per Inch UNC	Thread Per Inch UNF	Limit	No. of Flute
◇ T2496162	4	40	—	H2	2
◇ T2496163	4	40	—	H3	2
◇ T2496242	6	32	—	H2	2
◇ T2496243	6	32	—	H3	2
◇ T2496282	8	32	—	H2	2
◇ T2496283	8	32	—	H3	2
◇ T2496323	10	24	—	H3	2
◇ T2496342	10	—	32	H2	2
◇ T2496343	10	—	32	H3	2
◇ T2496345	10	—	32	H5	2
◇ T2496403	1/4	20	—	H3	2
◇ T2496405	1/4	20	—	H5	2
◇ T2496423	1/4	—	28	H3	2
◇ T2496443	5/16	18	—	H3	2
◇ T2496445	5/16	18	—	H5	2
◇ T2496463	5/16	—	24	H3	2
◇ T2496465	5/16	—	24	H5	2
◇ T2496483	3/8	16	—	H3	3
◇ T2496485	3/8	16	—	H5	3
◇ T2496503	3/8	—	24	H3	3
◇ T2496505	3/8	—	24	H5	3
◇ T2496563	1/2	13	-	H3	3
◇ T2496565	1/2	13	-	H5	3
◇ T2496583	1/2	-	20	H3	3
◇ T2496643	5/8	11	—	H3	3
◇ T2496663	5/8	—	18	H3	3
◇ T2496703	3/4	10	—	H3	3
◇ T2496723	3/4	—	16	H3	3
◇ T2496744	7/8	9	—	H4	3
◇ T2496764	7/8	—	14	H4	3
◇ T2496784	1	1	—	H4	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 197.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
							◎

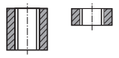
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎										

SPIRAL POINT TAPS

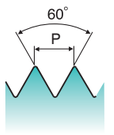
T2K01 SERIES

METRIC SPIRAL POINT TAPS PLUG STYLE for Aluminum Alloy or Die Cast Aluminum

Hole type 3.0×D



USCTI



AI | HSSE-V3 | M MF | USCTI 302A | D3~D6 | 60° | 4P~5P | Bright

◇ Call for Availability

EDP No. Bright	SIZE	Pitch	Thread Limit	No. of Flute
◇ T2K01203	M3	0.5	D3	2
◇ T2K01244	M4	0.7	D4	2
◇ T2K01284	M5	0.8	D4	2
◇ T2K01315	M6	1.0	D5	2
◇ T2K01365	M8	1.25	D5	2
◇ T2K01435	M10	1.25	D5	3
◇ T2K01426	M10	1.5	D6	3
◇ T2K01525	M12	1.25	D5	3
◇ T2K01515	M12	1.5	D5	3
◇ T2K01506	M12	1.75	D6	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
							◎

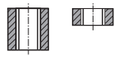
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎										

SPIRAL POINT TAPS

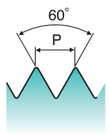
I9/J0/J1/J7 SERIES

STANDARD TAPS : SPIRAL POINT PLUG STYLE for General Purpose

Hole type 3.0×D



USCTI



GS | HSSE-V3 | UNC UNF | USCTI | H2~H6 | 60° | 4P~5P | Steam Oxide | Bright | TiN | Hardslick

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	Bright	TiN	Hardslick		UNC	UNF		
I9082	J0082	J1082	J7082	2	56	—	H2	2
I9162	J0162	J1162	J7162	4	40	—	H2	2
I9202	J0202	J1202	J7202	5	40	—	H2	2
I9243	J0243	J1243	J7243	6	32	—	H3	2
I9283	J0283	J1283	J7283	8	32	—	H3	2
I9323	J0323	J1323	J7323	10	24	—	H3	2
I9343	J0343	J1343	J7343	10	—	32	H3	2
I9403	J0403	J1403	J7403	1/4	20	—	H3	2
I9405	J0405	J1405	J7405	1/4	20	—	H5	2
I9423	J0423	J1423	J7423	1/4	—	28	H3	2
I9443	J0443	J1443	J7443	5/16	18	—	H3	2
I9445	J0445	J1445	J7445	5/16	18	—	H5	2
I9463	J0463	J1463	J7463	5/16	—	24	H3	2
I9483	J0483	J1483	J7483	3/8	16	—	H3	3
I9485	J0485	J1485	J7485	3/8	16	—	H5	3
I9503	J0503	J1503	J7503	3/8	—	24	H3	3
I9523	J0523	J1523	J7523	7/16	14	—	H3	3
I9525	J0525	J1525	J7525	7/16	14	—	H5	3
I9543	J0543	J1543	J7543	7/16	—	20	H3	3
I9545	J0545	J1545	J7545	7/16	—	20	H5	3
I9563	J0563	J1563	J7563	1/2	13	—	H3	3
I9565	J0565	J1565	J7565	1/2	13	—	H5	3
I9583	J0583	J1583	J7583	1/2	—	20	H3	3
I9585	J0585	J1585	J7585	1/2	—	20	H5	3
I9603	J0603	J1603	J7603	9/16	12	—	H3	3
I9625	J0625	J1625	J7625	9/16	—	18	H5	3
I9643	J0643	J1643	J7643	5/8	11	—	H3	3
I9645	J0645	J1645	J7645	5/8	11	—	H5	3
I9665	J0665	J1665	J7665	5/8	—	18	H5	3
I9703	J0703	J1703	J7703	3/4	10	—	H3	3
I9705	J0705	J1705	J7705	3/4	10	—	H5	3
I9725	J0725	J1725	J7725	3/4	—	16	H5	3
I9744	J0744	J1744	J7744	7/8	9	—	H4	3
I9766	J0766	J1766	J7766	7/8	—	14	H6	3
I9784	J0784	J1784	J7784	1	8	—	H4	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

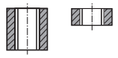
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL POINT TAPS

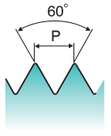
K9/L0/L1 SERIES

SPIRAL POINT TAPS PLUG STYLE for General Purpose

Hole type 3.0×D



USCTI



GS | HSS-V | UNC UNF | USCTI 302A | H2~H6 | 60° | 4P~5P | Bright | TiN | Hardslick

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Bright	TiN	Hardslick		UNC	UNF		
K9082	L0082	L1082	2	56	—	H2	2
K9162	L0162	L1162	4	40	—	H2	2
K9202	L0202	L1202	5	40	—	H2	2
K9243	L0243	L1243	6	32	—	H3	2
K9283	L0283	L1283	8	32	—	H3	2
K9323	L0323	L1323	10	24	—	H3	2
K9343	L0343	L1343	10	—	32	H3	2
K9403	L0403	L1403	1/4	20	—	H3	2
K9405	L0405	L1405	1/4	20	—	H5	2
K9423	L0423	L1423	1/4	—	28	H3	3
K9443	L0443	L1443	5/16	18	—	H3	2
K9445	L0445	L1445	5/16	18	—	H5	3
K9463	L0463	L1463	5/16	—	24	H3	3
K9483	L0483	L1483	3/8	16	—	H3	3
K9485	L0485	L1485	3/8	16	—	H5	3
K9503	L0503	L1503	3/8	—	24	H3	3
K9523	L0523	L1523	7/16	14	—	H3	3
K9525	L0525	L1525	7/16	14	—	H5	3
K9543	L0543	L1543	7/16	—	20	H3	3
K9545	L0545	L1545	7/16	—	20	H5	3
K9563	L0563	L1563	1/2	13	—	H3	3
K9565	L0565	L1565	1/2	13	—	H5	3
K9583	L0583	L1583	1/2	—	20	H3	3
K9585	L0585	L1585	1/2	—	20	H5	3
K9603	L0603	L1603	9/16	12	—	H3	3
K9623	L0623	L1623	9/16	—	18	H3	3
K9625	L0625	L1625	9/16	—	18	H5	3
K9643	L0643	L1643	5/8	11	—	H3	3
K9645	L0645	L1645	5/8	11	—	H5	3
K9663	L0663	L1663	5/8	—	18	H3	3
K9665	L0665	L1665	5/8	—	18	H5	3
K9703	L0703	L1703	3/4	10	—	H3	3
K9705	L0705	L1705	3/4	10	—	H5	3
K9723	L0723	L1723	3/4	—	16	H3	3
K9725	L0725	L1725	3/4	—	16	H5	3
K9746	L0746	L1746	7/8	9	—	H6	3
K9764	L0764	L1764	7/8	—	14	H4	3
K9766	L0766	L1766	7/8	—	14	H6	3
K9786	L0786	L1786	1	8	—	H6	3
K9806	L0806	L1806	1	—	12	H6	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

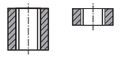
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL POINT TAPS

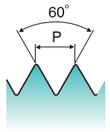
L7/L8/L9 SERIES

METRIC SPIRAL POINT TAPS PLUG STYLE for General Purpose

Hole type 3.0×D



USCTI



GS | HSS-V | M MF | USCTI 302A | D3~D6 | 60° | 4P~5P | Bright | TiCN | Hardslick

EDP No.			SIZE	Pitch	Limit	No. of Flute
Bright	TiCN	Hardslick				
L7203	L8203	L9203	M3	0.5	D3	2
L7224	L8224	L9224	M3.5	0.6	D4	2
L7244	L8244	L9244	M4	0.7	D4	2
L7284	L8284	L9284	M5	0.8	D4	2
L7315	L8315	L9315	M6	1.0	D5	3
L7345	L8345	L9345	M7	1.0	D5	3
L7365	L8365	L9365	M8	1.25	D5	3
L7375	L8375	L9375	M8	1.0	D5	3
L7426	L8426	L9426	M10	1.5	D6	3
L7435	L8435	L9435	M10	1.25	D5	3
L7506	L8506	L9506	M12	1.75	D6	3
L7525	L8525	L9525	M12	1.25	D5	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 198.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

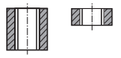
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL POINT TAPS

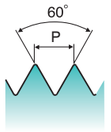
L3/L4/L5 SERIES

SPIRAL POINT TAPS PLUG STYLE for General Purpose

Hole type 3.0×D



DIN-ANSI Shank



GS | HSS-V | UNC UNF | H2~H6 | 60° | 4P~5P | Bright | TiN | Hardslick

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Bright	TiN	Hardslick		UNC	UNF		
L3082	L4082	L5082	2	56	—	H2	2
L3162	L4162	L5162	4	40	—	H2	2
L3202	L4202	L5202	5	40	—	H2	3
L3243	L4243	L5243	6	32	—	H3	3
L3283	L4283	L5283	8	32	—	H3	3
L3323	L4323	L5323	10	24	—	H3	3
L3343	L4343	L5343	10	—	32	H3	3
L3403	L4403	L5403	1/4	20	—	H3	3
L3405	L4405	L5405	1/4	20	—	H5	3
L3423	L4423	L5423	1/4	—	28	H3	3
L3443	L4443	L5443	5/16	18	—	H3	3
L3445	L4445	L5445	5/16	18	—	H5	3
L3463	L4463	L5463	5/16	—	24	H3	3
L3483	L4483	L5483	3/8	16	—	H3	3
L3485	L4485	L5485	3/8	16	—	H5	3
L3503	L4503	L5503	3/8	—	24	H3	3
L3523	L4523	L5523	7/16	14	—	H3	3
L3525	L4525	L5525	7/16	14	—	H5	3
L3543	L4543	L5543	7/16	—	20	H3	3
L3545	L4545	L5545	7/16	—	20	H5	3
L3563	L4563	L5563	1/2	13	—	H3	3
L3565	L4565	L5565	1/2	13	—	H5	3
L3583	L4583	L5583	1/2	—	20	H3	3
L3585	L4585	L5585	1/2	—	20	H5	3
L3605	L4605	L5605	9/16	12	—	H5	3
L3625	L4625	L5625	9/16	—	18	H5	3
L3643	L4643	L5643	5/8	11	—	H3	3
L3645	L4645	L5645	5/8	11	—	H5	3
L3703	L4703	L5703	3/4	10	—	H3	3
L3705	L4705	L5705	3/4	10	—	H5	3
L3725	L4725	L5725	3/4	—	16	H5	3
L3746	L4746	L5746	7/8	9	—	H6	3
L3766	L4766	L5766	7/8	—	14	H6	3
L3786	L4786	L5786	1	8	—	H6	3
L3806	L4806	L5806	1	—	12	H6	3

▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

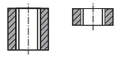
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

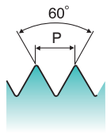
SPIRAL POINT TAPS

T7216/T6216/T8216 SERIES
T7C16/T6C16/T8C16 SERIES

STANDARD TAPS : SPIRAL POINT PLUG STYLE for General Purpose

Hole type 3.0×D





GS | HSS | UNC UNF | USCTI 302 | H1~H7 | 60° | 4P~5P | Bright | Steam Oxide | TiN

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Bright	Steam Oxide	TiN		UNC	UNF		
T7216021	T6216021	T8216021	0	—	80	H1	2
T7216022	T6216022	T8216022	0	—	80	H2	2
T7216023	T6216023	T8216023	0	—	80	H3	2
T7216041	T6216041	T8216041	1	64	—	H1	2
T7216042	T6216042	T8216042	1	64	—	H2	2
T7216061	T6216061	T8216061	1	—	72	H1	2
T7216062	T6216062	T8216062	1	—	72	H2	2
T7216081	T6216081	T8216081	2	56	—	H1	2
T7216082	T6216082	T8216082	2	56	—	H2	2
T7216083	T6216083	T8216083	2	56	—	H3	2
T7216085	T6216085	T8216085	2	56	—	H5	2
T7216101	T6216101	T8216101	2	—	64	H1	2
T7216102	T6216102	T8216102	2	—	64	H2	2
T7216121	T6216121	T8216121	3	48	—	H1	2
T7216122	T6216122	T8216122	3	48	—	H2	2
T7216123	T6216123	T8216123	3	48	—	H3	2
T7216125	T6216125	T8216125	3	48	—	H5	2
T7216141	T6216141	T8216141	3	—	56	H1	2
T7216142	T6216142	T8216142	3	—	56	H2	2
T7216161	T6216161	T8216161	4	40	—	H1	2
T7216162	T6216162	T8216162	4	40	—	H2	2
T7216163	T6216163	T8216163	4	40	—	H3	2
T7216165	T6216165	T8216165	4	40	—	H5	2
T7216167	T6216167	T8216167	4	40	—	H7	2
T7216181	T6216181	T8216181	4	—	48	H1	2
T7216182	T6216182	T8216182	4	—	48	H2	2
T7216201	T6216201	T8216201	5	40	—	H1	2
T7216202	T6216202	T8216202	5	40	—	H2	2
T7216205	T6216205	T8216205	5	40	—	H5	2
T7216222	T6216222	T8216222	5	—	44	H2	2
T7216241	T6216241	T8216241	6	32	—	H1	2
T7216242	T6216242	T8216242	6	32	—	H2	2

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

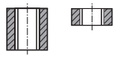
HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

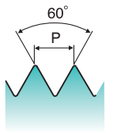
SPIRAL POINT TAPS

T7216/T6216/T8216 SERIES
T7C16/T6C16/T8C16 SERIES

STANDARD TAPS : SPIRAL POINT PLUG STYLE for General Purpose

Hole type 3.0×D





GS | HSS | UNC UNF | USCTI 302 | H1~H7 | 60° | 4P~5P | Bright | Steam Oxide | TiN

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Bright	Steam Oxide	TiN		UNC	UNF		
T7216243	T6216243	T8216243	6	32	—	H3	2
T7216244	T6216244	T8216244	6	32	—	H4	2
T7216245	T6216245	T8216245	6	32	—	H5	2
T7216247	T6216247	T8216247	6	32	—	H7	2
T7C16243	T6C16243	T8C16243	6	32	—	H3	3
T7216261	T6216261	T8216261	6	—	40	H1	2
T7216262	T6216262	T8216262	6	—	40	H2	2
T7216265	T6216265	T8216265	6	—	40	H5	2
T7216281	T6216281	T8216281	8	32	—	H1	2
T7216282	T6216282	T8216282	8	32	—	H2	2
T7216283	T6216283	T8216283	8	32	—	H3	2
T7216284	T6216284	T8216284	8	32	—	H4	2
T7216285	T6216285	T8216285	8	32	—	H5	2
T7216287	T6216287	T8216287	8	32	—	H7	2
T7C16283	T6C16283	T8C16283	8	32	—	H3	3
T7216301	T6216301	T8216301	8	—	36	H1	2
T7216302	T6216302	T8216302	8	—	36	H2	2
T7216321	T6216321	T8216321	10	24	—	H1	2
T7216322	T6216322	T8216322	10	24	—	H2	2
T7216323	T6216323	T8216323	10	24	—	H3	2
T7216324	T6216324	T8216324	10	24	—	H4	2
T7216325	T6216325	T8216325	10	24	—	H5	2
T7216327	T6216327	T8216327	10	24	—	H7	2
T7C16323	T6C16323	T8C16323	10	24	—	H3	3
T7216341	T6216341	T8216341	10	—	32	H1	2
T7216342	T6216342	T8216342	10	—	32	H2	2
T7216343	T6216343	T8216343	10	—	32	H3	2
T7216344	T6216344	T8216344	10	—	32	H4	2
T7216345	T6216345	T8216345	10	—	32	H5	2
T7216347	T6216347	T8216347	10	—	32	H7	2
T7C16343	T6C16343	T8C16343	10	—	32	H3	3
T7216361	T6216361	T8216361	12	24	—	H1	2

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

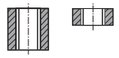
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

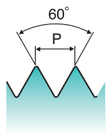
SPIRAL POINT TAPS

T7216/T6216/T8216 SERIES
T7C16/T6C16/T8C16 SERIES

STANDARD TAPS : SPIRAL POINT PLUG STYLE for General Purpose

Hole type 3.0×D





GS | HSS | UNC UNF | USCTI 302 | H1~H7 | 60° | 4P~5P | Bright | Steam Oxide | TiN

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Bright	Steam Oxide	TiN		UNC	UNF		
T7216363	T6216363	T8216363	12	24	—	H3	2
T7216383	T6216383	T8216383	12	—	28	H3	2
T7216401	T6216401	T8216401	1/4	20	—	H1	2
T7216402	T6216402	T8216402	1/4	20	—	H2	2
T7216403	T6216403	T8216403	1/4	20	—	H3	2
T7216405	T6216405	T8216405	1/4	20	—	H5	2
T7C16403	T6C16403	T8C16403	1/4	20	—	H3	3
T7C16405	T6C16405	T8C16405	1/4	20	—	H5	3
T7216421	T6216421	T8216421	1/4	—	28	H1	2
T7216422	T6216422	T8216422	1/4	—	28	H2	2
T7216423	T6216423	T8216423	1/4	—	28	H3	2
T7216424	T6216424	T8216424	1/4	—	28	H4	2
T7C16422	T6C16422	T8C16422	1/4	—	28	H2	3
T7C16424	T6C16424	T8C16424	1/4	—	28	H4	3
T7216441	T6216441	T8216441	5/16	18	—	H1	2
T7216442	T6216442	T8216442	5/16	18	—	H2	2
T7216443	T6216443	T8216443	5/16	18	—	H3	2
T7216445	T6216445	T8216445	5/16	18	—	H5	2
T7C16443	T6C16443	T8C16443	5/16	18	—	H3	3
T7C16445	T6C16445	T8C16445	5/16	18	—	H5	3
T7216461	T6216461	T8216461	5/16	—	24	H1	2
T7216462	T6216462	T8216462	5/16	—	24	H2	2
T7216463	T6216463	T8216463	5/16	—	24	H3	2
T7216464	T6216464	T8216464	5/16	—	24	H4	2
T7C16462	T6C16462	T8C16462	5/16	—	24	H2	3
T7C16464	T6C16464	T8C16464	5/16	—	24	H4	3
T7216481	T6216481	T8216481	3/8	16	—	H1	3
T7216482	T6216482	T8216482	3/8	16	—	H2	3
T7216483	T6216483	T8216483	3/8	16	—	H3	3
T7216485	T6216485	T8216485	3/8	16	—	H5	3
T7216501	T6216501	T8216501	3/8	—	24	H1	3
T7216502	T6216502	T8216502	3/8	—	24	H2	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

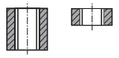
HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

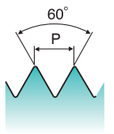
SPIRAL POINT TAPS

T7216/T6216/T8216 SERIES
T7C16/T6C16/T8C16 SERIES

STANDARD TAPS : SPIRAL POINT PLUG STYLE for General Purpose

Hole type 3.0×D





GS | HSS | UNC UNF | USCTI 302 | H1~H7 | 60° | 4P~5P | Bright | Steam Oxide | TiN

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Bright	Steam Oxide	TiN		UNC	UNF		
T7216503	T6216503	T8216503	3/8	—	24	H3	3
T7216504	T6216504	T8216504	3/8	—	24	H4	3
T7216522	T6216522	T8216522	7/16	14	—	H2	3
T7216523	T6216523	T8216523	7/16	14	—	H3	3
T7216525	T6216525	T8216525	7/16	14	—	H5	3
T7216542	T6216542	T8216542	7/16	—	20	H2	3
T7216543	T6216543	T8216543	7/16	—	20	H3	3
T7216545	T6216545	T8216545	7/16	—	20	H5	3
T7216561	T6216561	T8216561	1/2	13	—	H1	3
T7216562	T6216562	T8216562	1/2	13	—	H2	3
T7216563	T6216563	T8216563	1/2	13	—	H3	3
T7216565	T6216565	T8216565	1/2	13	—	H5	3
T7216581	T6216581	T8216581	1/2	—	20	H1	3
T7216582	T6216582	T8216582	1/2	—	20	H2	3
T7216583	T6216583	T8216583	1/2	—	20	H3	3
T7216585	T6216585	T8216585	1/2	—	20	H5	3
T7216603	T6216603	T8216603	9/16	12	—	H3	3
T7216605	T6216605	T8216605	9/16	12	—	H5	3
T7216623	T6216623	T8216623	9/16	—	18	H3	3
T7216625	T6216625	T8216625	9/16	—	18	H5	3
T7216643	T6216643	T8216643	5/8	11	—	H3	3
T7216645	T6216645	T8216645	5/8	11	—	H5	3
T7216663	T6216663	T8216663	5/8	—	18	H3	3
T7216665	T6216665	T8216665	5/8	—	18	H5	3
T7216703	T6216703	T8216703	3/4	10	—	H3	3
T7216705	T6216705	T8216705	3/4	10	—	H5	3
T7216723	T6216723	T8216723	3/4	—	16	H3	3
T7216725	T6216725	T8216725	3/4	—	16	H5	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

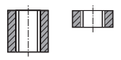
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL POINT TAPS

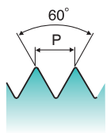
T7256/T6256 SERIES

STANDARD TAPS : SPIRAL POINT BOTTOMING STYLE for General Purpose

Hole type 3.0×D



USCTI



GS | HSS | UNC UNF | USCTI 302 | H1~H7 | 60° | 1.5P~2P | Bright | Steam Oxide

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Bright	Steam Oxide		UNC	UNF		
T7256021	**T6256021**	0	—	80	H1	2
T7256022	**T6256022**	0	—	80	H2	2
T7256042	**T6256042**	1	64	—	H2	2
T7256061	**T6256061**	1	—	72	H1	2
T7256062	**T6256062**	1	—	72	H2	2
T7256081	**T6256081**	2	56	—	H1	2
T7256082	**T6256082**	2	56	—	H2	2
T7256122	**T6256122**	3	48	—	H2	2
T7256142	**T6256142**	3	—	56	H2	2
T7256162	**T6256162**	4	40	—	H2	2
T7256182	**T6256182**	4	—	48	H2	2
T7256202	**T6256202**	5	40	—	H2	2
T7256222	**T6256222**	5	—	44	H2	2
T7256242	**T6256242**	6	32	—	H2	2
T7256243	**T6256243**	6	32	—	H3	2
T7256247	**T6256247**	6	32	—	H7	2
T7256262	**T6256262**	6	—	40	H2	2
T7256282	**T6256282**	8	32	—	H2	2
T7256283	**T6256283**	8	32	—	H3	2
T7256287	**T6256287**	8	32	—	H7	2
T7256302	**T6256302**	8	—	36	H2	2
T7256322	**T6256322**	10	24	—	H2	2
T7256323	**T6256323**	10	24	—	H3	2
T7256341	**T6256341**	10	—	32	H1	2
T7256342	**T6256342**	10	—	32	H2	2
T7256343	**T6256343**	10	—	32	H3	2
T7256363	**T6256363**	12	24	—	H3	2
T7256383	**T6256383**	12	—	28	H3	2
T7256403	**T6256403**	1/4	20	—	H3	2
T7256422	**T6256422**	1/4	—	28	H2	2
T7256423	**T6256423**	1/4	—	28	H3	2
T7256443	**T6256443**	5/16	18	—	H3	2

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

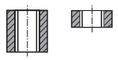
HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

SPIRAL POINT TAPS

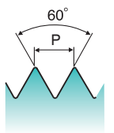
T7256/T6256 SERIES

STANDARD TAPS : SPIRAL POINT BOTTOMING STYLE for General Purpose

Hole type 3.0×D



USCTI



GS | HSS | UNC UNF | USCTI 302 | H1~H7 | 60° | 1.5P~2P | Bright | Steam Oxide

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Bright	Steam Oxide		UNC	UNF		
T7256463	**T6256463**	5/16	—	24	H3	2
T7256483	**T6256483**	3/8	16	—	H3	3
T7256503	**T6256503**	3/8	—	24	H3	3
T7256523	**T6256523**	7/16	14	—	H3	3
T7256543	**T6256543**	7/16	—	20	H3	3
T7256563	**T6256563**	1/2	13	—	H3	3
T7256583	**T6256583**	1/2	—	20	H3	3
T7256643	**T6256643**	5/8	11	—	H3	3
T7256663	**T6256663**	5/8	—	18	H3	3
T7256703	**T6256703**	3/4	10	—	H3	3
T7256723	**T6256723**	3/4	—	16	H3	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

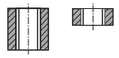
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL POINT TAPS

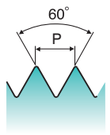
T7217/T6217/T8217 SERIES

METRIC STANDARD TAPS : SPIRAL POINT PLUG STYLE for General Purpose

Hole type 3.0×D



USCTI



GS | HSS | M MF | USCTI 302 | D3~D7 | 60° | 4P~5P | Bright | Steam Oxide | TiN

EDP No.			SIZE	Pitch	Thread Limit	No. of Flute
Bright	Steam Oxide	TiN				
T7217093	**T6217093**	**T8217093**	M1.6	0.35	D3	2
T7217133	**T6217133**	**T8217133**	M2	0.40	D3	2
T7217173	**T6217173**	**T8217173**	M2.5	0.45	D3	2
T7217203	**T6217203**	**T8217203**	M3	0.50	D3	2
T7217224	**T6217224**	**T8217224**	M3.5	0.60	D4	2
T7217244	**T6217244**	**T8217244**	M4	0.70	D4	2
T7217264	**T6217264**	**T8217264**	M4.5	0.75	D4	2
T7217284	**T6217284**	**T8217284**	M5	0.80	D4	2
T7217315	**T6217315**	**T8217315**	M6	1.00	D5	2
T7217345	**T6217345**	**T8217345**	M7	1.00	D5	2
T7217365	**T6217365**	**T8217365**	M8	1.25	D5	2
T7217375	**T6217375**	**T8217375**	M8	1.00	D5	3
T7217426	**T6217426**	**T8217426**	M10	1.50	D6	3
T7217435	**T6217435**	**T8217435**	M10	1.25	D5	3
T7217506	**T6217506**	**T8217506**	M12	1.75	D6	3
T7217525	**T6217525**	**T8217525**	M12	1.25	D5	3
T7217547	**T6217547**	**T8217547**	M14	2.00	D7	3
T7217556	**T6217556**	**T8217556**	M14	1.50	D6	3
T7217607	**T6217607**	**T8217607**	M16	2.00	D7	3
T7217616	**T6217616**	**T8217616**	M16	1.50	D6	3
T7217657	**T6217657**	**T8217657**	M18	2.50	D7	3
T7217707	**T6217707**	**T8217707**	M20	2.50	D7	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

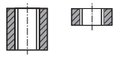
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL POINT TAPS

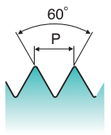
T7226/T6226/T8226 SERIES

STANDARD TAPS : SPIRAL POINT PLUG STYLE Oversize Tap

Hole type 3.0×D



USCTI



GS | HSS | UNC UNF | USCTI 302 | 60° | 4P~5P | Bright | Steam Oxide | TiN | +.005" oversize

EDP No.			SIZE	Thread Per Inch		No. of Flute
Bright	Steam Oxide	TiN		UNC	UNF	
T7226240	**T6226240**	**T8226240**	6	32	—	2
T7226280	**T6226280**	**T8226280**	8	32	—	2
T7226320	**T6226320**	**T8226320**	10	24	—	2
T7226340	**T6226340**	**T8226340**	10	—	32	2
T7226400	**T6226400**	**T8226400**	1/4	20	—	2
T7226420	**T6226420**	**T8226420**	1/4	—	28	2
T7226440	**T6226440**	**T8226440**	5/16	18	—	2
T7226460	**T6226460**	**T8226460**	5/16	—	24	2
T7226480	**T6226480**	**T8226480**	3/8	16	—	3
T7226500	**T6226500**	**T8226500**	3/8	—	24	3
T7226520	**T6226520**	**T8226520**	7/16	14	—	3
T7226540	**T6226540**	**T8226540**	7/16	—	20	3
T7226560	**T6226560**	**T8226560**	1/2	13	—	3
T7226580	**T6226580**	**T8226580**	1/2	—	20	3
T7226640	**T6226640**	**T8226640**	5/8	11	—	3
T7226700	**T6226700**	**T8226700**	3/4	10	—	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

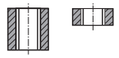
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL POINT TAPS

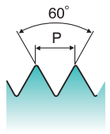
T7B17/T6B17/T8B17 SERIES

STANDARD TAPS : SPIRAL POINT PLUG STYLE
Oversize Tap

Hole type 3.0×D



USCTI



GS | HSS | M MF | USCTI 302 | 60° | 4P~5P | Bright | Steam Oxide | TiN | +.127mm oversize

EDP No.			SIZE	Pitch	No. of Flute
Bright	Steam Oxide	TiN			
T7B17240	**T6B17240**	**T8B17240**	M4	0.7	2
T7B17280	**T6B17280**	**T8B17280**	M5	0.8	2
T7B17310	**T6B17310**	**T8B17310**	M6	1	2
T7B17360	**T6B17360**	**T8B17360**	M8	1.25	2
T7B17370	**T6B17370**	**T8B17370**	M8	1	2
T7B17420	**T6B17420**	**T8B17420**	M10	1.5	3
T7B17430	**T6B17430**	**T8B17430**	M10	1.25	3
T7B17500	**T6B17500**	**T8B17500**	M12	1.75	3
T7B17600	**T6B17600**	**T8B17600**	M16	2	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

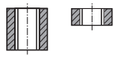
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL POINT TAPS

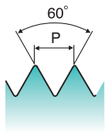
T7236/T6236/T8236 SERIES
T7G36/T6G36/T8G36 SERIES

SPIRAL POINTED TAP, 6″ EXTENSION

Hole type 3.0×D



USCTI Long Shank



GS | HSS | UNC UNF | USCTI Long Shank | H3 | 60° | 4P~5P | Bright | Steam Oxide | TiN

EDP No.			SIZE	Thread Per Inch		Thread Limit	Overall Length	No. of Flutes
Bright	Steam Oxide	TiN		UNC	UNF			
T7236243	**T6236243**	**T8236243**	6	32	—	H3	6	2
T7236283	**T6236283**	**T8236283**	8	32	—	H3	6	2
T7236323	**T6236323**	**T8236323**	10	24	—	H3	6	2
T7236343	**T6236343**	**T8236343**	10	—	32	H3	6	2
T7236403	**T6236403**	**T8236403**	1/4	20	—	H3	6	2
T7236423	**T6236423**	**T8236423**	1/4	—	28	H3	6	2
T7236443	**T6236443**	**T8236443**	5/16	18	—	H3	6	2
T7G36443	**T6G36443**	**T8G36443**	5/16	18	—	H3	6	3
T7236463	**T6236463**	**T8236463**	5/16	—	24	H3	6	2
T7G36463	**T6G36463**	**T8G36463**	5/16	—	24	H3	6	3
T7236483	**T6236483**	**T8236483**	3/8	16	—	H3	6	3
T7236503	**T6236503**	**T8236503**	3/8	—	24	H3	6	3
T7236523	**T6236523**	**T8236523**	7/16	14	—	H3	6	3
T7236543	**T6236543**	**T8236543**	7/16	—	20	H3	6	3
T7236563	**T6236563**	**T8236563**	1/2	13	—	H3	6	3
T7236583	**T6236583**	**T8236583**	1/2	—	20	H3	6	3
T7236643	**T6236643**	**T8236643**	5/8	11	—	H3	6	3

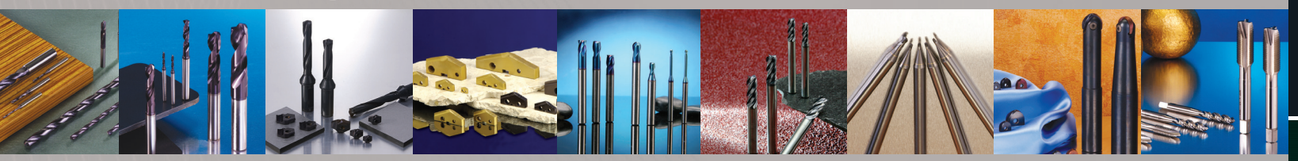
▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○		○	○		

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

Global Cutting Tool Leader **YG-1**



CARBIDE & HSS

Being the best through innovation

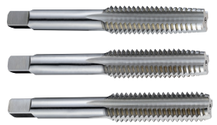
STRAIGHT FLUTE TAPS

- Tapping Through & Blind Holes / Carbide, Super HSS & HSS

SELECTION GUIDE

STRAIGHT FLUTE TAPS
Tapping Through & Blind Holes / Carbide, Super HSS & HSS

INCH

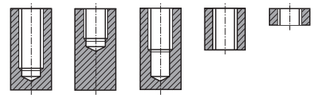
EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
T0C01		Carbide	UNC/UNF	**GG**	USCTI 302A	2B	1.5 ~ 2P	2.0D	Bright	147
TR		Super HSS	UNC/UNF	**GG**	USCTI 302A	H3~H5	2 ~ 3P		TiAlN	148
			M	**GG**		D4~D6	2 ~ 3P			
TR-A, TR-R		Super HSS	UNC/UNF	**GG**	USCTI 302A	H3~H5	2 ~ 3P		TiAlN	150
			M	**GG**		D4~D6	2 ~ 3P			
T7316/T6316/ T8316/T7A16/ T7B16		HSS	UNC/ UNF/ UNS	**GS**	USCTI 302	H1~H7	9P/5P/2P		Bright Steam Oxide TiN	152
T7315/T6315/ T8315		HSS	M/MF	**GS**	USCTI 302	D3~D9	9P/5P/2P		Bright Steam Oxide TiN	158
T7326		HSS	UNC/UNF	**GS**	USCTI 302	+.005" oversize	5P/2P		Bright	159
T7B15		HSS	M/MF	**GS**	USCTI 302	+.127mm oversize	5P/2P		Bright	160
T7336		HSS	UNC/UNF	**GS**	USCTI 302 (Left Hand)	H2~H4	5P/2P		Bright	161
T7A15		HSS	UNC/UNF	**GS**	USCTI 302 (Left Hand)	D4~D8	5P/2P		Bright	162
T7616/T6616/ T8616		HSS	UNC/UNF	**GS**	USCTI Long Shank	H3	4 ~ 5P		Bright Steam Oxide TiN	163

STRAIGHT FLUTE TAPS

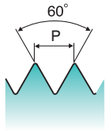
T0C01 SERIES

STRAIGHT FLUTE TAP BOTTOMING STYLE for ALUMINUM ALLOY & CAST IRON

Hole type 2.0×D



USCTI



GG | Carbide | UNC UNF | USCTI 302A | 2B | 60° | 1.5P~2P Bottoming | Bright

EDP No. Bright	SIZE	Thread Per Inch UNC	Thread Per Inch UNF	Thread Limit	No. of Flute
T0C01322	10	24	—	2B	4
T0C01342	10	—	32	2B	4
T0C01362	12	24	—	2B	4
T0C01402	1/4	20	—	2B	4
T0C01422	1/4	—	28	2B	4
T0C01442	5/16	18	—	2B	4
T0C01462	5/16	—	24	2B	4
T0C01482	3/8	16	—	2B	4
T0C01502	3/8	—	24	2B	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys

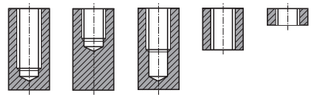
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎	◎				◎				

STRAIGHT FLUTE TAPS

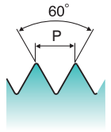
TR SERIES

STRAIGHT FLUTE TAP MODIFIED BOTTOMING STYLE for CAST IRON

Hole type 2.0×D



USCTI



GG | Super HSS | UNC UNF | USCTI 302A | H3~H5 | 60° | 2P~3P Bottoming | TiAlN

EDP No. TiAlN	SIZE	Thread Per Inch UNC	Thread Per Inch UNF	Limit	No. of Flute
TR323	10	24	—	H3	4
TR325	10	24	—	H5	4
TR343	10	—	32	H3	4
TR403	1/4	20	—	H3	4
TR405	1/4	20	—	H5	4
TR423	1/4	—	28	H3	4
TR443	5/16	18	—	H3	4
TR445	5/16	18	—	H5	4
TR463	5/16	—	24	H3	4
TR483	3/8	16	—	H3	4
TR485	3/8	16	—	H5	4
TR503	3/8	—	24	H3	4
TR523	7/16	14	—	H3	4
TR525	7/16	14	—	H5	4
TR543	7/16	—	20	H3	4
TR545	7/16	—	20	H5	4
TR563	1/2	13	—	H3	4
TR565	1/2	13	—	H5	4
TR583	1/2	—	20	H3	4
TR585	1/2	—	20	H5	4
TR603	9/16	12	—	H3	4
TR605	9/16	12	—	H5	4
TR623	9/16	—	18	H3	4
TR625	9/16	—	18	H5	4
TR643	5/8	11	—	H3	4
TR645	5/8	11	—	H5	4
TR663	5/8	—	18	H3	4
TR665	5/8	—	18	H5	4
TR703	3/4	10	—	H3	4
TR705	3/4	10	—	H5	4
TR723	3/4	—	16	H3	4
TR725	3/4	—	16	H5	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys

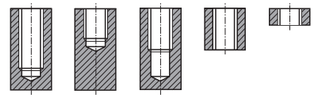
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎									

STRAIGHT FLUTE TAPS

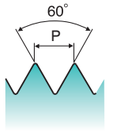
TR SERIES

METRIC STRAIGHT FLUTE TAP MODIFIED BOTTOMING STYLE for CAST IRON

Hole type 2.0×D



USCTI



*NEW SIZE

GG | Super HSS | M | USCTI 302A | D4~D6 | 60° | 2P~3P Bottoming | TiAlN

EDP No. TiAlN	SIZE	Pitch	Limit	No. of Flute
TR284	M5	0.8	D4	4
TR315	M6	1	D5	4
TR365	M8	1.25	D5	4
TR426	M10	1.5	D6	4
TR526	M12	1.25	D6	4
TR506	M12	1.75	D6	4
TR566	M14	1.25	D6	4
TR556	M14	1.5	D6	4
* **TR616**	M16	1.5	D6	4
TR676	M18	1.5	D6	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys

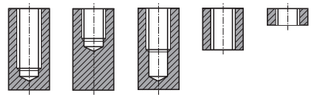
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎									

STRAIGHT FLUTE TAPS

TR-A, TR-R SERIES

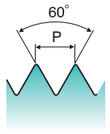
STRAIGHT FLUTE TAP MODIFIED BOTTOMING STYLE for CAST IRON

Hole type 2.0×D



Through Coolant Hole

Radial Coolant Hole



GG | Super HSS | UNC UNF | USCTI 302A | H3~H5 | 60° | 2P~3P Bottoming | TiAlN

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Through Coolant Hole	Radial Coolant Hole		UNC	UNF		
TR323A	TR323R	10	24	—	H3	4
TR325A	TR325R	10	24	—	H5	4
TR343A	TR343R	10	—	32	H3	4
TR403A	TR403R	1/4	20	—	H3	4
TR405A	TR405R	1/4	20	—	H5	4
TR423A	TR423R	1/4	—	28	H3	4
TR443A	TR443R	5/16	18	—	H3	4
TR445A	TR445R	5/16	18	—	H5	4
TR463A	TR463R	5/16	—	24	H3	4
TR483A	TR483R	3/8	16	—	H3	4
TR485A	TR485R	3/8	16	—	H5	4
TR503A	TR503R	3/8	—	24	H3	4
TR523A	TR523R	7/16	14	—	H3	4
TR525A	TR525R	7/16	14	—	H5	4
TR543A	TR543R	7/16	—	20	H3	4
TR545A	TR545R	7/16	—	20	H5	4
TR563A	TR563R	1/2	13	—	H3	4
TR565A	TR565R	1/2	13	—	H5	4
TR583A	TR583R	1/2	—	20	H3	4
TR585A	TR585R	1/2	—	20	H5	4
TR603A	TR603R	9/16	12	—	H3	4
TR605A	TR605R	9/16	12	—	H5	4
TR623A	TR623R	9/16	—	18	H3	4
TR625A	TR625R	9/16	—	18	H5	4
TR643A	TR643R	5/8	11	—	H3	4
TR645A	TR645R	5/8	11	—	H5	4
TR663A	TR663R	5/8	—	18	H3	4
TR665A	TR665R	5/8	—	18	H5	4
TR703A	TR703R	3/4	10	—	H3	4
TR705A	TR705R	3/4	10	—	H5	4
TR723A	TR723R	3/4	—	16	H3	4
TR725A	TR725R	3/4	—	16	H5	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys

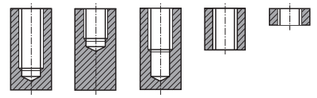
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎									

STRAIGHT FLUTE TAPS

TR-A, TR-R SERIES

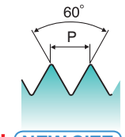
METRIC STRAIGHT FLUTE TAP MODIFIED BOTTOMING STYLE for CAST IRON

Hole type 2.0×D



Through Coolant Hole

Radial Coolant Hole



* NEW SIZE

GG | Super HSS | M | USCTI 302A | D4~D6 | 60° | 2P~3P Bottoming | TiAlN

EDP No.		SIZE	Pitch	Limit	No. of Flute
Through Coolant Hole	Radial Coolant Hole				
TR284A	TR284R	M5	0.8	D4	4
TR315A	TR315R	M6	1	D5	4
TR365A	TR365R	M8	1.25	D5	4
TR426A	TR426R	M10	1.5	D6	4
TR526A	TR526R	M12	1.25	D6	4
TR506A	TR506R	M12	1.75	D6	4
TR566A	TR566R	M14	1.25	D6	4
TR556A	TR556R	M14	1.5	D6	4
* TR616A	* TR616R	M16	1.5	D6	4
TR676A	TR676R	M18	1.5	D6	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys

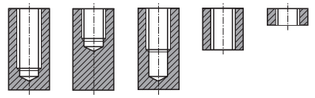
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎	◎									

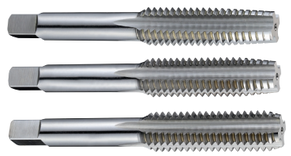
STRAIGHT FLUTE TAPS

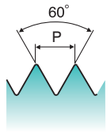
T7316/T6316/T8316 SERIES
T7A16/T7B16 SERIES

HAND TAP
TAPER, PLUG & BOTTOMING STYLE

Hole type 2.0×D







GS | HSS | UNC UNF UNS | USCTI 302 | H1~H7 | 60° | 9P/5P/2P | Bright | Steam Oxide | TiN

EDP No.								SIZE	Thread Per Inch			Limit	No. of Flute
Bright			Steam Oxide			TiN							
Taper	Plug	Bottoming	Taper	Plug	Bottoming	Plug	Bottoming		UNC	UNF	UNS		
T7316026	T7316027	T7316028	T6316026	T6316027	T6316028	T8316027	T8316028	0	–	80	–	H1	2
–	T7316027H2	T7316028H2	–	–	–	–	–	0	–	80	–	H2	2
T7316046	T7316047	T7316048	T6316046	T6316047	T6316048	T8316047	T8316048	1	64	–	–	H1	2
–	T7316047H2	T7316048H2	–	–	–	–	–	1	64	–	–	H2	2
T7316066	T7316067	T7316068	T6316066	T6316067	T6316068	T8316067	T8316068	1	–	72	–	H1	2
–	T7316067H2	T7316068H2	–	–	–	–	–	1	–	72	–	H2	2
–	T7A16087H1	T7A16088H1	–	–	–	–	–	2	56	–	–	H1	2
T7316086H1	T7316087H1	T7316088H1	–	–	–	–	–	2	56	–	–	H1	3
–	T7A16087	T7A16088	–	–	–	–	–	2	56	–	–	H2	2
T7316086	T7316087	T7316088	T6316086	T6316087	T6316088	T8316087	T8316088	2	56	–	–	H2	3
T7316106	T7316107	T7316108	–	–	–	–	–	2	–	64	–	H2	3
–	T7316127H1	–	–	–	–	–	–	3	48	–	–	H1	3
–	T7A16127	T7A16128	–	–	–	–	–	3	48	–	–	H2	2
T7316126	T7316127	T7316128	T6316126	T6316127	T6316128	–	–	3	48	–	–	H2	3
T7316146	T7316147	T7316148	T6316146	T6316147	T6316148	–	–	3	–	56	–	H2	3
T7316156	T7316157	T7316158	T6316156	T6316157	T6316158	–	–	4	–	–	36	H2	3
–	T7A16167H1	T7A16168H1	–	–	–	–	–	4	40	–	–	H1	2
T7316166H1	T7316167H1	T7316168H1	T6316166H1	T6316167H1	T6316168H1	–	–	4	40	–	–	H1	3
–	T7A16167	T7A16168	–	–	–	–	–	4	40	–	–	H2	2
T7316166	T7316167	T7316168	T6316166	T6316167	T6316168	T8316167	T8316168	4	40	–	–	H2	3
–	T7316187H1	–	–	–	–	–	–	4	–	48	–	H1	3
T7316186	T7316187	T7316188	–	–	–	–	–	4	–	48	–	H2	3
–	T7316207H1	T7316208H1	–	–	–	–	–	5	40	–	–	H1	3
–	T7A16207	T7A16208	–	–	–	–	–	5	40	–	–	H2	2
T7316206	T7316207	T7316208	T6316206	T6316207	T6316208	T8316207	T8316208	5	40	–	–	H2	3
T7316226	T7316227	T7316228	T6316226	T6316227	T6316228	–	–	5	–	44	–	H2	3
–	T7A16247H1	T7A16248H1	–	–	–	–	–	6	32	–	–	H1	2
T7316246H1	T7316247H1	T7316248H1	T6316246H1	T6316247H1	T6316248H1	–	–	6	32	–	–	H1	3
–	T7A16247H2	T7A16248H2	–	–	–	–	–	6	32	–	–	H2	2

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

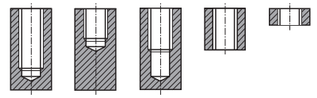
HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

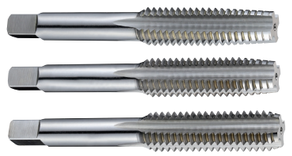
STRAIGHT FLUTE TAPS

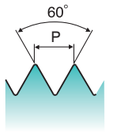
T7316/T6316/T8316 SERIES
T7A16/T7B16 SERIES

HAND TAP
TAPER, PLUG & BOTTOMING STYLE

Hole type 2.0×D







GS | HSS | UNC UNF UNS | USCTI 302 | H1~H7 | 60° | 9P/5P/2P | Bright | Steam Oxide | TiN

EDP No.								SIZE	Thread Per Inch			Limit	No. of Flute
Bright			Steam Oxide			TiN							
Taper	Plug	Bottoming	Taper	Plug	Bottoming	Plug	Bottoming		UNC	UNF	UNS		
T7316246H2	T7316247H2	T7316248H2	T6316246H2	T6316247H2	T6316248H2	–	–	6	32	–	–	H2	3
–	T7A16247	T7A16248	–	–	–	–	–	6	32	–	–	H3	2
T7316246	T7316247	T7316248	T6316246	T6316247	T6316248	T8316247	T8316248	6	32	–	–	H3	3
–	T7B16247H7	T7B16248H7	–	–	–	–	–	6	32	–	–	H7	3
–	T7B16267H1	–	–	–	–	–	–	6	–	40	–	H1	3
–	T7A16267	T7A16268	–	–	–	–	–	6	–	40	–	H2	2
T7316266	T7316267	T7316268	T6316266	T6316267	T6316268	T8316267	T8316268	6	–	40	–	H2	3
–	T7A16287H1	–	–	–	–	–	–	8	32	–	–	H1	2
T7316286H1	T7316287H1	T7316288H1	T6316286H1	T6316287H1	T6316288H1	–	–	8	32	–	–	H1	4
–	T7A16287H2	T7A16288H2	–	–	–	–	–	8	32	–	–	H2	2
–	T7B16287H2	T7B16288H2	–	–	–	–	–	8	32	–	–	H2	3
T7316286H2	T7316287H2	T7316288H2	T6316286H2	T6316287H2	T6316288H2	–	–	8	32	–	–	H2	4
–	T7A16287	T7A16288	–	–	–	–	–	8	32	–	–	H3	2
–	T7B16287	T7B16288	–	–	–	–	–	8	32	–	–	H3	3
T7316286	T7316287	T7316288	T6316286	T6316287	T6316288	T8316287	T8316288	8	32	–	–	H3	4
–	T7B16287H7	T7B16288H7	–	–	–	–	–	8	32	–	–	H7	3
–	T7316287H7	T7316288H7	–	–	–	–	–	8	32	–	–	H7	4
T7316306	T7316307	T7316308	T6316306	T6316307	T6316308	T8316307	T8316308	8	–	36	–	H2	4
T7316326H1	T7316327H1	T7316328H1	T6316326H1	T6316327H1	T6316328H1	–	–	10	24	–	–	H1	4
–	T7A16327H2	T7A16328H2	–	–	–	–	–	10	24	–	–	H2	2
–	T7B16327H2	–	–	–	–	–	–	10	24	–	–	H2	3
T7316326H2	T7316327H2	T7316328H2	T6316326H2	T6316327H2	T6316328H2	–	–	10	24	–	–	H2	4
–	T7A16327	T7A16328	–	–	–	–	–	10	24	–	–	H3	2
–	T7B16327	T7B16328	–	–	–	–	–	10	24	–	–	H3	3
T7316326	T7316327	T7316328	T6316326	T6316327	T6316328	T8316327	T8316328	10	24	–	–	H3	4
–	T7B16327H7	T7B16328H7	–	–	–	–	–	10	24	–	–	H7	3
–	T7316327H7	T7316328H7	–	–	–	–	–	10	24	–	–	H7	4
–	T7A16347H1	T7A16348H1	–	–	–	–	–	10	–	32	–	H1	2
T7316346H1	T7316347H1	T7316348H1	T6316346H1	T6316347H1	T6316348H1	–	–	10	–	32	–	H1	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

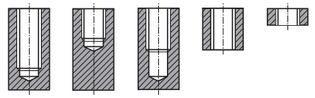
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

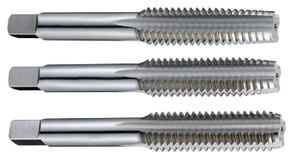
STRAIGHT FLUTE TAPS

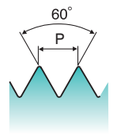
T7316/T6316/T8316 SERIES
T7A16/T7B16 SERIES

HAND TAP
TAPER, PLUG & BOTTOMING STYLE

Hole type 2.0×D







GS | HSS | UNC UNF UNS | USCTI 302 | H1~H7 | 60° | 9P/5P/2P | Bright | Steam Oxide | TiN

EDP No.								SIZE	Thread Per Inch			Limit	No. of Flute
Bright			Steam Oxide			TiN							
Taper	Plug	Bottoming	Taper	Plug	Bottoming	Plug	Bottoming		UNC	UNF	UNS		
–	T7A16347H2	T7A16348H2	–	–	–	–	–	10	–	32	–	H2	2
–	T7B16347H2	T7B16348H2	–	–	–	–	–	10	–	32	–	H2	3
T7316346H2	T7316347H2	T7316348H2	T6316346H2	T6316347H2	T6316348H2	–	–	10	–	32	–	H2	4
–	T7A16347	T7A16348	–	–	–	–	–	10	–	32	–	H3	2
–	T7B16347	T7B16348	–	–	–	–	–	10	–	32	–	H3	3
T7316346	T7316347	T7316348	T6316346	T6316347	T6316348	T8316347	T8316348	10	–	32	–	H3	4
–	T7B16347H7	T7B16348H7	–	–	–	–	–	10	–	32	–	H7	3
T7316366	T7316367	T7316368	T6316366	T6316367	T6316368	T8316367	T8316368	12	24	–	–	H3	4
–	T7316387H1	–	–	–	–	–	–	12	–	28	–	H1	4
T7316386	T7316387	T7316388	T6316386	T6316387	T6316388	T8316387	T8316388	12	–	28	–	H3	4
–	T7B16407H1	–	–	–	–	–	–	1/4	20	–	–	H1	3
T7316406H1	T7316407H1	T7316408H1	–	–	–	–	–	1/4	20	–	–	H1	4
–	T7B16407H2	T7B16408H2	–	–	–	–	–	1/4	20	–	–	H2	3
T7316406H2	T7316407H2	T7316408H2	–	–	–	–	–	1/4	20	–	–	H2	4
–	T7A16407	T7A16408	–	–	–	–	–	1/4	20	–	–	H3	2
–	T7B16407	T7B16408	–	–	–	–	–	1/4	20	–	–	H3	3
T7316406	T7316407	T7316408	T6316406	T6316407	T6316408	T8316407	T8316408	1/4	20	–	–	H3	4
–	T7B16407H5	T7B16408H5	–	–	–	–	–	1/4	20	–	–	H5	3
–	T7316407H5	T7316408H5	–	–	–	–	–	1/4	20	–	–	H5	4
–	T7316427H1	T7316428H1	–	–	–	–	–	1/4	–	28	–	H1	4
–	T7316427H2	T7316428H2	–	–	–	–	–	1/4	–	28	–	H2	4
–	T7A16427	T7A16428	–	–	–	–	–	1/4	–	28	–	H3	2
–	T7B16427	T7B16428	–	–	–	–	–	1/4	–	28	–	H3	3
T7316426	T7316427	T7316428	T6316426	T6316427	T6316428	T8316427	T8316428	1/4	–	28	–	H3	4
–	T7316427H4	T7316428H4	–	–	–	–	–	1/4	–	28	–	H4	4
–	T7316447H1	T7316448H1	–	–	–	–	–	5/16	18	–	–	H1	4
T7316446H2	T7316447H2	T7316448H2	T6316446H2	T6316447H2	T6316448H2	–	–	5/16	18	–	–	H2	4
–	T7A16447	T7A16448	–	–	–	–	–	5/16	18	–	–	H3	2

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

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◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

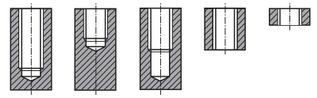
HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

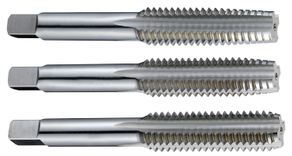
STRAIGHT FLUTE TAPS

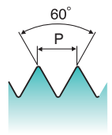
T7316/T6316/T8316 SERIES
T7A16/T7B16 SERIES

HAND TAP
TAPER, PLUG & BOTTOMING STYLE

Hole type 2.0×D







GS | HSS | UNC UNF UNS | USCTI 302 | H1~H7 | 60° | 9P/5P/2P | Bright | Steam Oxide | TiN

EDP No.								SIZE	Thread Per Inch			Limit	No. of Flute
Bright			Steam Oxide			TiN							
Taper	Plug	Bottoming	Taper	Plug	Bottoming	Plug	Bottoming		UNC	UNF	UNS		
–	T7B16447	T7B16448	–	–	–	–	–	5/16	18	–	–	H3	3
T7316446	T7316447	T7316448	T6316446	T6316447	T6316448	T8316447	T8316448	5/16	18	–	–	H3	4
–	T7B16447H5	T7B16448H5	–	–	–	–	–	5/16	18	–	–	H5	3
–	T7316447H5	T7316448H5	–	–	–	–	–	5/16	18	–	–	H5	4
–	T7316467H1	T7316468H1	–	–	–	–	–	5/16	–	24	–	H1	4
–	T7316467H2	T7316468H2	–	–	–	–	–	5/16	–	24	–	H2	4
–	T7B16467	T7B16468	–	–	–	–	–	5/16	–	24	–	H3	3
T7316466	T7316467	T7316468	T6316466	T6316467	T6316468	T8316467	T8316468	5/16	–	24	–	H3	4
–	T7316467H4	T7316468H4	–	–	–	–	–	5/16	–	24	–	H4	4
–	T7B16487H1	T7B16488H1	–	–	–	–	–	3/8	16	–	–	H1	3
–	T7316487H1	T7316488H1	–	–	–	–	–	3/8	16	–	–	H1	4
–	T7316487H2	T7316488H2	–	–	–	–	–	3/8	16	–	–	H2	4
–	T7B16487	T7B16488	–	–	–	–	–	3/8	16	–	–	H3	3
T7316486	T7316487	T7316488	T6316486	T6316487	T6316488	T8316487	T8316488	3/8	16	–	–	H3	4
–	T7B16487H5	T7B16488H5	–	–	–	–	–	3/8	16	–	–	H5	3
–	T7316487H5	T7316488H5	–	–	–	–	–	3/8	16	–	–	H5	4
–	T7316507H1	T7316508H1	–	–	–	–	–	3/8	–	24	–	H1	4
–	T7316507H2	T7316508H2	–	–	–	–	–	3/8	–	24	–	H2	4
–	T7B16507	T7B16508	–	–	–	–	–	3/8	–	24	–	H3	3
T7316506	T7316507	T7316508	T6316506	T6316507	T6316508	T8316507	T8316508	3/8	–	24	–	H3	4
–	T7316507H4	T7316508H4	–	–	–	–	–	3/8	–	24	–	H4	4
–	T7316527H2	–	–	–	–	–	–	7/16	14	–	–	H2	4
–	T7B16527	T7B16528	–	–	–	–	–	7/16	14	–	–	H3	3
T7316526	T7316527	T7316528	T6316526	T6316527	T6316528	T8316527	T8316528	7/16	14	–	–	H3	4
–	T7316527H5	T7316528H5	–	–	–	–	–	7/16	14	–	–	H5	4
–	T7316547H2	–	–	–	–	–	–	7/16	–	20	–	H2	4
–	T7B16547	T7B16548	–	–	–	–	–	7/16	–	20	–	H3	3
T7316546	T7316547	T7316548	T6316546	T6316547	T6316548	T8316547	T8316548	7/16	–	20	–	H3	4
–	T7316547H5	T7316548H5	–	–	–	–	–	7/16	–	20	–	H5	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

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◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

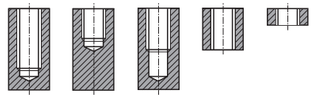
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

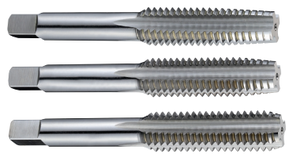
STRAIGHT FLUTE TAPS

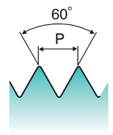
T7316/T6316/T8316 SERIES
T7A16/T7B16 SERIES

HAND TAP
TAPER, PLUG & BOTTOMING STYLE

Hole type 2.0×D







GS | HSS | UNC UNF UNS | USCTI 302 | H1~H7 | 60° | 9P/5P/2P | Bright | Steam Oxide | TiN

EDP No.								SIZE	Thread Per Inch			Limit	No. of Flute
Bright			Steam Oxide			TiN							
Taper	Plug	Bottoming	Taper	Plug	Bottoming	Plug	Bottoming		UNC	UNF	UNS		
–	T7316567H1	T7316568H1	–	–	–	–	–	1/2	13	–	–	H1	4
–	T7316567H2	T7316568H2	–	–	–	–	–	1/2	13	–	–	H2	4
–	T7B16567	T7B16568	–	–	–	–	–	1/2	13	–	–	H3	3
T7316566	T7316567	T7316568	T6316566	T6316567	T6316568	T8316567	T8316568	1/2	13	–	–	H3	4
–	T7316567H5	T7316568H5	–	–	–	–	–	1/2	13	–	–	H5	4
–	T7316587H1	T7316588H1	–	–	–	–	–	1/2	–	20	–	H1	4
–	T7B16587	T7B16588	–	–	–	–	–	1/2	–	20	–	H3	3
T7316586	T7316587	T7316588	T6316586	T6316587	T6316588	T8316587	T8316588	1/2	–	20	–	H3	4
–	T7316587H5	T7316588H5	–	–	–	–	–	1/2	–	20	–	H5	4
T7316606	T7316607	T7316608	T6316606	T6316607	T6316608	T8316607	T8316608	9/16	12	–	–	H3	4
–	T7316607H5	T7316608H5	–	–	–	–	–	9/16	12	–	–	H5	4
–	T7316627H2	–	–	–	–	–	–	9/16	–	18	–	H2	4
T7316626	T7316627	T7316628	T6316626	T6316627	T6316628	T8316627	T8316628	9/16	–	18	–	H3	4
–	T7316627H5	T7316628H5	–	–	–	–	–	9/16	–	18	–	H5	4
–	T7316647H1	–	–	–	–	–	–	5/8	11	–	–	H1	4
–	T7316647H2	T7316648H2	–	–	–	–	–	5/8	11	–	–	H2	4
T7316646	T7316647	T7316648	T6316646	T6316647	T6316648	T8316647	T8316648	5/8	11	–	–	H3	4
–	T7316647H5	T7316648H5	–	–	–	–	–	5/8	11	–	–	H5	4
–	T7316667H1	–	–	–	–	–	–	5/8	–	18	–	H1	4
–	T7316667H2	–	–	–	–	–	–	5/8	–	18	–	H2	4
T7316666	T7316667	T7316668	T6316666	T6316667	T6316668	T8316667	T8316668	5/8	–	18	–	H3	4
–	T7316667H5	T7316668H5	–	–	–	–	–	5/8	–	18	–	H5	4
T7316A06	T7316A07	T7316A08	T6316A06	T6316A07	T6316A08	–	–	11/16	–	–	11	H3	4
T7316A26	T7316A27	T7316A28	T6316A26	T6316A27	T6316A28	–	–	11/16	–	–	16	H3	4
–	T7316707H1	T7316708H1	–	–	–	–	–	3/4	10	–	–	H1	4
–	T7316707H2	–	–	–	–	–	–	3/4	10	–	–	H2	4
T7316706	T7316707	T7316708	T6316706	T6316707	T6316708	T8316707	T8316708	3/4	10	–	–	H3	4
–	T7316707H5	T7316708H5	–	–	–	–	–	3/4	10	–	–	H5	4
–	T7316727H1	–	–	–	–	–	–	3/4	–	16	–	H1	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

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◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

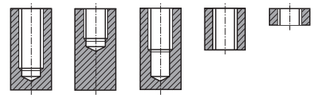
HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

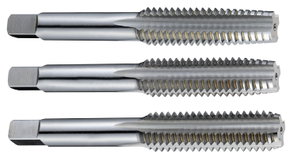
STRAIGHT FLUTE TAPS

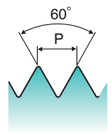
T7316/T6316/T8316 SERIES
T7A16/T7B16 SERIES

HAND TAP
TAPER, PLUG & BOTTOMING STYLE

Hole type 2.0×D







GS | HSS | UNC UNF UNS | USCTI 302 | H1~H7 | 60° | 9P/5P/2P | Bright | Steam Oxide | TiN

EDP No.								SIZE	Thread Per Inch			Limit	No. of Flute
Bright			Steam Oxide			TiN							
Taper	Plug	Bottoming	Taper	Plug	Bottoming	Plug	Bottoming		UNC	UNF	UNS		
–	T7316727H2	–	–	–	–	–	–	3/4	–	16	–	H2	4
T7316726	T7316727	T7316728	T6316726	T6316727	T6316728	T8316727	T8316728	3/4	–	16	–	H3	4
–	T7316727H5	T7316728H5	–	–	–	–	–	3/4	–	16	–	H5	4
T7316746	T7316747	T7316748	T6316746	T6316747	T6316748	T8316747	T8316748	7/8	9	–	–	H4	4
–	T7316747H6	–	–	–	–	–	–	7/8	9	–	–	H6	4
–	T7316767H2	–	–	–	–	–	–	7/8	–	14	–	H2	4
T7316766	T7316767	T7316768	T6316766	T6316767	T6316768	T8316767	T8316768	7/8	–	14	–	H4	4
–	T7316767H6	–	–	–	–	–	–	7/8	–	14	–	H6	4
–	T7316787H1	T7316788H1	–	–	–	–	–	1	8	–	–	H1	4
–	T7316787H2	–	–	–	–	–	–	1	8	–	–	H2	4
T7316786	T7316787	T7316788	T6316786	T6316787	T6316788	T8316787	T8316788	1	8	–	–	H4	4
–	T7316787H6	–	–	–	–	–	–	1	8	–	–	H6	4
T7316806	T7316807	T7316808	T6316806	T6316807	T6316808	T8316807	T8316808	1	–	12	–	H4	4
–	T7316817H2	–	–	–	–	–	–	1	–	–	14	H2	4
T7316816	T7316817	T7316818	–	–	–	T8316817	T8316818	1	–	–	14	H4	4
T7316826	T7316827	T7316828	–	–	–	T8316827	T8316828	1-1/8	7	–	–	H4	4
T7316846	T7316847	T7316848	–	–	–	T8316847	T8316848	1-1/8	–	12	–	H4	4
T7316866	T7316867	T7316868	–	–	–	T8316867	T8316868	1-1/4	7	–	–	H4	4
T7316886	T7316887	T7316888	–	–	–	T8316887	T8316888	1-1/4	–	12	–	H4	6
T7316906	T7316907	T7316908	–	–	–	T8316907	T8316908	1-3/8	6	–	–	H4	4
T7316926	T7316927	T7316928	–	–	–	T8316927	T8316928	1-3/8	–	12	–	H4	6
T7316946	T7316947	T7316948	–	–	–	T8316947	T8316948	1-1/2	6	–	–	H4	4
T7316966	T7316967	T7316968	–	–	–	T8316967	T8316968	1-1/2	–	12	–	H4	6

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

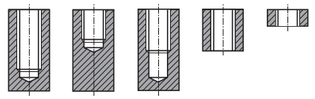
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

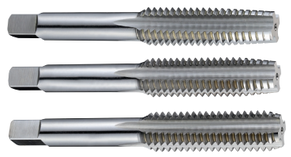
STRAIGHT FLUTE TAPS

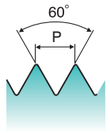
T7315/T6315/T8315 SERIES

METRIC HAND TAP
TAPER, PLUG & BOTTOMING STYLE

Hole type 2.0×D







GS | HSS | M MF | USCTI 302 | D3~D9 | 60° | 9P/5P/2P | Bright | Steam Oxide | TiN

EDP No.								SIZE	Pitch	Limit	No. of Flute
Bright			Steam Oxide			TiN					
Taper	Plug	Bottoming	Taper	Plug	Bottoming	Plug	Bottoming				
–	T7315097	–	–	–	–	–	–	M1.6	0.35	D3	3
–	T7315137	T7315138	–	T6315137	T6315138	T8315137	T8315138	M2	0.40	D3	3
–	T7315177	T7315178	–	T6315177	T6315178	T8315177	T8315178	M2.5	0.45	D3	3
T7315206	T7315207	T7315208	T6315206	T6315207	T6315208	T8315207	T8315208	M3	0.50	D3	3
–	T7315227	T7315228	–	–	–	–	–	M3.5	0.60	D4	3
T7315246	T7315247	T7315248	T6315246	T6315247	T6315248	T8315247	T8315248	M4	0.70	D4	4
–	T7315267	T7315268	–	T6315267	T6315268	T8315267	T8315268	M4.5	0.75	D4	4
T7315286	T7315287	T7315288	T6315286	T6315287	T6315288	T8315287	T8315288	M5	0.80	D4	4
T7315316	T7315317	T7315318	T6315316	T6315317	T6315318	T8315317	T8315318	M6	1.00	D5	4
–	T7315347	T7315348	–	T6315347	T6315348	T8315347	T8315348	M7	1.00	D5	4
T7315366	T7315367	T7315368	T6315366	T6315367	T6315368	T8315367	T8315368	M8	1.25	D5	4
–	T7315377	T7315378	–	T6315377	T6315378	T8315377	T8315378	M8	1.00	D5	4
–	T7315447	T7315448	–	–	–	–	–	M10	1.00	D5	4
T7315426	T7315427	T7315428	T6315426	T6315427	T6315428	T8315427	T8315428	M10	1.50	D6	4
T7315436	T7315437	T7315438	T6315436	T6315437	T6315438	T8315437	T8315438	M10	1.25	D5	4
–	T7315517	T7315518	–	–	–	–	–	M12	1.50	D6	4
T7315506	T7315507	T7315508	T6315506	T6315507	T6315508	T8315507	T8315508	M12	1.75	D6	4
T7315526	T7315527	T7315528	T6315526	T6315527	T6315528	T8315527	T8315528	M12	1.25	D5	4
T7315546	T7315547	T7315548	T6315546	T6315547	T6315548	T8315547	T8315548	M14	2.00	D7	4
–	T7315557	T7315558	–	–	–	–	–	M14	1.50	D6	4
–	T7315567	T7315568	–	–	–	–	–	M14	1.25	D5	4
T7315606	T7315607	T7315608	T6315606	T6315607	T6315608	T8315607	T8315608	M16	2.00	D7	4
T7315616	T7315617	T7315618	T6315616	T6315617	T6315618	T8315617	T8315618	M16	1.50	D6	4
–	T7315657	T7315658	–	–	–	–	–	M18	2.50	D7	4
T7315676	T7315677	T7315678	T6315676	T6315677	T6315678	T8315677	T8315678	M18	1.50	D6	4
T7315706	T7315707	T7315708	T6315706	T6315707	T6315708	T8315707	T8315708	M20	2.50	D7	4
T7315726	T7315727	T7315728	T6315726	T6315727	T6315728	T8315727	T8315728	M20	1.50	D6	4
T7315786	T7315787	T7315788	T6315786	T6315787	T6315788	T8315787	T8315788	M24	3.00	D8	4
T7315946	T7315947	T7315948	T6315946	T6315947	T6315948	–	–	M30	3.50	D9	4
–	T7315B37	T7315B38	–	–	–	–	–	M36	4.00	D9	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

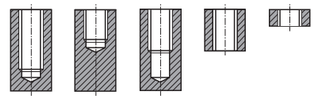
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

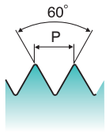
STRAIGHT FLUTE TAPS

T7326 SERIES

METRIC HAND TAP
Oversize Tap

Hole type 2.0×D





GS | HSS | UNC UNF | USCTI 302 | 60° | 5P/2P | Bright | +.005" oversize

EDP No.		SIZE	Thread Per Inch		No. of Flute
Bright					
Plug	Bottoming		UNC	UNF	
T7326247	–	6	32	–	3
T7326287	–	8	32	–	4
T7326327	–	10	24	–	4
T7326347	–	10	–	32	4
T7326407	T7326408	1/4	20	–	4
T7326427	–	1/4	–	28	4
T7326447	T7326448	5/16	18	–	4
T7326467	–	5/16	–	24	4
T7326487	T7326488	3/8	16	–	4
T7326507	–	3/8	–	24	4
T7326527	–	7/16	14	–	4
T7326567	–	1/2	13	–	4
T7326587	–	1/2	–	20	4
T7326647	–	5/8	11	–	4
T7326707	–	3/4	10	–	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

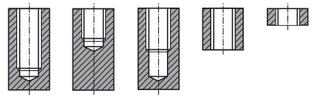
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

STRAIGHT FLUTE TAPS

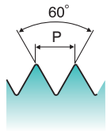
T7B15 SERIES

METRIC HAND TAP Oversize Tap

Hole type 2.0×D



USCTI



GS | HSS | M MF | USCTI 302 | 60° | 5P/2P | Bright | +.127mm oversize

EDP No.		SIZE	Pitch	No. of Flute
Bright				
Plug	Bottoming			
T7B15247	T7B15248	M4	0.70	4
T7B15267	T7B15268	M4.5	0.75	4
T7B15287	T7B15288	M5	0.80	4
T7B15317	T7B15318	M6	1.00	4
T7B15347	T7B15348	M7	1.00	4
T7B15367	T7B15368	M8	1.25	4
T7B15377	T7B15378	M8	1.00	4
T7B15427	T7B15428	M10	1.50	4
T7B15437	T7B15438	M10	1.25	4
T7B15507	T7B15508	M12	1.75	4
T7B15527	T7B15528	M12	1.25	4
T7B15607	T7B15608	M16	2.00	4
T7B15707	T7B15708	M20	2.50	4
T7B15787	T7B15788	M24	3.00	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

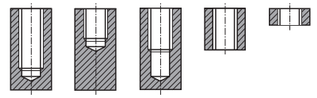
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

STRAIGHT FLUTE TAPS

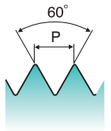
T7336 SERIES

LEFT HAND TAP

Hole type 2.0×D



USCTI



GS | HSS | UNC UNF | USCTI 302 | H2~H4 | 60° | 5P/2P | Bright

EDP No.		SIZE	Thread Per Inch		Thread Limit	No. of Flute
Bright						
Plug	Bottoming		UNC	UNF		
T7336247	T7336248	6	32	—	H3	3
T7336267	T7336268	6	—	40	H2	3
T7336287	T7336288	8	32	—	H3	4
T7336307	T7336308	8	—	36	H2	4
T7336327	T7336328	10	24	—	H3	4
T7336347	T7336348	10	—	32	H3	4
T7336407	T7336408	1/4	20	—	H3	4
T7336427	T7336428	1/4	—	28	H3	4
T7336447	T7336448	5/16	18	—	H3	4
T7336467	T7336468	5/16	—	24	H3	4
T7336487	T7336488	3/8	16	—	H3	4
T7336507	T7336508	3/8	—	24	H3	4
T7336527	T7336528	7/16	14	—	H3	4
T7336547	T7336548	7/16	—	20	H3	4
T7336567	T7336568	1/2	13	—	H3	4
T7336587	T7336588	1/2	—	20	H3	4
T7336607	T7336608	9/16	12	—	H3	4
T7336627	T7336628	9/16	—	18	H3	4
T7336647	T7336648	5/8	11	—	H3	4
T7336667	T7336668	5/8	—	18	H3	4
T7336707	T7336708	3/4	10	—	H3	4
T7336727	T7336728	3/4	—	16	H3	4
T7336747	T7336748	7/8	9	—	H4	4
T7336767	T7336768	7/8	—	14	H4	4
T7336787	T7336788	1	8	—	H4	4
T7336807	T7336808	1	—	12	H4	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

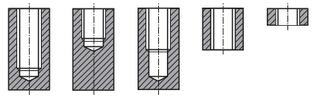
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

STRAIGHT FLUTE TAPS

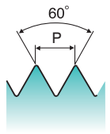
T7A15 SERIES

METRIC LEFT HAND TAP

Hole type 2.0×D



USCTI



GS | HSS | UNC UNF | USCTI 302 | D4~D8 | 60° | 5P/2P | Bright

EDP No. Bright Plug	EDP No. Bright Bottom	SIZE	Pitch	Limit	No. of Flute
T7A15227	T7A15228	M3.5	0.6	D4	3
T7A15247	T7A15248	M4	0.7	D4	4
T7A15267	T7A15268	M4.5	0.75	D4	4
T7A15287	T7A15288	M5	0.8	D4	4
T7A15317	T7A15318	M6	1.0	D5	4
T7A15347	T7A15348	M7	1.0	D5	4
T7A15367	T7A15368	M8	1.25	D5	4
T7A15377	T7A15378	M8	1.0	D5	4
T7A15427	T7A15428	M10	1.5	D6	4
T7A15437	T7A15438	M10	1.25	D5	4
T7A15507	T7A15508	M12	1.75	D6	4
T7A15527	T7A15528	M12	1.25	D5	4
T7A15547	T7A15548	M14	2.0	D7	4
T7A15557	T7A15558	M14	1.5	D6	4
T7A15607	T7A15608	M16	2.0	D7	4
T7A15617	T7A15618	M16	1.5	D6	4
T7A15657	T7A15658	M18	2.5	D7	4
T7A15677	T7A15678	M18	1.5	D6	4
T7A15707	T7A15708	M20	2.5	D7	4
T7A15727	T7A15728	M20	1.5	D6	4
T7A15747	T7A15748	M22	2.5	D7	4
T7A15767	T7A15768	M22	1.5	D6	4
T7A15787	T7A15788	M24	3.0	D8	4
T7A15797	T7A15798	M24	2.0	D7	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 201.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

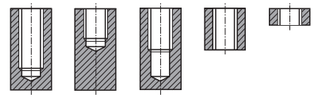
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

STRAIGHT FLUTE TAPS

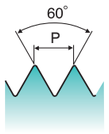
T7616/T6616/T8616 SERIES

PULLEY TAPS, 6″ EXTENSION PLUG STYLE

Hole type 2.0×D



USCTI Long Shank



GS | HSS | UNC UNF | USCTI Long Shank | H3 | 60° | 4P~5P | Bright | Steam Oxide | TiN

EDP No. Bright	EDP No. Steam Oxide	EDP No. TiN	SIZE	UNC	Overall Length	Limit	No. of Flute
T7616403	T6616403	T8616403	1/4	20	6	H3	4
T7616443	T6616443	T8616443	5/16	18	6	H3	4
T7616483	T6616483	T8616483	3/8	16	6	H3	4
T7616523	T6616523	T8616523	7/16	14	6	H3	4
T7616563	T6616563	T8616563	1/2	13	6	H3	4
T7616643	T6616643	T8616643	5/8	11	6	H3	4

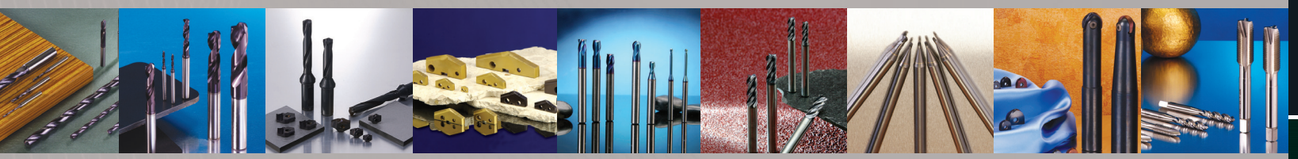
▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

Global Cutting Tool Leader **YG-1**



HSS

Being the best through innovation

FORMING TAPS

- Tapping by Forming Soft Materials (No Chips)

SELECTION GUIDE

FORMING TAPS
Tapping by Forming Soft Materials

INCH

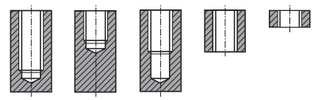
EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
TKR03		Super HSS	UNC/UNF	**GV**	USCTI 302A	H3~H7	2 ~ 3P	3.0D	TiCN	167
ZF		HSSE-V3	UNC/UNF	**GV**	USCTI 302	H2~H5	1.5 ~ 2P		Bright	168
Z0/Z1/Z2/Z3		HSSE-V3	UNC/UNF	**GV**	USCTI 302A	H2~H12	4 ~ 5P 1.5 ~ 2P		Bright TiN	169
Z4/Z5/Z6/Z7		HSSE-V3	UNC/UNF	**GV**	USCTI 302A	H3~H12	4 ~ 5P 1.5 ~ 2P		Bright TiN	171
Z8/ZA/ZC Z9/ZB/ZD		HSSE-V3	M/MF	**GV**	USCTI 302A	D3~D11	4 ~ 5P 1.5 ~ 2P		Bright TiN /TiCN	173
T7R01/T8R01/ THR01 T7R02/T8R02/ THR02		HSS	UNC/UNF	**GV**	USCTI 302A	H2~H5	4 ~ 5P 1.5 ~ 2P		Bright TiN /TiCN	174

FORMING TAPS

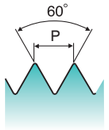
TKR03 SERIES

FORMING TAPS BOTTOMING STYLE

Hole type 3.0×D



USCTI



GV | Super HSS | UNC UNF | USCTI 302A | H3~H7 | 60° | 2P~3P | TiCN

EDP No. Class of fit 2B (TiCN)		EDP No. Class of fit 3B (TiCN)		SIZE	Thread Per Inch UNC	Thread Per Inch UNF	No. of Lobe
TKR03165	H5	**TKR03163**	H3	4	40	—	4
TKR03205	H5	**TKR03203**	H3	5	40	—	4
TKR03245	H5	**TKR03243**	H3	6	32	—	4
TKR03285	H5	**TKR03283**	H3	8	32	—	4
TKR03326	H6	**TKR03324**	H4	10	24	—	4
TKR03346	H6	**TKR03344**	H4	10	—	32	4
TKR03406	H6	**TKR03404**	H4	1/4	20	—	4
TKR03426	H6	**TKR03424**	H4	1/4	—	28	4
TKR03447	H7	**TKR03445**	H5	5/16	18	—	4
TKR03467	H7	**TKR03465**	H5	5/16	—	24	4
TKR03487	H7	**TKR03485**	H5	3/8	16	—	4
TKR03507	H7	**TKR03505**	H5	3/8	—	24	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 203.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

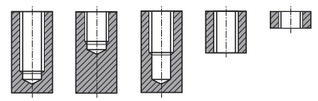
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

FORMING TAPS

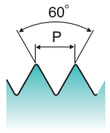
ZF SERIES

MINIATURE FORMING TAPS BOTTOMING STYLE

Hole type 3.0×D



USCTI



GV | HSSE-V3 | UNC UNF | USCTI 302 | H2~H5 | 60° | 1.5P~2P Bottoming | Bright

EDP No.	SIZE	Nominal Size (mm)	Pitch		Limit	Overall Length	Thread Length	Shank Diameter	Square Length	Square Siz	No. of Lobe
			UNC	UNF		L	Lt	D	kl	K	
ZFM52	#00	1.1938	90	—	H2	1.63	.25	.1410	.19	.110	4
ZFM53	#00	1.1938	90	—	H3	1.63	.25	.1410	.19	.110	4
ZFM82	#00	1.1938	—	96	H2	1.63	.25	.1410	.19	.110	4
ZFM83	#00	1.1938	—	96	H3	1.63	.25	.1410	.19	.110	4
ZF022	#0	1.524	—	80	H2	1.63	.31	.1410	.19	.110	4
ZF023	#0	1.524	—	80	H3	1.63	.31	.1410	.19	.110	4
ZF024	#0	1.524	—	80	H4	1.63	.31	.1410	.19	.110	4
ZF042	#1	1.854	64	—	H2	1.69	.38	.1410	.19	.110	4
ZF043	#1	1.854	64	—	H3	1.69	.38	.1410	.19	.110	4
ZF044	#1	1.854	64	—	H4	1.69	.38	.1410	.19	.110	4
ZF062	#1	1.854	—	72	H2	1.69	.38	.1410	.19	.110	4
ZF063	#1	1.854	—	72	H3	1.69	.38	.1410	.19	.110	4
ZF064	#1	1.854	—	72	H4	1.69	.38	.1410	.19	.110	4
ZF082	#2	2.1844	56	—	H2	1.75	.44	.1410	.19	.110	4
ZF083	#2	2.1844	56	—	H3	1.75	.44	.1410	.19	.110	4
ZF084	#2	2.1844	56	—	H4	1.75	.44	.1410	.19	.110	4
ZF102	#2	2.1844	—	64	H2	1.75	.44	.1410	.19	.110	4
ZF103	#2	2.1844	—	64	H3	1.75	.44	.1410	.19	.110	4
ZF104	#2	2.1844	—	64	H4	1.75	.44	.1410	.19	.110	4
ZF122	#3	2.5146	48	—	H2	1.81	.50	.1410	.19	.110	4
ZF123	#3	2.5146	48	—	H3	1.81	.50	.1410	.19	.110	4
ZF124	#3	2.5146	48	—	H4	1.81	.50	.1410	.19	.110	4
ZF125	#3	2.5146	48	—	H5	1.81	.50	.1410	.19	.110	4
ZF142	#3	2.5146	—	56	H2	1.81	.50	.1410	.19	.110	4
ZF143	#3	2.5146	—	56	H3	1.81	.50	.1410	.19	.110	4
ZF144	#3	2.5146	—	56	H4	1.81	.50	.1410	.19	.110	4
ZF145	#3	2.5146	—	56	H5	1.81	.50	.1410	.19	.110	4

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎				◎			◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎										

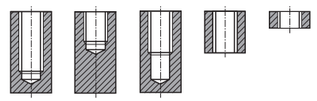
FORMING TAPS

Z0/Z1/Z2/Z3 SERIES

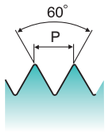
FORMING TAPS PLUG & BOTTOMING STYLE

A variety of H Limit

Hole type 3.0×D



USCTI



GV | HSSE-V3 | UNC UNF | USCTI 302A | H2~H12 | 60° | 4P~5P Plug | 1.5P~2P Bottoming | Bright | TiN

EDP No.				SIZE	Thread Per Inch		Limit	No. of Lobe
Plug		Bottom			UNC	UNF		
Bright	TiN	Bright	TiN					
—	—	Z2022	Z3022	0	—	80	H2	4
—	—	Z2023	Z3023	0	—	80	H3	4
—	—	Z2042	Z3042	1	64	—	H2	4
—	—	Z2062	Z3062	1	—	72	H2	4
—	—	Z2063	Z3063	1	—	72	H3	4
—	—	Z2082	Z3082	2	56	—	H2	4
—	—	Z2083	Z3083	2	56	—	H3	4
—	—	Z2102	Z3102	2	—	64	H2	4
—	—	Z2122	Z3122	3	48	—	H2	4
—	—	Z2123	Z3123	3	48	—	H3	4
—	—	Z2143	Z3143	3	—	56	H3	4
Z0163	Z1163	Z2163	Z3163	4	40	—	H3	4
Z0165	Z1165	Z2165	Z3165	4	40	—	H5	4
Z0183	Z1183	Z2183	Z3183	4	—	48	H3	4
Z0185	Z1185	Z2185	Z3185	4	—	48	H5	4
Z0203	Z1203	Z2203	Z3203	5	40	—	H3	4
Z0205	Z1205	Z2205	Z3205	5	40	—	H5	4
Z0225	Z1225	Z2225	Z3225	5	—	44	H5	4
Z0243	Z1243	Z2243	Z3243	6	32	—	H3	4
Z0245	Z1245	Z2245	Z3245	6	32	—	H5	4
Z0263	Z1263	Z2263	Z3263	6	—	40	H3	4
Z0265	Z1265	Z2265	Z3265	6	—	40	H5	4
Z0283	Z1283	Z2283	Z3283	8	32	—	H3	4
Z0285	Z1285	Z2285	Z3285	8	32	—	H5	4
Z0303	Z1303	Z2303	Z3303	8	—	36	H3	4
Z0305	Z1305	Z2305	Z3305	8	—	36	H5	4
Z0324	Z1324	Z2324	Z3324	10	24	—	H4	4
Z0326	Z1326	Z2326	Z3326	10	24	—	H6	4
Z0344	Z1344	Z2344	Z3344	10	—	32	H4	4
Z0346	Z1346	Z2346	Z3346	10	—	32	H6	4
Z0364	Z1364	Z2364	Z3364	12	24	—	H4	4
Z0366	Z1366	Z2366	Z3366	12	24	—	H6	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 203.
▶Hardslck coating is available on your request (Bright Finish EDP No + H)

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

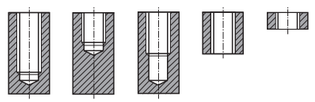
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

FORMING TAPS

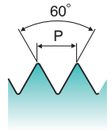
Z0/Z1/Z2/Z3 SERIES

FORMING TAPS PLUG & BOTTOMING STYLE

Hole type 3.0×D



USCTI



GV | HSSE-V3 | UNC UNF | USCTI 302A | H2~H12 | 60° | 4P~5P Plug | 1.5P~2P Bottoming | Bright | TiN

EDP No.				SIZE	Thread Per Inch		Limit	No. of Lobe
Plug		Bottom			UNC	UNF		
Bright	TiN	Bright	TiN					
Z0404	**Z1404**	**Z2404**	**Z3404**	1/4	20	—	H4	4
Z0406	**Z1406**	**Z2406**	**Z3406**	1/4	20	—	H6	4
Z0424	**Z1424**	**Z2424**	**Z3424**	1/4	—	28	H4	4
Z0426	**Z1426**	**Z2426**	**Z3426**	1/4	—	28	H6	4
Z0445	**Z1445**	**Z2445**	**Z3445**	5/16	18	—	H5	4
Z0447	**Z1447**	**Z2447**	**Z3447**	5/16	18	—	H7	4
Z0465	**Z1465**	**Z2465**	**Z3465**	5/16	—	24	H5	4
Z0467	**Z1467**	**Z2467**	**Z3467**	5/16	—	24	H7	4
Z0485	**Z1485**	**Z2485**	**Z3485**	3/8	16	—	H5	4
Z0487	**Z1487**	**Z2487**	**Z3487**	3/8	16	—	H7	4
Z0505	**Z1505**	**Z2505**	**Z3505**	3/8	—	24	H5	4
Z0507	**Z1507**	**Z2507**	**Z3507**	3/8	—	24	H7	4
Z0528	**Z1528**	**Z2528**	**Z3528**	7/16	14	—	H8	4
Z0548	**Z1548**	**Z2548**	**Z3548**	7/16	—	20	H8	4
Z0568	**Z1568**	**Z2568**	**Z3568**	1/2	13	—	H8	4
Z0565	**Z1565**	**Z2565**	**Z3565**	1/2	13	—	H5	4
Z0585	**Z1585**	**Z2585**	**Z3585**	1/2	—	20	H5	4
Z0588	**Z1588**	**Z2588**	**Z3588**	1/2	—	20	H8	4
Z0607	**Z1607**	**Z2607**	**Z3607**	9/16	12	—	H7	4
Z0600	**Z1600**	**Z2600**	**Z3600**	9/16	12	—	H10	4
Z0628	**Z1628**	**Z2628**	**Z3628**	9/16	—	18	H8	4
Z0620	**Z1620**	**Z2620**	**Z3620**	9/16	—	18	H10	4
Z0648	**Z1648**	**Z2648**	**Z3648**	5/8	11	—	H8	4
Z0640	**Z1640**	**Z2640**	**Z3640**	5/8	11	—	H10	4
Z0660	**Z1660**	**Z2660**	**Z3660**	5/8	—	18	H10	4
Z0700	**Z1700**	**Z2700**	**Z3700**	3/4	10	—	H10	4
Z070B	**Z170B**	**Z270B**	**Z370B**	3/4	10	—	H12	4
Z0728	**Z1728**	**Z2728**	**Z3728**	3/4	—	16	H8	4
Z0720	**Z1720**	**Z2720**	**Z3720**	3/4	—	16	H10	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 203.
▶Hardslck coating is available on your request (Bright Finish EDP No + H)

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

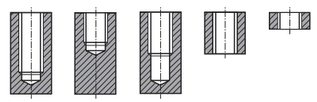
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

FORMING TAPS

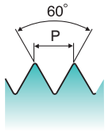
Z4/Z5/Z6/Z7 SERIES

FORMING TAPS WITH OIL GROOVE PLUG & BOTTOMING STYLE

Hole type 3.0×D



USCTI



GV | HSSE-V3 | UNC UNF | USCTI 302A | H3~H12 | 60° | 4P~5P Plug | 1.5P~2P Bottoming | Bright | TiN

EDP No.				SIZE	Thread Per Inch		Limit	No. of Lobe
Plug		Bottom			UNC	UNF		
Bright	TiN	Bright	TiN					
Z4163	**Z5163**	**Z6163**	**Z7163**	4	40	—	H3	4
Z4165	**Z5165**	**Z6165**	**Z7165**	4	40	—	H5	4
Z4183	**Z5183**	**Z6183**	**Z7183**	4	—	48	H3	4
Z4185	**Z5185**	**Z6185**	**Z7185**	4	—	48	H5	4
Z4203	**Z5203**	**Z6203**	**Z7203**	5	40	—	H3	4
Z4205	**Z5205**	**Z6205**	**Z7205**	5	40	—	H5	4
Z4225	**Z5225**	**Z6225**	**Z7225**	5	—	44	H5	4
Z4243	**Z5243**	**Z6243**	**Z7243**	6	32	—	H3	4
Z4245	**Z5245**	**Z6245**	**Z7245**	6	32	—	H5	4
Z4263	**Z5263**	**Z6263**	**Z7263**	6	—	40	H3	4
Z4265	**Z5265**	**Z6265**	**Z7265**	6	—	40	H5	4
Z4283	**Z5283**	**Z6283**	**Z7283**	8	32	—	H3	4
Z4285	**Z5285**	**Z6285**	**Z7285**	8	32	—	H5	4
Z4303	**Z5303**	**Z6303**	**Z7303**	8	—	36	H3	4
Z4305	**Z5305**	**Z6305**	**Z7305**	8	—	36	H5	4
Z4324	**Z5324**	**Z6324**	**Z7324**	10	24	—	H4	4
Z4326	**Z5326**	**Z6326**	**Z7326**	10	24	—	H6	4
Z4344	**Z5344**	**Z6344**	**Z7344**	10	—	32	H4	4
Z4346	**Z5346**	**Z6346**	**Z7346**	10	—	32	H6	4
Z4364	**Z5364**	**Z6364**	**Z7364**	12	24	—	H4	4
Z4366	**Z5366**	**Z6366**	**Z7366**	12	24	—	H6	4
Z4404	**Z5404**	**Z6404**	**Z7404**	1/4	20	—	H4	4
Z4406	**Z5406**	**Z6406**	**Z7406**	1/4	20	—	H6	4
Z4424	**Z5424**	**Z6424**	**Z7424**	1/4	—	28	H4	4
Z4426	**Z5426**	**Z6426**	**Z7426**	1/4	—	28	H6	4
Z4445	**Z5445**	**Z6445**	**Z7445**	5/16	18	—	H5	4
Z4447	**Z5447**	**Z6447**	**Z7447**	5/16	18	—	H7	4
Z4465	**Z5465**	**Z6465**	**Z7465**	5/16	—	24	H5	4
Z4467	**Z5467**	**Z6467**	**Z7467**	5/16	—	24	H7	4
Z4485	**Z5485**	**Z6485**	**Z7485**	3/8	16	—	H5	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 203.
▶Hardslck coating is available on your request (Bright Finish EDP No + H)

▶ NEXT PAGE

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

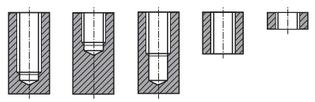
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

FORMING TAPS

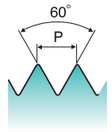
Z4/Z5/Z6/Z7 SERIES

FORMING TAPS WITH OIL GROOVE PLUG & BOTTOMING STYLE for General Purpose

Hole type 3.0×D



USCTI



GV | HSSE-V3 | UNC UNF | USCTI 302A | H3~H12 | 60° | 4P~5P Plug | 1.5P~2P Bottoming | Bright | TiN

EDP No.				SIZE	Thread Per Inch		Limit	No. of Lobe
Plug		Bottom						
Bright	TiN	Bright	TiN		UNC	UNF		
Z4487	**Z5487**	**Z6487**	**Z7487**	3/8	16	—	H7	4
Z4505	**Z5505**	**Z6505**	**Z7505**	3/8	—	24	H5	4
Z4507	**Z5507**	**Z6507**	**Z7507**	3/8	—	24	H7	4
Z4528	**Z5528**	**Z6528**	**Z7528**	7/16	14	—	H8	4
Z4548	**Z5548**	**Z6548**	**Z7548**	7/16	—	20	H8	4
Z4568	**Z5568**	**Z6568**	**Z7568**	1/2	13	—	H8	4
Z4565	**Z5565**	**Z6565**	**Z7565**	1/2	13	—	H5	4
Z4585	**Z5585**	**Z6585**	**Z7585**	1/2	—	20	H5	4
Z4588	**Z5588**	**Z6588**	**Z7588**	1/2	—	20	H8	4
Z4607	**Z5607**	**Z6607**	**Z7607**	9/16	12	—	H7	4
Z4600	**Z5600**	**Z6600**	**Z7600**	9/16	12	—	H10	4
Z4628	**Z5628**	**Z6628**	**Z7628**	9/16	—	18	H8	4
Z4620	**Z5620**	**Z6620**	**Z7620**	9/16	—	18	H10	4
Z4648	**Z5648**	**Z6648**	**Z7648**	5/8	11	—	H8	4
Z4640	**Z5640**	**Z6640**	**Z7640**	5/8	11	—	H10	4
Z4660	**Z5660**	**Z6660**	**Z7660**	5/8	—	18	H10	4
Z4700	**Z5700**	**Z6700**	**Z7700**	3/4	10	—	H10	4
Z470B	**Z570B**	**Z670B**	**Z770B**	3/4	10	—	H12	4
Z4728	**Z5728**	**Z6728**	**Z7728**	3/4	—	16	H8	4
Z4720	**Z5720**	**Z6720**	**Z7720**	3/4	—	16	H10	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 203.
▶Hardslck coating is available on your request (Bright Finish EDP No + H)

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

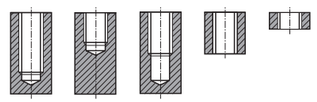
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

FORMING TAPS

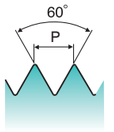
Z8/ZA/ZC SERIES
Z9/ZB/ZD SERIES

FORMING TAPS WITH OIL GROOVE PLUG & BOTTOMING STYLE for General Purpose

Hole type 3.0×D



USCTI



GV | HSSE-V3 | M MF | USCTI 302A | D3~D11 | 60° | 4P~5P Plug | 1.5P~2P Bottoming | Bright | TiN | TiCN

EDP No.						SIZE	Pitch	Limit	No. of Lobe
Plug			Bottom						
Bright	TiN	TiCN	Bright	TiN	TiCN				
-	-	-	**Z9133**	**ZB133**	**ZD133**	M2	0.4	D3	4
Z8205	**ZA205**	**ZC205**	**Z9205**	**ZB205**	**ZD205**	M3	0.5	D5	4
Z8246	**ZA246**	**ZC246**	**Z9246**	**ZB246**	**ZD246**	M4	0.7	D6	4
Z8287	**ZA287**	**ZC287**	**Z9287**	**ZB287**	**ZD287**	M5	0.8	D7	4
Z8318	**ZA318**	**ZC318**	**Z9318**	**ZB318**	**ZD318**	M6	1.0	D8	4
Z8369	**ZA369**	**ZC369**	**Z9369**	**ZB369**	**ZD369**	M8	1.25	D9	4
Z8420	**ZA420**	**ZC420**	**Z9420**	**ZB420**	**ZD420**	M10	1.5	D10	4
Z850A	**ZA50A**	**ZC50A**	**Z950A**	**ZB50A**	**ZD50A**	M12	1.75	D11	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 203.
▶Hardslck coating is available on your request (Bright Finish EDP No + H)

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			◎			◎

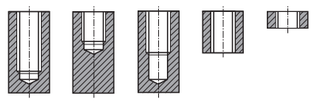
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

FORMING TAPS

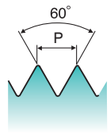
T7R01/T8R01/THR01 SERIES
T7R02/T8R02/THR02 SERIES

FORMING TAPS PLUG & BOTTOMING STYLE

Hole type 3.0×D



USCTI



GV | HSS | UNC UNF | USCTI 302A | H2~H5 | 60° | 4P~5P Plug | 1.5P~2P Bottoming | Bright | TiN | TiCN

EDP No.						SIZE	Thread Per Inch		Limit
Plug			Bottom						
Bright	TiN	TiCN	Bright	TiN	TiCN		UNC	UNF	
—	—	—	T7R02022	T8R02022	THR02022	0	—	80	H2
—	—	—	T7R02082	T8R02082	THR02082	2	56	—	H2
—	—	—	T7R02123	T8R02123	THR02123	3	48	—	H3
T7R01163	T8R01163	THR01163	T7R02163	T8R02163	THR02163	4	40	—	H3
T7R01203	T8R01203	THR01203	T7R02203	T8R02203	THR02203	5	40	—	H3
T7R01243	T8R01243	THR01243	T7R02243	T8R02243	THR02243	6	32	—	H3
T7R01283	T8R01283	THR01283	T7R02283	T8R02283	THR02283	8	32	—	H3
T7R01324	T8R01324	THR01324	T7R02324	T8R02324	THR02324	10	24	—	H4
T7R01344	T8R01344	THR01344	T7R02344	T8R02344	THR02344	10	—	32	H4
T7R01404	T8R01404	THR01404	T7R02404	T8R02404	THR02404	1/4	20	—	H4
T7R01424	T8R01424	THR01424	T7R02424	T8R02424	THR02424	1/4	—	28	H4
T7R01445	T8R01445	THR01445	T7R02445	T8R02445	THR02445	5/16	18	—	H5
T7R01485	T8R01485	THR01485	T7R02485	T8R02485	THR02485	3/8	16	—	H5

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 203.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎			○			◎

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						○	○		○	○

HSS

Being the best through innovation

SCREW THREAD INSERT TAPS

SELECTION GUIDE

SCREW THREAD INSERT TAPS

INCH

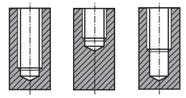
EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
ST/SI		HSSE-V3	UNC/UNF	GS	USCTI 322	2B	1.5 ~ 2P	2.5D	Hardslick	177
T7406		HSS	UNC/UNF	GS	USCTI 322	H2~H4	1.5 ~ 2P		Bright	178
T7425		HSS	M/MF	GS	USCTI 322A	D2~D4	1.5 ~ 2P		Bright	179
ST/SI		HSSE-V3	UNC/UNF	GS	USCTI 322	2B	4 ~ 5P	3.0D	Hardslick	180
T7436		HSS	UNC/UNF	GS	USCTI 322	H1~H4	4 ~ 5P		Bright	181
T7415		HSS	M/MF	GS	USCTI 322A	D2~D4	4 ~ 5P		Bright	182
T7426		HSS	UNC/UNF	GS	USCTI 322	H1~H4	4 ~ 5P 1.5 ~ 2P	2.0D	Bright	183
T7405		HSS	M/MF	GS	USCTI 322A	D2~D4	4 ~ 5P 1.5 ~ 2P		Bright	184

SCREW THREAD INSERT TAPS

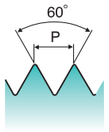
ST/SI SERIES

SPIRAL FLUTE TAPS SCREW THREAD INSERT for General Purpose

Hole type 2.5×D



USCTI



GS | HSSE-V3 | UNC UNF | USCTI 322 | 2B | 60° | 1.5P~2P | Hardslick | R40

EDP No. Hardslick	SIZE	Thread Per Inch UNC	Thread Per Inch UNF	Limit	No. of Flute
ST162	#4	40	—	2B	3
SI182	#4	—	48	2B	3
ST202	#5	40	—	2B	3
SI222	#5	—	44	2B	3
ST242	#6	32	—	2B	3
SI262	#6	—	40	2B	3
ST282	#8	32	—	2B	3
SI302	#8	—	36	2B	3
ST322	#10	24	—	2B	3
SI342	#10	—	32	2B	3
ST362	#12	24	—	2B	3
SI382	#12	—	28	2B	3
ST402	1/4	20	—	2B	3
SI422	1/4	—	28	2B	3
ST442	5/16	18	—	2B	3
SI462	5/16	—	24	2B	3
ST482	3/8	16	—	2B	3
SI502	3/8	—	24	2B	3
ST522	7/16	14	—	2B	3
SI542	7/16	—	20	2B	3
ST562	1/2	13	—	2B	3
SI582	1/2	—	20	2B	3
ST602	9/16	12	—	2B	4
SI622	9/16	—	18	2B	4
ST642	5/8	11	—	2B	4
SI662	5/8	—	18	2B	4
ST702	3/4	10	—	2B	4
SI722	3/4	—	16	2B	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 205.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○					○

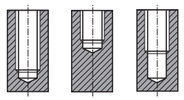
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○	○									

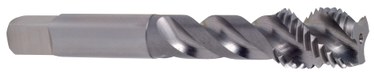
SCREW THREAD INSERT TAPS

T7406 SERIES

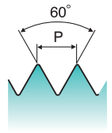
SPIRAL FLUTE TAPS SCREW THREAD INSERT for General Purpose

Hole type 2.5×D





USCTI



GS | HSS | UNC UNF | USCTI 322 | H2~H4 | 60° | 1.5P~2P | Bright | R50

EDP No. Bright	SIZE	Thread Per Inch		Limit	No. of Flute
		UNC	UNF		
T7406082	2	56	—	H2	2
T7406122	3	48	—	H2	2
T7406162	4	40	—	H2	2
T7406182	4	—	48	H2	3
T7406242	6	32	—	H2	3
T7406243	6	32	—	H3	3
T7406262	6	—	40	H2	3
T7406282	8	32	—	H2	3
T7406283	8	32	—	H3	3
T7406302	8	—	36	H2	3
T7406322	10	24	—	H2	3
T7406323	10	24	—	H3	3
T7406342	10	—	32	H2	3
T7406343	10	—	32	H3	3
T7406402	1/4	20	—	H2	3
T7406403	1/4	20	—	H3	3
T7406422	1/4	—	28	H2	3
T7406423	1/4	—	28	H3	3
T7406443	5/16	18	—	H3	3
T7406444	5/16	18	—	H4	3
T7406462	5/16	—	24	H2	3
T7406463	5/16	—	24	H3	3
T7406483	3/8	16	—	H3	3
T7406484	3/8	16	—	H4	3
T7406502	3/8	—	24	H2	3
T7406503	3/8	—	24	H3	3
T7406523	7/16	14	—	H3	4
T7406524	7/16	14	—	H4	4
T7406543	7/16	—	20	H3	3
T7406544	7/16	—	20	H4	3
T7406563	1/2	13	—	H3	4
T7406564	1/2	13	—	H4	4
T7406583	1/2	—	20	H3	4
T7406584	1/2	—	20	H4	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 205.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○						○

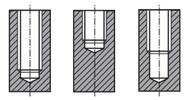
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○	○									

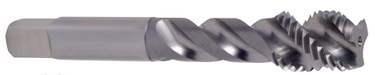
SCREW THREAD INSERT TAPS

T7425 SERIES

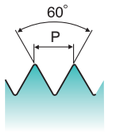
METRIC SPIRAL FLUTE TAPS SCREW THREAD INSERT for General Purpose

Hole type 2.5×D





USCTI



GS | HSS | M MF | USCTI 322A | D2~D4 | 60° | 1.5P~2P | Bright | R50

EDP No. Bright	SIZE	Pitch	Limit	No. of Flute
T7425132	M2	0.40	D2	2
T7425172	M2.5	0.45	D2	2
T7425202	M3	0.50	D2	3
T7425243	M4	0.70	D3	3
T7425283	M5	0.80	D3	3
T7425313	M6	1.00	D3	3
T7425363	M8	1.25	D3	3
T7425424	M10	1.50	D4	3
T7425504	M12	1.75	D4	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 205.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○						○

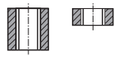
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○	○									

SCREW THREAD INSERT TAPS

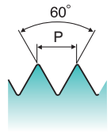
ST/SI SERIES

SPIRAL POINT TAPS SCREW THREAD INSERT for General Purpose

Hole type 3.0×D



USCTI



GS | HSSE-V3 | UNC UNF | USCTI 322 | 2B | 60° | 4P~5P | Hardslick

EDP No. Hardslick	SIZE	Thread Per Inch UNC	Thread Per Inch UNF	Limit	No. of Flute
SI162	#4	40	—	2B	3
ST182	#4	—	48	2B	3
SI242	#6	32	—	2B	3
ST262	#6	—	40	2B	3
SI282	#8	32	—	2B	3
ST302	#8	—	36	2B	3
SI322	#10	24	—	2B	3
ST342	#10	—	32	2B	3
SI402	1/4	20	—	2B	3
ST422	1/4	—	28	2B	3
SI442	5/16	18	—	2B	3
ST462	5/16	—	24	2B	3
SI482	3/8	16	—	2B	3
ST502	3/8	—	24	2B	3
SI522	7/16	14	—	2B	3
ST542	7/16	—	20	2B	3
SI562	1/2	13	—	2B	3
ST582	1/2	—	20	2B	3
SI602	9/16	12	—	2B	3
ST622	9/16	—	18	2B	3
SI642	5/8	11	—	2B	3
ST662	5/8	—	18	2B	3
SI702	3/4	10	—	2B	3
ST722	3/4	—	16	2B	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 205.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○					○

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○	○									

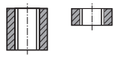
HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

SCREW THREAD INSERT TAPS

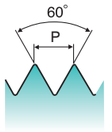
T7436 SERIES

SPIRAL POINT TAPS SCREW THREAD INSERT for General Purpose

Hole type 3.0×D



USCTI



GS | HSS | UNC UNF | USCTI 322 | H1~H4 | 60° | 4P~5P | Bright

EDP No. Bright	SIZE	Thread Per Inch UNC	Thread Per Inch UNF	Limit	No. of Flute
T7436082	2	56	—	H2	2
T7436122	3	48	—	H2	2
T7436161	4	40	—	H1	2
T7436162	4	40	—	H2	2
T7436182	4	—	48	H2	2
T7436202	5	40	—	H2	2
T7436242	6	32	—	H2	2
T7436243	6	32	—	H3	2
T7436262	6	—	40	H2	2
T7436282	8	32	—	H2	2
T7436283	8	32	—	H3	2
T7436302	8	—	36	H2	2
T7436322	10	24	—	H2	2
T7436323	10	24	—	H3	2
T7436342	10	—	32	H2	2
T7436343	10	—	32	H3	2
T7436402	1/4	20	—	H2	3
T7436403	1/4	20	—	H3	3
T7436422	1/4	—	28	H2	3
T7436423	1/4	—	28	H3	3
T7436443	5/16	18	—	H3	3
T7436444	5/16	18	—	H4	3
T7436462	5/16	—	24	H2	3
T7436463	5/16	—	24	H3	3
T7436483	3/8	16	—	H3	3
T7436484	3/8	16	—	H4	3
T7436502	3/8	—	24	H2	3
T7436503	3/8	—	24	H3	3
T7436523	7/16	14	—	H3	3
T7436524	7/16	14	—	H4	3
T7436543	7/16	—	20	H3	3
T7436544	7/16	—	20	H4	3
T7436563	1/2	13	—	H3	4
T7436564	1/2	13	—	H4	4
T7436583	1/2	—	20	H3	4
T7436584	1/2	—	20	H4	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 205.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○						○

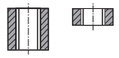
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○	○									

SCREW THREAD INSERT TAPS

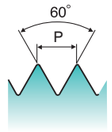
T7415 SERIES

METRIC SPIRAL POINT TAPS SCREW THREAD INSERT for General Purpose

Hole type 3.0×D



USCTI



GS | HSS | M MF | USCTI 322A | D2~D4 | 60° | 4P~5P | Bright

EDP No. Bright	SIZE	Pitch	Limit	No. of Flute
T7415132	M2	0.4	D2	2
T7415172	M2.5	0.45	D2	2
T7415202	M3	0.5	D2	3
T7415243	M4	0.7	D3	3
T7415283	M5	0.8	D3	3
T7415313	M6	1.0	D3	3
T7415363	M8	1.25	D3	3
T7415424	M10	1.5	D4	3
T7415504	M12	1.75	D4	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 205.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○						○

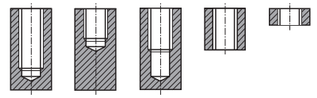
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○	○									

SCREW THREAD INSERT TAPS

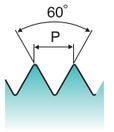
T7426 SERIES

STRAIGHT FLUTE TAPS SCREW THREAD INSERT for General Purpose

Hole type 2.0×D



USCTI



GS | HSS | UNC UNF | USCTI 322 | H1~H4 | 60° | 4P~5P Plug | 1.5P~2P Bottoming | Bright

EDP No. Plug	EDP No. Bottomming	SIZE	Thread Per Inch UNC	Thread Per Inch UNF	Limit	No. of Flute
T7426087	**T7426088**	2	56	—	H2	3
T7426127	**T7426128**	3	48	—	H2	3
T7426167H1	**T7426168H1**	4	40	—	H1	3
T7426167	**T7426168**	4	40	—	H2	3
T7426187	**T7426188**	4	—	48	H2	3
T7426207	**T7426208**	5	40	—	H2	3
T7426247H2	**T7426248H2**	6	32	—	H2	3
T7426247	**T7426248**	6	32	—	H3	3
T7426267	**T7426268**	6	—	40	H2	3
T7426287H2	**T7426288H2**	8	32	—	H2	3
T7426287	**T7426288**	8	32	—	H3	3
T7426307	**T7426308**	8	—	36	H2	3
T7426327H2	**T7426328H2**	10	24	—	H2	3
T7426327	**T7426328**	10	24	—	H3	3
T7426347H2	**T7426348H2**	10	—	32	H2	3
T7426347	**T7426348**	10	—	32	H3	3
T7426407H2	**T7426408H2**	1/4	20	—	H2	3
T7426407	**T7426408**	1/4	20	—	H3	3
T7426427H2	**T7426428H2**	1/4	—	28	H2	3
T7426427	**T7426428**	1/4	—	28	H3	3
T7426447	**T7426448**	5/16	18	—	H3	4
T7426447H4	**T7426448H4**	5/16	18	—	H4	4
T7426467H2	**T7426468H2**	5/16	—	24	H2	4
T7426467	**T7426468**	5/16	—	24	H3	4
T7426487	**T7426488**	3/8	16	—	H3	4
T7426487H4	**T7426488H4**	3/8	16	—	H4	4
T7426507H2	**T7426508H2**	3/8	—	24	H2	4
T7426507	**T7426508**	3/8	—	24	H3	4
T7426527	**T7426528**	7/16	14	—	H3	4
T7426527H4	**T7426528H4**	7/16	14	—	H4	4
T7426547	**T7426548**	7/16	—	20	H3	4
T7426547H4	**T7426548H4**	7/16	—	20	H4	4
T7426567	**T7426568**	1/2	13	—	H3	4
T7426567H4	**T7426568H4**	1/2	13	—	H4	4
T7426587	**T7426588**	1/2	—	20	H3	4
T7426587H4	**T7426588H4**	1/2	—	20	H4	4

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 204.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○						○

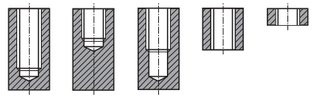
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○	○									

SCREW THREAD INSERT TAPS

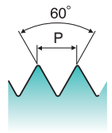
T7405 SERIES

METRIC STRAIGHT FLUTE TAPS SCREW THREAD INSERT for General Purpose

Hole type 2.0×D



USCTI



GS | HSS | M | USCTI 322A | D2~D4 | 4P~5P Plug | 1.5P~2P Bottoming | 60° | Bright

EDP No.		SIZE	Pitch	Limit	No. of Flute
Plug	Bottomming				
T7405137	T7405138	M2	0.4	D2	2
T7405177	T7405178	M2.5	0.45	D2	2
T7405207	T7405208	M3	0.5	D2	3
T7405247	T7405248	M4	0.7	D3	3
T7405287	T7405288	M5	0.8	D3	3
T7405317	T7405318	M6	1.0	D3	3
T7405367	T7405368	M8	1.25	D3	3
T7405427	T7405428	M10	1.5	D4	3
T7405507	T7405508	M12	1.75	D4	3

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 204.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○						○

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○	○									

HSS

Being the best through innovation

PIPE TAPS

- Tapping NPT, NPTF, NPS & NPSF threads

SELECTION GUIDE

PIPE TAPS
Tapping NPT, NPTF, NPS & NPSF threads

INCH

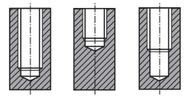
EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Thread Depth	Surface Treatment	Page
Q1/Q0/Q6		HSSE-V3	NPTF	VA	USCTI 311		2 ~ 3P	2.5D	Bright Steam Oxide Hardslick	187
Q9/R0/R1		HSSE-V3	NPTF	GG	USCTI 311		2 ~ 3P		Bright TiN Hardslick	188
R7/R8/R9/S0		HSSE-V3	NPTF	GG	USCTI 311		2 ~ 3P	2.0D	Bright TiN Hardslick Nitrided- Steam Oxide	189
S1/S2		HSSE-V3	NPTF	GG	USCTI 311		2 ~ 3P		Bright TiCN	190
T7L36/T6L36 T7536/T6536		HSS	NPS/NPSF	GS	USCTI 311		4 ~ 5P		Bright Steam Oxide	191
T7505/T6505/ TH505		HSS	NPT	GS	USCTI 311		2 ~ 3P		Bright Steam Oxide TiCN	192
T7546/T8546		HSS	NPTF	GS	USCTI 311		2 ~ 3P		Bright TiN	193

PIPE TAPS

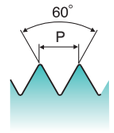
Q1/Q0/Q6 SERIES

TAPER PIPE TAPS : SPIRAL FLUTE for Steels & Stainless Steels

Hole type 2.5×D



USCTI



VA | HSSE-V3 | NPTF | USCTI 311 | 60° | 2P ~ 3P | Bright | Steam Oxide | Hardslick | R15

EDP No.			SIZE	Thread Per Inch	No. of Flute
Bright	Steam Oxide	Hardslick			
Q1020	Q0020	Q6020	1/16	27	4
Q1200	Q0200	Q6200	1/8(Lg.)	27	4
Q1210	Q0210	Q6210	1/8(Sm.)	27	4
Q1400	Q0400	Q6400	1/4	18	4
Q1480	Q0480	Q6480	3/8	18	4
Q1560	Q0560	Q6560	1/2	14	4
Q1700	Q0700	Q6700	3/4	14	4
Q1780	Q0780	Q6780	1	11-1/2	4
Q1860	Q0860	Q6860	1-1/4	11-1/2	5
Q1960	Q0960	Q6960	1-1/2	11-1/2	7
Q1D20	Q0D20	Q6D20	2	11-1/2	7

▶These Taps meet both NPT and NPTF Standards.
▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 202.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	◎	○		◎	○		

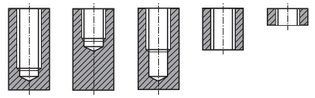
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

PIPE TAPS

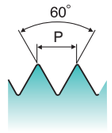
Q9/R0/R1 SERIES

TAPER PIPE TAPS : SPIRAL FLUTE
for Cast Irons & Steels

Hole type 2.5×D



USCTI



GG | HSSE-V3 | NPTF | USCTI 311 | 60° | 2P~3P | Bright | TiN | Hardslick | R15

EDP No.			SIZE	Thread Per Inch	No. of Flute
Bright	TiN	Hardslick			
Q9020	**R0020**	**R1020**	1/16	27	4
Q9200	**R0200**	**R1200**	1/8(Lg.)	27	4
Q9210	**R0210**	**R1210**	1/8(Sm.)	27	4
Q9400	**R0400**	**R1400**	1/4	18	4
Q9480	**R0480**	**R1480**	3/8	18	4
Q9560	**R0560**	**R1560**	1/2	14	4
Q9700	**R0700**	**R1700**	3/4	14	4
Q9780	**R0780**	**R1780**	1	11-1/2	4
Q9860	**R0860**	**R1860**	1-1/4	11-1/2	5
Q9960	**R0960**	**R1960**	1-1/2	11-1/2	7
Q9D20	**R0D20**	**R1D20**	2	11-1/2	7

▶These Taps meet both NPT and NPTF Standards.
▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 202.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○					

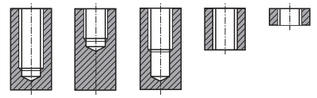
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
	◎	◎								

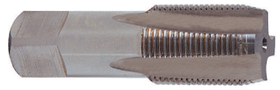
PIPE TAPS

R7/R8/R9/S0 SERIES

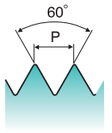
TAPER PIPE TAPS : STRAIGHT FLUTE
for Cast Irons & Steels

Hole type 2.0×D





USCTI



GG | HSSE-V3 | NPTF | USCTI 311 | 60° | 2P~3P | Bright | TiN | Hardslick | Nitrided Steam Oxide

EDP No.				SIZE	Thread Per Inch	No. of Flute
Bright	TiN	Hardslick	Nitrided Steam Oxide			
R7020	**R8020**	**R9020**	**S0020**	1/16	27	4
R7200	**R8200**	**R9200**	**S0200**	1/8(Lg.)	27	4
R7210	**R8210**	**R9210**	**S0210**	1/8(Sm.)	27	4
R7400	**R8400**	**R9400**	**S0400**	1/4	18	4
R7480	**R8480**	**R9480**	**S0480**	3/8	18	4
R7560	**R8560**	**R9560**	**S0560**	1/2	14	4
R7700	**R8700**	**R9700**	**S0700**	3/4	14	5
R7780	**R8780**	**R9780**	**S0780**	1	11-1/2	5
R7860	**R8860**	**R9860**	**S0860**	1-1/4	11-1/2	5
R7960	**R8960**	**R9960**	**S0960**	1-1/2	11-1/2	7
R7D20	**R8D20**	**R9D20**	**S0D20**	2	11-1/2	7

▶These Taps meet both NPT and NPTF Standards.
▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 202.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○					

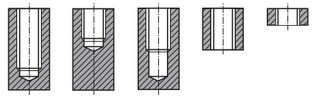
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
	◎	◎								

PIPE TAPS

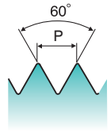
S1 / S2 SERIES

TAPER PIPE TAPS : STRAIGHT FLUTE INTERRUPTED THREAD for Cast Irons & Steels

Hole type 2.0×D



USCTI



GG | HSSE-V3 | NPTF | USCTI 311 | 60° | 2P~3P | Bright | TiCN

EDP No.		SIZE	Thread Per Inch	No. of Flute
Bright	TiCN			
S1020	S2020	1/16	27	5
S1200	S2200	1/8(Lg.)	27	5
S1210	S2210	1/8(Sm.)	27	5
S1400	S2400	1/4	18	5
S1480	S2480	3/8	18	5
S1560	S2560	1/2	14	5
S1700	S2700	3/4	14	5
S1780	S2780	1	11-1/2	5

▶These Taps meet both NPT and NPTF Standards.

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 202.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
◎	◎	○					

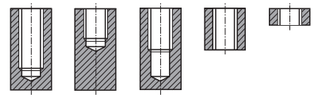
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
	◎	◎								

PIPE TAPS

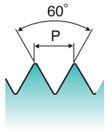
T7L36/T6L36 SERIES
T7536/T6536 SERIES

STRAIGHT PIPE TAPS for General Purpose

Hole type 2.0×D



USCTI



GS | HSS | NPS NPSF | USCTI 311 | 60° | 4P~5P | Bright | Steam Oxide

T7L36 / T6L36 Series (NPS)

EDP No.		SIZE	Thread Per Inch	No. of Flute
Bright	Steam Oxide			
T7L36200	T6L36200	1/8 (Lg.)	27	4
T7L36210	T6L36210	1/8 (Sm.)	27	4
T7L36400	T6L36400	1/4	18	4
T7L36480	T6L36480	3/8	18	4
T7L36560	T6L36560	1/2	14	4
T7L36700	T6L36700	3/4	14	5
T7L36780	T6L36780	1	11-1/2	5

T7536 / T6536 Series (NPSF)

EDP No.		SIZE	Thread Per Inch	No. of Flute
Bright	Steam Oxide			
T7536200	T6536200	1/8 (Lg.)	27	4
T7536210	T6536210	1/8 (Sm.)	27	4
T7536400	T6536400	1/4	18	4
T7536480	T6536480	3/8	18	4
T7536560	T6536560	1/2	14	4
T7536700	T6536700	3/4	14	5
T7536780	T6536780	1	11-1/2	5

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 202.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○						○

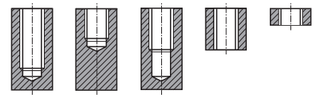
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○	○									

PIPE TAPS

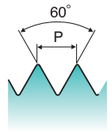
T7505/T6505/TH505 SERIES

TAPER PIPE TAPS INTERRUPTED THREAD for General Purpose

Hole type 2.0×D



USCTI



GS | HSS | NPT | USCTI 311 | 60° | 2P~3P | Bright | Steam Oxide | TiCN

EDP No.			SIZE	Thread Per Inch	No. of Flute
Bright	Steam Oxide	TiCN			
T7505200	T6505200	TH505200	1/8 (Lg.)	27	5
T7505210	T6505210	TH505210	1/8 (Sm.)	27	5
T7505400	T6505400	TH505400	1/4	18	5
T7505480	T6505480	TH505480	3/8	18	5
T7505560	T6505560	TH505560	1/2	14	5
T7505700	T6505700	TH505700	3/4	14	5
T7505780	T6505780	TH505780	1"	11-1/2	5

▶For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 202.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○						○

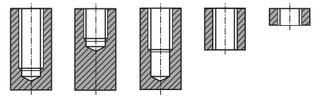
Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○	○									

PIPE TAPS

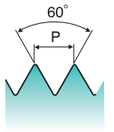
T7546/T8546 SERIES

TAPER PIPE TAPS 6″ EXTENSION

Hole type 2.0×D



USCTI



GS | HSS | NPTF | USCTI 311 | 60° | 2P~3P | Bright | TiN

EDP No.		SIZE	Threads Per Inch	Overall Length	Thread Length	Shank Diameter	No. of Flute
Bright	TiN			L	Lt	D	
T7546200	T8546200	1/8	27	6.0	3/4	.4375	4
T7546400	T8546400	1/4	18	6.0	1-1/16	.5625	4
T7546480	T8546480	3/8	18	6.0	1-1/16	.7000	4
T7546560	T8546560	1/2	14	6.0	1-3/8	.6875	4
T7546700	T8546700	3/4	14	6.0	1-3/8	.9063	5
T7546780	T8546780	1	11-1/2	6.0	1-3/4	1.1250	5

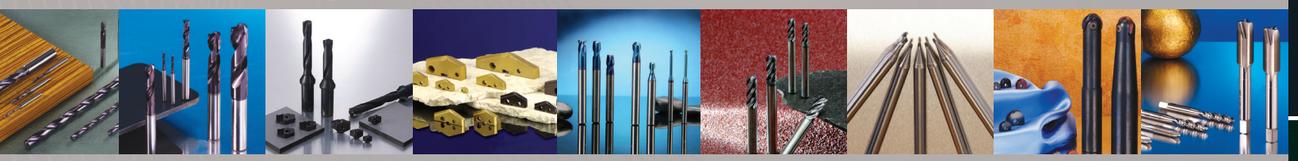
▶For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 199 & 200.

◎ : Excellent ○: Good

Low carbon steels/ Free machining carbon steels	Medium to high carbon steels/ Low alloyed steels	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steels	Heat-and corrosionresistant stainless steels / Valve stainless steels	Stainless steel castings / Precipitation hardening stainless steels	Pure Aluminum/ Aluminum alloys
○	○						○

Aluminum alloy castings	Grey cast iron	Nodular cast iron / Chilled cast iron / Meehanite iron / Ductile iron	718 & 625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○	○									

Global Cutting Tool Leader **YG-1**



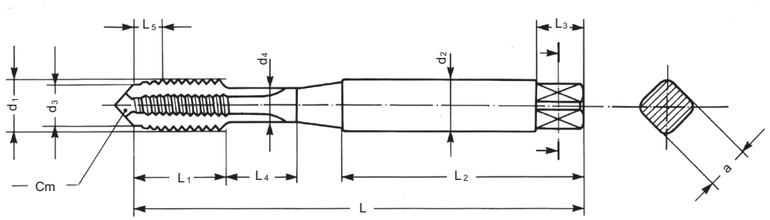
TAPS

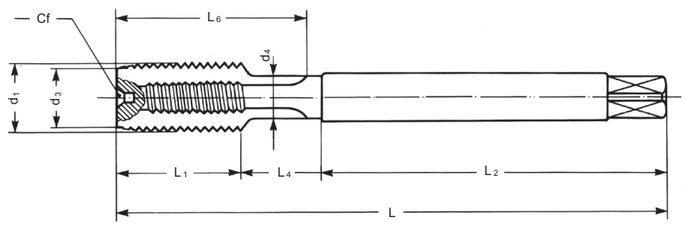
Being the best through innovation

TECHNICAL DATA

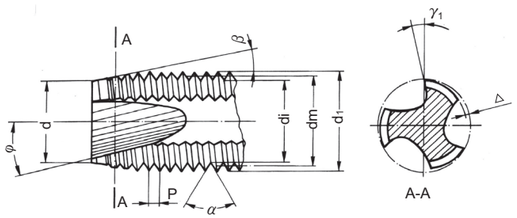
TECHNICAL DATA

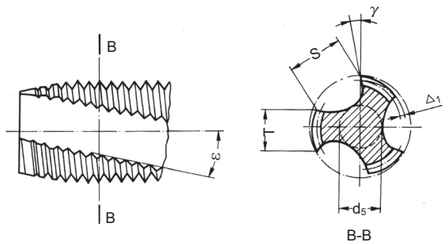
1 TAPS TERMINOLOGY





d_1	Major diameter
d_2	Shank diameter
d_3	Chamfer diameter
d_4	Neck diameter
L	Total length
L_1	Thread length
L_2	Shank length
L_3	Square length
L_4	Neck length
L_5	Chamfer length
L_6	Flutes length
a	Square size
Cm	Center male
Cf	Center female



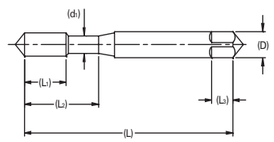


d_1	Major diameter
d_m	Flank diameter
d_i	Minor diameter
d_3	Chamfer diameter
P	Pitch
a	Flank angle
β	Chamfer angle
φ	Gun nose angle
γ	Gun nose rake angle in front
Δ	Chamfer relief
Δ_1	Pitch diameter relief on the land
γ	Rake angle
T	Width of land
S	Flute width
d_5	Web tickness
ε	Angle of spiral flute

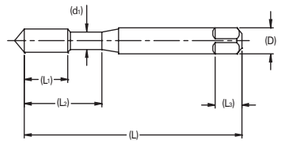
HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

TECHNICAL DATA

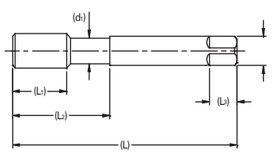
2 MODI TAP BLANK DIMENSION



Blank Design (1)



Blank Design (2)



Blank Design (3)

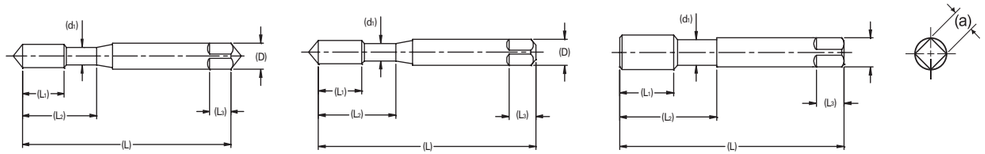
Unified Tap Blank

Nominal Size	Overall Length	Thread Length		Length to neck		Shank Diameter	Neck Diameter	Square Length	Square Size	Blank Design No.
		SF	SP	SF	SP					
	(L)	(L_1)		(L_2)		(D)	(d_1)	(L_3)	(a)	
#2	1.75	.157	.256	.689		.141	.061	.173	.110	1
#3	1.81	.197	.295	.563		.141	.069	.173	.110	1
#4	1.87	.236	.335	.563		.141	.077	.173	.110	1
#5	1.94	.236	.374	.626		.141	.090	.173	.110	1
#6	2.00	.276	.413	.689		.141	.094	.173	.110	1
#8	2.13	.276	.453	.752		.168	.120	.236	.131	1
#10-24	2.37	.354	.531	.906		.194	.131	.236	.152	1
#10-32		.276					.146			1
#12-24	2.37	.354	.571	.906		.220	.157	.268	.165	1
#12-28		.276					.166			2
1/4-20	2.52	.433	.591	1.000		.255	.180	.299	.191	2
1/4-28		.354					.200			2
5/16-18	2.74	.472	.669	1.126		.318	.234	.362	.238	2
5/16-24		.394					.254			2
3/8-16	2.97	.551	.748	1.252		.381	.287	.425	.286	2
3/8-24		.394					.316			3
7/16-14	3.16	.591	.866	1.850	1.437	.323	.311	.394	.242	3
7/16-20		.472								3
1/2-13	3.37	.630	.984	2.067	1.657	.367	.354	.425	.275	3
1/2-20		.472								3
9/16-12	3.59	.709	.984	2.067	1.657	.429	.417	.488	.322	3
9/16-18		.512								3
5/8-11	3.81	.748	1.083	2.205	1.811	.480	.469	.547	.360	3
5/8-18		.512								3
3/4-10	4.25	.827	1.201	2.480	2.000	.590	.577	.673	.442	3
3/4-10		.591								3
7/8-9	4.69	.827	1.339	2.815	2.220	.697	.685	.736	.523	3
7/8-14		.709								3
1"-8	5.13	.984	1.496	3.091	2.500	.800	.787	.799	.600	3
1"-12		.709								3
1"1/8-7	5.44	1.024	1.535	3.15	2.563	.896	.878	.88	.672	3
1"1/8-12		.787								3
1"1/4-7	5.75	1.024	1.535	3.15	2.563	1.021	1.002	1.00	.766	3
1"1/4-12		.787								3
1"3/8-6	6.06	1.181	1.791	3.583	3.000	1.108	1.088	1.06	.831	3
1"3/8-12		.866								3
1"1/2-6	6.38	1.181	1.791	3.583	3.000	1.233	1.212	1.13	.925	3
1"1/2-12		.866								3

*SF : Spiral Fluted Taps
*SP : Spiral Pointed Taps

TECHNICAL DATA

3 MODI TAP BLANK DIMENSION - METRIC



Blank Design (1) Blank Design (2) Blank Design (3)

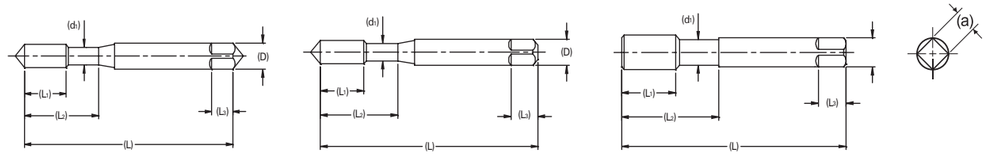
Metric Tap Blank

Nominal Size	Overall Length	Thread Length		Length to neck		Shank Diameter	Neck Diameter	Square Length	Square Size	Blank Design No.
		SF	SP	SF	SP					
	(L)	(L_1)		(L_2)		(D)	(d_1)	(L_3)	(a)	
M3	1.94	.197	.374	.646		.141	.090	.173	.110	1
M3.5	2.00	.276	.413	.646		.141	.104	.173	.110	1
M4	2.13	.276	.453	.768		.168	.119	.236	.131	1
M4.5	2.37	.354	.531	.933		.194	.135	.236	.152	1
M5	2.37	.354	.531	.933		.194	.152	.236	.152	1
M5.5	2.37	.354	.571	1.000		.220	.189	.268	.165	2
M6	2.52	.433	.591	1.000		.255	.181	.299	.191	2
M7	2.74	.433	.669	1.126		.318	.220	.362	.238	2
M8x 1.25	2.74	.472	.669	1.126		.318	.246	.362	.238	2
M8x 1.0		.433								2
M10x 1.5	2.97	.512	.748	1.252		.381	.310	.425	.286	2
M10x 1.25		.472								2
M12x 1.75	3.37	.591	.984	2.067	1.657	.367	.354	.425	.275	3
M12x 1.25		.551								3
M14x 2.0	3.59	.709	.984	2.067	1.657	.429	.417	.488	.322	3
M14x 1.5		.551								3
M16x 2.0	3.81	.709	1.083	2.205	1.811	.480	.469	.547	.360	3
M16x 1.5		.551								3
M18x 2.5	4.03	.787	1.083	2.205	1.811	.542	.530	.610	.406	3
M18x 1.5		.551								3
M20x 1.5	4.47	.551	1.201	2.48	2.000	.652	.64	.69	.489	3
M20x 2.5		.787								3
M22x 1.5	4.69	.551	1.339	2.815	2.220	.697	.685	.75	.523	3
M22x 2.5		.787								3
M24x 1.5	4.91	.551	1.339	2.815	2.220	.76	.748	.75	.57	3
M24x 3		.945								3
M27x 1.5	5.13	.591	1.496	3.091	2.500	.896	.878	.88	.672	3
M27x 3		.945								3
M30x 1.5	5.44	.591	1.713	3.15	2.854	1.021	1.002	1.00	.766	3
M30x 3.5		1.102								3

*SF : Spiral Fluted Taps
*SP : Spiral Pointed Taps

TECHNICAL DATA

4 HIGH PERFORMANCE TAPS DIN LENGTH / ANSI SHANK - INCH



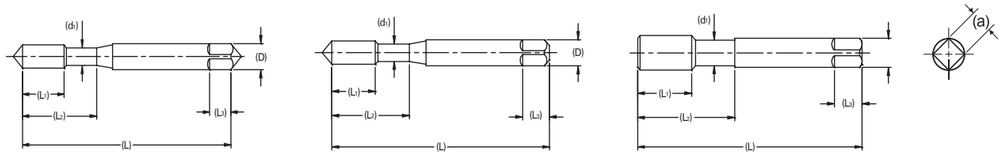
Blank Design (1) Blank Design (2) Blank Design (3)

Nominal Size	Overall Length	Thread Length		Length to neck		Shank Diameter	Neck Diameter	Square Length	Square Size	Blank Design No.
		SF	SP	SF	SP					
	(L)	(L_1)		(L_2)		(D)	(d_1)	(L_3)	(a)	
#4	2.205	.236	.335	.563		.141	.077	.173	.110	1
#5	2.205	.236	.374	.626		.141	.090	.173	.110	1
#6	2.205	.276	.413	.689		.141	.094	.173	.110	1
#8	2.480	.276	.453	.752		.168	.120	.236	.131	1
#10-24	2.756	.354	.531	.906		.194	.131	.236	.152	1
#10-32		.276					.146			1
#12-24	3.150	.354	.571	.906		.220	.157	.268	.165	1
#12-28		.276					.166			1
1/4-20	3.150	.433	.591	1.000		.255	.180	.299	.191	2
1/4-28		.354					.200			2
5/16-18	3.543	.472	.669	1.126		.318	.234	.362	.238	2
5/16-24		.394					.254			2
3/8-16	3.937	.551	.748	1.252		.381	.287	.425	.286	2
3/8-24		.394					.316			2
7/16-14	3.937	.591	.866	1.850	1.437	.323	.311	.394	.242	3
7/16-20		.472								3
1/2-13	4.331	.630	.984	2.067	1.657	.367	.354	.425	.275	3
1/2-20	3.937	.472								3
9/16-12	4.331	.709	.984	2.067	1.657	.429	.417	.488	.322	3
9/16-18	3.937	.512								3
5/8-11	4.331	.748	1.083	2.205	1.811	.480	.469	.547	.360	3
5/8-18	3.937	.512								3
3/4-10	4.921	.827	1.201	2.480	2.000	.590	.577	.673	.442	3
3/4-10	4.331	.591								3
7/8-9	5.512	.827	1.339	2.815	2.220	.697	.685	.736	.523	3
7/8-14	4.921	.709								3
1"-8	6.299	.984	1.496	3.091	2.500	.800	.787	.799	.600	3
1"-12	5.512	.709								3

*SF : Spiral Fluted Taps
*SP : Spiral Pointed Taps

TECHNICAL DATA

5 HIGH PERFORMANCE TAPS DIN LENGTH / ANSI SHANK - METRIC



Blank Design (1) Blank Design (2) Blank Design (3)

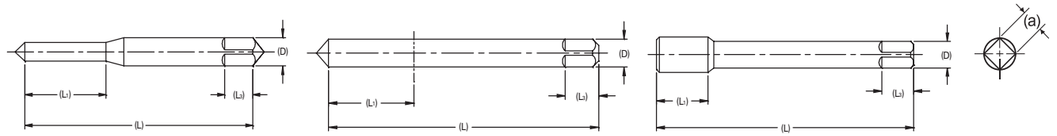
Nominal Size	Overall Length	Thread Length		Length to neck		Shank Diameter	Neck Diameter	Square Length	Square Size	Blank Design No.
		SF	SP	SF	SP					
	(L)	(L_1)		(L_2)		(D)	(d_1)	(L_3)	(a)	
M3	2.21	.197	.374	.646		.141	.090	.173	.110	1
M3.5	2.21	.276	.413	.646		.141	.104	.173	.110	1
M4	2.48	.276	.453	.768		.168	.119	.236	.131	1
M5	2.76	.354	.531	.933		.194	.152	.236	.152	1
M6	3.15	.433	.591	1.000		.255	.181	.299	.191	2
M8x 1.25	3.54	.472	.669	1.126		.318	.246	.362	.238	2
M8x 1.0		.433								2
M10x 1.5	3.94	.512	.748	1.252		.381	.310	.425	.286	2
M10x 1.25		.472								2
M12x 1.75	4.331	.591	.984	2.067	1.657	.367	.354	.425	.275	3
M12x 1.25	3.937	.551								3
M14x 2.0	4.331	.709	.984	2.067	1.657	.429	.417	.488	.322	3
M14x 1.5	3.937	.551								3
M16x 2.0	4.331	.709	1.083	2.205	1.811	.480	.469	.547	.360	3
M16x 1.5	3.937	.551								3
M18x 2.5	4.931	.787	1.083	2.205	1.811	.542	.530	.610	.406	3
M18x 1.5	4.331	.551								3

*SF : Spiral Fluted Taps
*SP : Spiral Pointed Taps

HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

TECHNICAL DATA

6 YG-1 USCTI 302 TAP BLANK DIMENSION



Blank Design (1) Blank Design (2) Blank Design (3)

Unified Tap Blank (Inch)

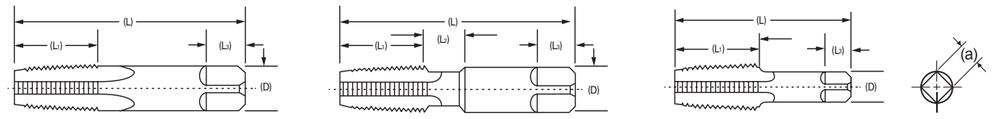
Nominal Size	Overall Length	Thread Length	Shank Diameter	Square Length	Square Size	Blank Design No.
	(L)	(L_1)	(D)	(L_3)	(a)	
#0	1.63	.315	.141	.173	.110	1
#1	1.69	.374	.141	.173	.110	1
#2	1.75	.433	.141	.173	.110	1
#3	1.81	.492	.141	.173	.110	1
#4	1.87	.563	.141	.173	.110	1
#5	1.94	.626	.141	.173	.110	1
#6	2.00	.689	.141	.173	.110	1
#8	2.13	.752	.168	.236	.131	1
#10	2.37	.906	.194	.236	.152	1
#12	2.37	.906	.220	.268	.165	1
1/4	2.50	1.000	.255	.299	.191	2
5/16	2.72	1.126	.318	.362	.238	2
3/8	2.94	1.252	.381	.425	.286	2
7/16	3.16	1.437	.323	.394	.242	3
1/2	3.37	1.657	.367	.425	.275	3
9/16	3.59	1.657	.429	.488	.322	3
5/8	3.81	1.811	.480	.547	.360	3
11/16	4.03	1.811	.542	.610	.406	3
3/4	4.25	2.000	.590	.673	.442	3
13/16	4.47	2.000	.652	.673	.489	3
7/8	4.69	2.220	.697	.736	.523	3
15/16	4.91	2.220	.760	.736	.570	3
1"	5.13	2.500	.800	.799	.600	3

Unified Tap Blank (Metric)

Nominal Size	Overall Length	Thread Length	Shank Diameter	Square Length	Square Size	Blank Design No.
	(L)	(L_1)	(D)	(L_3)	(a)	
M1.6	1.63	.310	.141	.173	.110	1
M1.8	1.69	.380	.141	.173	.110	1
M2	1.75	.440	.141	.173	.110	1
M2.5	1.81	.500	.141	.173	.110	1
M3	1.94	.630	.141	.173	.110	1
M3.5	2.00	.690	.141	.173	.110	1
M4	2.13	.750	.168	.236	.131	1
M4.5	2.38	.880	.194	.236	.152	1
M5	2.38	.880	.194	.236	.165	1
M6	2.50	1.000	.255	.299	.191	2
M7	2.72	1.130	.318	.362	.238	2
M8	2.72	1.130	.318	.362	.238	2
M10	2.94	1.250	.381	.425	.286	2
M12	3.38	1.660	.367	.425	.275	3
M14	3.59	1.660	.429	.488	.322	3
M16	3.81	1.810	.480	.547	.360	3
M18	4.03	1.810	.542	.610	.406	3
M20	4.47	2.000	.652	.673	.489	3
M22	4.69	2.220	.697	.736	.523	3
M24	4.91	2.220	.760	.736	.570	3

TECHNICAL DATA

7 STANDARD PIPE TAP DIMENSION (STRAIGHT AND TAPER, GROUND THREAD)



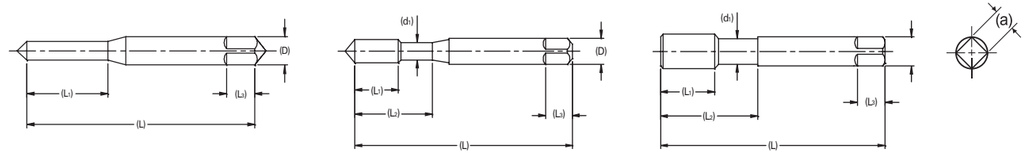
Blank Design (1) Blank Design (2) Blank Design (3)

Nominal Size	Overall Length (L)	Thread Length (L_1)	Shank Diameter (D)	Square Length (L_3)	Square Size (a)	Optional Neck Length (L_2)
1/16	2.13	.69	.3125	.38	.234	.375
1/8	2.13	.75	.3125	.38	.234	...
1/8	2.13	.75	.4375	.38	.328	.375
1/4	2.44	1.06	.5625	.44	.421	.375
3/8	2.56	1.06	.7000	.50	.531	.375
1/2	3.13	1.38	.6875	.63	.515	...
3/4	3.25	1.38	.9063	.69	.679	...
1"	3.75	1.75	1.1250	.81	.843	...
1-1/4	4.00	1.75	1.3125	.94	.984	...
1-1/2	4.25	1.75	1.5000	1.00	1.125	...
2"	4.25	1.75	1.8750	1.13	1.406	...
2-1/2	5.50	2.56	2.2500	1.25	1.687	...
3"	6.00	2.63	2.6250	1.38	1.968	...
3-1/2	6.50	2.69	2.8125	1.50	2.108	...
4"	6.75	2.75	3.0000	1.56	2.250	...

HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

TECHNICAL DATA

8 STANDARD FORMING TAP DIMENSION



Blank Design (1) Blank Design (2) Blank Design (3)

Forming TaP Blank (Inch)

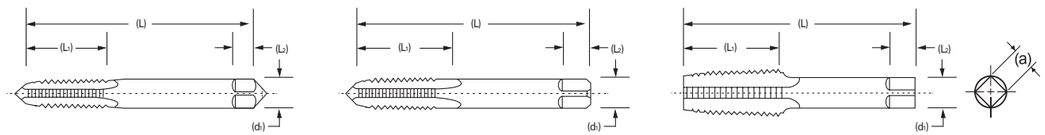
Nominal Size	Overall Length (L)	Thread Length (L_1)	Neck Length (L_2)	Shank Diameter (D)	Square Length (L_3)	Square Size (a)	Blank Design No.
#0	1.63	.31	–	.141	.19	.110	1
#1	1.69	.38	–	.141	.19	.110	1
#2	1.75	.44	–	.141	.19	.110	1
#3	1.81	.50	–	.141	.19	.110	1
#4	1.87	.56	–	.141	.19	.110	1
#5	1.94	.63	–	.141	.19	.110	1
#6	2.00	.48	.69	.141	.19	.110	1
#8	2.13	.50	.75	.168	.25	.131	1
#10	2.38	.63	.88	.194	.25	.152	1
#12	2.38	.63	.94	.220	.28	.165	1
1/4	2.50	.86	1.0	.255	.31	.191	2
5/16	2.72	.93	1.13	.318	.38	.238	2
3/8	2.94	.98	1.25	.381	.44	.286	2
7/16	3.16	.95	1.44	.323	.41	.242	3
1/2	3.38	1.0	1.60	.367	.44	.275	3
9/16	3.59	1.0	1.66	.429	.50	.322	3
5/8	3.81	1.0	1.81	.480	.56	.360	3
3/4	4.25	1.0	2.0	.590	.69	.442	3

Forming TaP Blank (Metric)

Nominal Size	Overall Length (L)	Thread Length (L_1)	Neck Length (L_2)	Shank Diameter (D)	Square Length (L_3)	Square Size (a)	Blank Design No.
M2	1.75	.40	–	.141	.19	.110	1
M3	1.94	.630	–	.141	.19	.110	1
M4	2.13	.50	.75	.168	.25	.131	1
M5	2.38	.63	.88	.194	.25	.152	1
M6	2.50	.86	1.0	.255	.31	.191	2
M8	2.72	.93	1.13	.318	.38	.238	2
M10	2.94	.98	1.25	.381	.44	.286	2
M12	3.38	1.0	1.60	.367	.44	.275	3

TECHNICAL DATA

9 STI STRAIGHT TAP DIMENSION



Blank Design (1) Blank Design (2) Blank Design (3)

STI Tap blank (Inch)

Nominal Size (STI)	Threads per Inch		Overall Length	Thread Length	Shank Diameter	Square Length	Square Size	Blank Design No.	Table 302 Blank Equivalent
	UNC	UNF	(L)	(L_2)	(D)	(L_3)	(a)		
2	56	–	1.880	.560	.141	.190	.110	1	No.4
2		64	1.880	.560	.141	.190	.110	1	No.4
3	48	–	1.940	.630	.141	.190	.110	1	No.5
3		56	1.940	.630	.141	.190	.110	1	No.5
4	40	–	2.000	.690	.141	.190	.110	1	No.6
4		48	2.000	.690	.141	.190	.110	1	No.6
5	40	–	2.130	.750	.168	.250	.131	1	No.8
6	32	–	2.380	.880	.194	.250	.152	1	No.10
6		40	2.130	.750	.168	.250	.131	1	No.8
8	32	–	2.380	.940	.220	.280	.165	1	No.12
8		36	2.380	.940	.220	.280	.165	1	No.12
10	24	–	2.500	1.000	.255	.310	.191	2	1/4
10		32	2.500	1.000	.255	.310	.191	2	1/4
12	24	–	2.720	1.130	.318	.380	.238	2	5/16
1/4	20	–	2.720	1.130	.318	.380	.238	2	5/16
1/4		28	2.720	1.130	.318	.380	.238	2	5/16
5/16	18	–	2.940	1.250	.381	.440	.286	2	3/8
5/16		24	2.940	1.250	.381	.440	.286	2	3/8
3/8	16	–	3.380	1.660	.367	.440	.275	3	1/2
3/8		24	3.160	1.440	.323	.410	.242	3	7/16
7/16	14	–	3.590	1.660	.429	.500	.322	3	9/16
7/16		20	3.380	1.660	.367	.440	.275	3	1/2
1/2	13	–	3.810	1.810	.480	.560	.360	3	5/8
1/2		20	3.590	1.660	.429	.500	.322	3	9/16

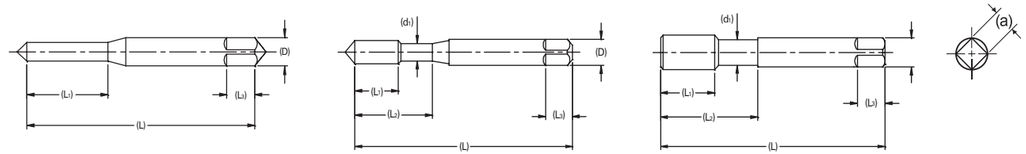
STI Tap blank (Metric)

Nominal Size (STI)	Thread Pitch (mm)	Overall Length	Thread Length	Shank Diameter	Square Length	Square Size	Blank Design No.	Table 302 Blank Equivalent
		(L)	(L_2)	(D)	(L_3)	(a)		
M2	0.4	1.81	.50	.141	.190	.110	1	
M2.5	0.45	1.940	.630	.141	.190	.110	1	No.5
M3	0.5	2.000	.690	.141	.190	.110	1	No.6
M4	0.7	2.380	.880	.194	.250	.152	1	No.10
M5	0.8	2.500	1.000	.255	.310	.191	2	1/4
M6	1	2.720	1.130	.318	.380	.238	2	5/16
M8	1.25	2.940	1.250	.381	.440	.286	2	3/8
M10	1.5	3.380	1.660	.367	.440	.275	3	1/2
M12	1.75	3.590	1.660	.429	.500	.322	3	9/16

HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

TECHNICAL DATA

10 STI SPIRAL FLUTE & SPIRAL POINT TAP DIMENSION



Blank Design (1) Blank Design (2) Blank Design (3)

STI Tap blank (Inch)

Nominal Size (STI)	Threads per Inch		Overall Length	Thread Length		Neck Length	Shank Diameter	Square Length	Square Size	Blank Design No.	Table 302 Blank Equivalent
	UNC	UNF	(L)	SP	SF	(L_2)	(D)	(L_3)	(a)		
2	56	–	1.880	.335	.236	.56	.141	.190	.110	1	No.4
2		64	1.880	.335	.236	.56	.141	.190	.110	1	No.4
3	48	–	1.940	.374	.236	.63	.141	.190	.110	1	No.5
3		56	1.940	.374	.236	.63	.141	.190	.110	1	No.5
4	40	–	2.000	.413	.276	.68	.141	.190	.110	1	No.6
4		48	2.000	.413	.276	.68	.141	.190	.110	1	No.6
5	40	–	2.130	.453	.276	.75	.168	.250	.131	1	No.8
6	32	–	2.380	.531	.354	.88	.194	.250	.152	1	No.10
6		40	2.130	.453	.276	.75	.168	.250	.131	1	No.8
8	32	–	2.380	.571	.354	.94	.220	.280	.165	1	No.12
8		36	2.380	.571	.354	.94	.220	.280	.165	1	No.12
10	24	–	2.500	.591	.433	1.0	.255	.310	.191	2	1/4
10		32	2.500	.591	.433	1.0	.255	.310	.191	2	1/4
12	24	–	2.720	.669	.472	1.13	.318	.380	.238	2	5/16
1/4	20	–	2.720	.669	.472	1.13	.318	.380	.238	2	5/16
1/4		28	2.720	.669	.472	1.13	.318	.380	.238	2	5/16
5/16	18	–	2.940	.748	.551	1.25	.381	.440	.286	2	3/8
5/16		24	2.940	.748	.551	1.25	.381	.440	.286	2	3/8
3/8	16	–	3.380	.984	.630	1.66	.367	.440	.275	3	1/2
3/8		24	3.160	.866	.591	1.44	.323	.410	.242	3	7/16
7/16	14	–	3.590	.984	.709	1.66	.429	.500	.322	3	9/16
7/16		20	3.380	.984	.984	1.66	.367	.440	.275	3	1/2
1/2	13	–	3.810	1.083	.748	1.81	.480	.560	.360	3	5/8
1/2		20	3.590	.984	.709	1.66	.429	.500	.322	3	9/16

STI Tap blank (Metric)

Nominal Size (STI)	Thread Pitch (mm)	Overall Length	Thread Length		Neck Length	Shank Diameter	Square Length	Square Size	Blank Design No.	Table 302 Blank Equivalent
		(L)	SP	SF	(L_2)	(D)	(L_3)	(a)		
M2	0.4	1.81	.295	.236	.56	.141	.190	.110	1	
M2.5	0.45	1.940	.374	.197	.63	.141	.190	.110	1	No.5
M3	0.5	2.000	.413	.276	.69	.141	.190	.110	1	No.6
M4	0.7	2.380	.531	.354	.93	.194	.250	.152	1	No.10
M5	0.8	2.500	.591	.433	1.0	.255	.310	.191	2	1/4
M6	1	2.720	.669	.433	1.13	.318	.380	.238	2	5/16
M8	1.25	2.940	.748	.512	1.25	.381	.440	.286	2	3/8
M10	1.5	3.380	.984	.591	2.07	.367	.440	.275	3	1/2
M12	1.75	3.590	.984	.709	2.07	.429	.500	.322	3	9/16

TECHNICAL DATA

11 TAP RECOMMENDATIONS FOR CLASSES OF THREAD - INCH

Internal Screw Thread Classes and Tap Recommendations

Size	Threads per Inch		Recommended Tap for Class of Thread				Pitch Diameter Limits for Class of Thread				
	UNC	UNF	Unified Class of Thread		American National Class of Thread		Min. All Class (Basic)	Unified Class of Thread		American National Class of Thread	
			Class 2	Class 3	Class 2B	Class 3B		Max. Class 2	Max. Class 3	Max. Class 2B	Max. Class 3B
0	–	80	GH1	GH1	GH2	GH1	.0519	.0536	.0532	.0542	.0536
1	64	–	GH1	GH1	GH2	GH1	.0629	.0648	.0643	.0655	.0648
1	–	72	GH1	GH1	GH2	GH1	.0640	.0658	.0653	.0665	.0659
2	56	–	GH1	GH1	GH2	GH1	.0744	.0764	.0759	.0772	.0765
2	–	64	GH1	GH1	GH2	GH1	.0759	.0778	.0773	.0786	.0779
3	48	–	GH1	GH1	GH2	GH1	.0855	.0877	.0871	.0885	.0877
3	–	56	GH1	GH1	GH2	GH1	.0874	.0894	.8890	.0902	.0895
4	40	–	GH2	GH1	GH2	GH2	.0958	.0982	.0975	.0991	.0982
4	–	48	GH1	GH1	GH2	GH1	.0985	.1007	.1001	.1016	.1008
5	40	–	GH2	GH1	GH2	GH2	.1088	.1112	.1105	.1121	.1113
5	–	44	GH1	GH1	GH2	GH1	.1102	.1125	.1118	.1134	.1126
6	32	–	GH2	GH1	GH3	GH2	.1177	.1204	.1196	.1214	.1204
6	–	40	GH2	GH1	GH2	GH2	.1218	.1242	.1235	.1252	.1243
8	32	–	GH2	GH1	GH3	GH2	.1437	.1464	.1456	.1475	.1465
8	–	36	GH2	GH1	GH2	GH2	.1460	.1485	.1478	.1496	.1487
10	24	–	GH3	GH1	GH3	GH3	.1629	.1662	.1653	.1672	.1661
10	–	32	GH2	GH1	GH3	GH2	.1697	.1724	.1716	.1736	.1726
12	24	–	GH3	GH1	GH3	GH3	.1889	.1922	.1913	.1933	.1922
12	–	28	GH3	GH1	GH3	GH3	.1928	.1959	.1950	.1970	.1959
1/4	20	–	GH3	GH2	GH5	GH3	.2175	.2211	.2201	.2223	.2211
1/4	–	28	GH3	GH1	GH4	GH3	.2268	.2299	.2290	.2311	.2300
5/16	18	–	GH3	GH2	GH5	GH3	.2764	.2805	.2794	.2817	.2803
5/16	—	24	GH3	GH1	GH4	GH3	.2854	.2887	.2878	.2902	.2890
3/8	16	–	GH3	GH2	GH5	GH3	.3344	.3389	.3376	.3401	.3387
3/8	–	24	GH3	GH1	GH4	GH3	.3479	.3512	.3503	.3528	.3516
7/16	14	–	GH5	GH3	GH5	GH3	.3911	.3960	.3947	.3972	.3957
7/16	–	20	GH3	GH1	GH5	GH3	.4050	.4086	.4076	.4104	.4091
1/2	13	–	GH5	GH3	GH5	GH3	.4500	.4552	.4537	.4565	.4548
1/2	–	20	GH3	GH1	GH5	GH3	.4675	.4711	.4701	.4731	.4717
9/16	12	–	GH5	GH3	GH5	GH3	.5084	.5140	.5124	.5152	.5135
9/16	–	18	GH3	GH2	GH5	GH3	.5264	.5305	.5294	.5323	.5308
5/8	11	–	GH5	GH3	GH5	GH3	.5660	.5719	.5702	.5732	.5714
5/8	–	18	GH3	GH2	GH5	GH3	.5889	.5930	.5919	.5949	.5934
3/4	10	–	GH5	GH3	GH5	GH3	.6850	.6914	.6895	.6927	.6907
3/4	–	16	GH3	GH2	GH5	GH3	.7094	.7139	.7126	.7159	.7143
7/8	9	–	GH6	GH4	GH6	GH4	.8028	.8098	.8077	.8110	.8089
7/8	–	14	GH4	GH2	GH6	GH4	.8286	.8335	.8322	.8356	.8339
1	8	–	GH6	GH4	GH6	GH4	.9188	.9264	.9242	.9276	.9254
1	–	12	GH4	GH2	GH6	GH4	.9459	.9515	.9499	.9535	.9516

The above recommended taps normally produce the Class of Thread indicated in average materials when used with reasonable care. However, if the tap specified does not give a satisfactory gage fit in the work, a choice of some other limit tap will be necessary.

TECHNICAL DATA

12 TAP RECOMMENDATIONS FOR CLASSES OF THREAD - METRIC

Size	Pitch	Recommended Tap for Class of Thread		Pitch Diameter Limits for Class of Thread (mm)			Pitch Diameter Limits for Class of Thread (inch)		
		4H	6H	Min. (Basic)	Max. 4H	Max. 6H	Min. (Basic)	Max. 4H	Max. 6H
M1.6	0.35	D1	D3	1.373	1.426	1.458	.05406	.05614	.05740
M2	0.40	D1	D3	1.740	1.796	1.830	.06850	.07071	.07205
M2.5	0.45	D1	D3	2.208	2.268	2.303	.08693	.08929	.09067
M3	0.50	D1	D3	2.675	2.738	2.775	.10531	.10780	.10925
M3.5	0.60	D1	D4	3.110	3.181	3.222	.12244	.12524	.12685
M4	0.70	D2	D4	3.545	3.620	3.663	.13957	.14252	.14421
M4.5	0.75	D2	D4	4.013	4.088	4.131	.15789	.16094	.16264
M5	0.80	D2	D4	4.480	4.560	4.605	.17638	.17953	.18130
M6	1.00	D3	D5	5.350	5.445	5.500	.21063	.21437	.21654
M7	1.00	D3	D5	6.350	6.445	6.500	.25000	.25374	.25591
M8	1.25	D3	D5	7.188	7.288	7.348	.28299	.28693	.28929
M10	1.50	D3	D6	9.026	9.138	9.206	.35535	.35976	.36244
M12	1.75	D3	D6	10.863	10.988	11.063	.42768	.43260	.43555
M14	2.00	D3	D7	12.701	12.833	12.913	.50004	.50524	.50839
M16	2.00	D4	D7	14.701	14.833	14.913	.57878	.58398	.58713
M20	2.50	D4	D7	18.376	18.516	18.600	.72346	.72898	.73228
M24	3.00	D4	D8	22.051	22.221	22.316	.86815	.87484	.87858
M30	3.50	D5	D9	27.727	27.907	28.007	1.09161	1.0987	1.10264
M36	4.00	D5	D9	33.402	33.592	33.702	1.31504	1.32252	1.32685

13 TOLERANCE CHART - USCTI

Element	Nominal Diameter Range in Inches		Direction	Tolerance (Inches)
	Over	To (Inc.)		
Overall Length - L	.0520	1.0100	Plus or Minus	.031
	1.0100	4.0100	Plus or Minus	.063
Thread Length - L1	.0520	.2230	Plus or Minus	.047
	.2230	.5100	Plus or Minus	.063
	.5100	1.5100	Plus or Minus	.094
	1.5100	4.0100	Plus or Minus	.125
Square Length - L3	.0520	1.0100	Plus or Minus	.031
	1.0100	4.0100	Plus or Minus	.063
Shank Diameter - D	.0520	.2230	Minus	.0015
	.2230	.6350	Minus	.0015
	.6350	1.0100	Minus	.0020
	1.0100	1.5100	Minus	.0020
	1.5100	2.0100	Minus	.0030
	2.0100	4.0100	Minus	.0030
Square Size - a	.0520	.5100	Minus	.004
	.5100	1.0100	Minus	.006
	1.0100	2.0100	Minus	.008
	2.0100	4.0100	Minus	.010

TECHNICAL DATA

THREAD LIMITS

Unified Thread, Machine Screw Size - Ground Thread

Size	Thread per Inch			Major Diameter (Inches)			Pitch Diameter Limits (Inches)								
							Basic Pitch Dia.	H1 Limit		H2 Limit		H3 Limit		H7 Limit	
	UNC	UNF	UNS	Basic	Min.	Max.		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
0	–	80	–	.0600	.0605	.0615	.0519	.0519	.0524	.0524	.0529	–	–	–	–
1	64	–	–	.0730	.0735	.0745	.0629	.0629	.0634	.0634	.0639	–	–	–	–
	–	72	–	.0730	.0735	.0745	.0640	.0640	.0645	.0645	.0650	–	–	–	–
2	56	–	–	.0860	.0865	.0875	.0744	.0744	.0749	.0749	.0754	–	–	–	–
	–	64	–	.0860	.0865	.0875	.0759	–	–	.0764	.0769	–	–	–	–
3	48	–	–	.0990	.0100	.1010	.0855	.0855	.0860	.0860	.0865	–	–	–	–
	–	56	–	.0990	.0995	.1005	.0874	.0874	.0879	.0879	.0884	–	–	–	–
4	–	–	36	.1120	.1135	.1145	.0940	–	–	.0945	.0950	–	–	–	–
	40	–	–	.1120	.1135	.1145	.0958	.0958	.0963	.0963	.0968	–	–	–	–
	–	48	–	.1120	.1130	.1140	.0985	.0985	.0990	.0990	.0995	–	–	–	–
5	40	–	–	.1250	.1265	.1275	.1088	.1088	.1093	.1093	.1098	–	–	–	–
	–	44	–	.1250	.1260	.1270	.1102	–	–	.1107	.1112	–	–	–	–
6	32	–	–	.1380	.1400	.1410	.1177	.1177	.1182	.1182	.1187	.1187	.1192	.1207	.1212
	–	40	–	.1380	.1395	.1405	.1218	.1218	.1223	.1223	.1228	—	—	—	—
8	32	–	–	.1640	.1660	.1670	.1437	.1437	.1442	.1442	.1447	.1447	.1452	.1467	.1472
	–	36	–	.1640	.1655	.1665	.1460	–	–	.1465	.1470	—	—	—	—
10	24	–	–	.1900	.1930	.1940	.1629	.1629	.1634	.1634	.1639	.1639	.1644	.1659	.1664
	–	32	–	.1900	.1920	.1930	.1697	.1697	.1702	.1702	.1707	.1707	.1712	.1727	.1732
12	24	–	–	.2160	.2190	.2200	.1889	–	–	–	–	.1899	.1904	–	–
	–	28	–	.2160	.2185	.2195	.1928	–	–	–	–	.1938	.1943	–	–

Lead Tolerance

A maximum lead deviation of plus or minus .0005" within any two threads not farther apart than 1" is permitted

Pitch Diameter Limits

H1 = Basic to basic plus .0005"
H2 = Basic plus .0005" to basic plus .001"
H3 = Basic plus .001" to basic plus .0015"
H7 = Basic plus .003" to basic plus .0035"

Angle Tolerance

24 to 80 threads per inch incl. = 30 plus or minus in 1/2 angle.

HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

TECHNICAL DATA

Unified Thread, Machine Screw Size - Ground Thread

Size	Thread per Inch			Major Diameter (Inches)			Pitch Diameter Limits (Inches)												
							Basic Pitch Dia.	H1 Limit		H2 Limit		H3 Limit		H4 Limit		H5 Limit		H6 Limit	
	UNC	UNF	UNS	Basic	Min.	Max.		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1/4	20	–	–	.2500	.2540	.2550	.2175	.2175	.2180	.2180	.2185	.2185	.2190	–	–	.2195	.2200	–	–
	–	28	–	.2500	.2525	.2535	.2268	.2268	.2273	.2273	.2278	.2278	.2283	.2283	.2288	–	–	–	–
5/16	18	–	–	.3125	.3170	.3180	.2764	.2764	.2769	.2769	.2774	.2774	.2779	–	–	.2784	.2789	–	–
	–	24	–	.3125	.3155	.3165	.2854	.2854	.2859	.2859	.2864	.2864	.2869	.2869	.2874	–	–	–	–
3/8	16	–	–	.3750	.3800	.3810	.3344	.3344	.3349	.3349	.3354	.3354	.3359	–	–	.3364	.3369	–	–
	–	24	–	.3750	.3780	.3790	.3479	.3479	.3484	.3484	.3489	.3489	.3494	.3494	.3499	–	–	–	–
7/16	14	–	–	.4375	.4435	.4445	.3911	–	–	.3916	.3921	.3921	.3926	–	–	.3931	.3936	–	–
	–	20	–	.4375	.4415	.4425	.4050	–	–	–	–	.4060	.4065	–	–	.4070	.4075	–	–
1/2	13	–	–	.5000	.5065	.5075	.4500	.4500	.4505	.4505	.4510	.4510	.4515	–	–	.4520	.4525	–	–
	–	20	–	.5000	.5040	.5050	.4675	.4675	.4680	.4680	.4685	.4685	.4690	–	–	.4695	.4700	–	–
9/16	12	–	–	.5625	.5690	.5700	.5084	–	–	.5089	.5094	.5094	.5099	–	–	.5104	.5109	–	–
	–	18	–	.5625	.5670	.5680	.5264	–	–	.5269	.5274	.5274	.5279	–	–	.5284	.5289	–	–
5/8	11	–	–	.6250	.6320	.6330	.5660	–	–	.5665	.5670	.5670	.5675	–	–	.5680	.5685	–	–
	–	18	–	.6250	.6295	.6305	.5889	–	–	.5894	.5899	.5899	.5904	–	–	.5909	.5914	–	–
11/16	–	–	11	.6875	.6945	.6955	.6285	–	–	–	–	.6295	.6300	–	–	–	–	–	–
	–	–	16	.6875	.6925	.6935	.6469	–	–	.6855	.6860	.6479	.6484	–	–	–	–	–	–
3/4	10	–	–	.7500	.7525	.7590	.6850	.6850	.6855	.7099	.7104	.6860	.6865	–	–	.6870	.6875	–	–
	–	16	–	.7500	.7550	.7560	.7094	.7094	.7099	–	–	.7104	.7109	–	–	.7114	.7119	.8053	–
7/8	9	–	–	.8750	.8835	.8850	.8028	–	–	.8291	.8296	–	–	.8043	.8048	–	–	.8311	.8058
	–	14	–	.8750	.8810	.8820	.8286	–	–	.9193	.9198	–	–	.8301	.8306	–	–	.9213	.8318
1"	8	–	–	1.0000	1.0095	1.0110	.9188	–	–	–	–	–	–	.9203	.9208	–	–	–	.9218
	–	12	–	1.0000	1.0065	1.0075	.9459	–	–	–	–	–	–	.9474	.9479	–	–	–	–
	–	–	14	1.0000	1.0060	1.0070	.9536	–	–			–	–	.9551	.9556	–	–		–

Lead Tolerance

A maximum lead deviation of plus or minus .0005" within any two threads not farther apart than 1" is permitted

Pitch Diameter Limits

H1 = Basic to basic plus .0005"
H2 = Basic plus .0005" to basic plus .001"
H3 = Basic plus .001" to basic plus .0015"
H4 = Basic plus .0015" to basic plus .0020"
H5 = Basic plus .0020" to basic plus .0025"
H6 = Basic plus .0025" to basic plus .0030"

Angle Tolerance

Threads per Inch	Deviation in Half Angle
6 to 9 Incl. 10 to 28 Incl.	25' Plus or Minus 30' Plus or Minus

TECHNICAL DATA

Metric Thread - Ground Thread

Size	Pitch		Major Diameter (Inches)			Pitch Diameter Limits (Inches)										
						Basic Pitch Dia.	D2 Limit		D3 Limit		D4 Limit		D5 Limit		D6 Limit	
	Coarse	Fine	Basic	Min.	Max.		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
M2	0.4	–	.0787	.0801	.0811	.0685	.0690	.0696	.0695	.0701	.0700	.0706	–	–	–	–
M2.2	0.45	–	.0866	.0881	.0891	.0751	.0756	.0762	.0761	.0767	.0766	.0772	–	–	–	–
M2.3	0.4	–	.0906	.0919	.0929	.0803	.0808	.0814	.0813	.0819	.0818	.0824	–	–	–	–
M2.6	0.45	–	.1024	.1038	.1048	.0909	.0913	.0919	.0918	.0924	.0923	.0929	–	–	–	–
M3	0.5	–	.1181	.1198	.1208	.1053	.1058	.1064	.1063	.1069	.1068	.1074	.1073	.1079	–	–
	–	0.35	.1181	.1193	.1203	.1092	.1096	.1102	.1101	.1107	.1106	.1112	.1111	.1117	–	–
M3.5	0.6	–	.1378	.1397	.1407	.1225	.1227	.1235	.1232	.1240	.1237	.1245	.1242	.1250	–	–
	–	0.35	.1378	.1389	.1399	.1289	.1293	.1299	.1298	.1304	.1303	.1309	.1308	.1314	–	–
M4	0.7	—	.1575	.1597	.1613	.1396	.1398	.1406	.1403	.1411	.1408	.1416	.1413	.1421	–	–
	–	0.5	.1575	.1591	.1601	.1447	.1451	.1457	.1456	.1462	.1461	.1467	.1466	.1472	–	–
M5	0.8	–	.1969	.1994	.2010	.1764	.1766	.1774	.1771	.1779	.1776	.1784	.1781	.1789	–	–
	–	0.5	.1969	.1985	.1995	.1841	.1845	.1851	.1850	.1856	.1855	.1861	.1861	.1866	–	–
M6	1	—	.2362	.2395	.2411	.2106	.2107	.2117	.2112	.2122	.2117	.2127	.2122	.2132	.2127	.2137
	–	0.75	.2362	.2387	.2403	.2170	.2173	.2181	.2178	.2186	.2183	.2191	.2188	.2196	.2193	.2201
M7	1	–	.2756	.2788	.2804	.2500	.2501	.2511	.2506	.2516	.2511	.2521	.2516	.2526	.2521	.2531
	–	0.75	.2756	.2780	.2796	.2564	.2565	.2575	.2570	.2580	.2575	.2585	.2580	.2590	.2585	.2595
M8	1.25	–	.3150	.3189	.3214	.2830	.2828	.2840	.2833	.2845	.2838	.2850	.2843	.2855	.2848	.2860
	–	1	.3150	.3182	.3198	.2894	.2894	.2904	.2899	.2909	.2904	.2914	.2909	.2919	.2914	.2924
M10	1.5	–	.3937	.3984	.4009	.3553	.3552	.3564	.3557	.3569	.3562	.3574	.3567	.3579	.3572	.3584
	–	1.25	.3937	.3976	.4001	.3617	.3616	.3628	.3621	.3633	.3626	.3638	.3631	.3643	.3636	.3648
		1	.3937	.3969	.3985	.3681	.3682	.3692	.3687	.3697	.3692	.3702	.3697	.3707	.3702	.3712
M12	1.75	–	.4724	.4780	.4805	.4277	.4275	.4287	.4280	.4292	.4285	.4297	.4290	.4302	.4295	.4307
	–	1.5	.4724	.4772	.4797	.4341	.4339	.4351	.4344	.4356	.4349	.4361	.4354	.4366	.4359	.4371
	–	1.25	.4724	.4764	.4789	.4405	.4403	.4415	.4408	.4420	.4413	.4425	.4418	.4430	.4423	.4435

Lead Tolerance

The tap major and pitch diameter conversions have been rounded upward.

A maximum lead deviation of +/- .0005″ within any two threads not further apart than 1″ is permitted

Angle Tolerance

Pitch(mm)	Deviation in Half Angle
Over 0.25 to 2.5 Incl. Over 2.5 to 4.0 Incl.	30' Plus or Minus 25' Plus or Minus

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SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

TECHNICAL DATA

Metric Thread - Ground Thread

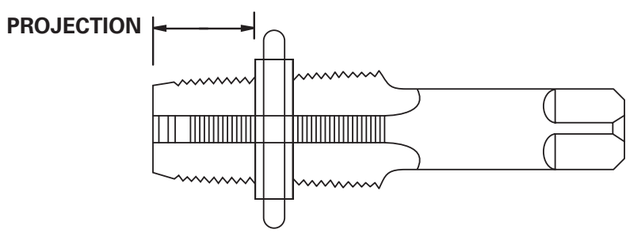
Size	Pitch		Major Diameter (Inches)			Pitch Diameter Limits (Inches)										
						Basic Pitch Dia.	D2 Limit		D3 Limit		D4 Limit		D5 Limit			
	Coarse	Fine	Basic	Min.	Max.		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
M14	2	–	.5512	.5575	.5600	.5000	.5015	.5031	.5020	.5036	.5025	.5041	–	–		
	–	1.5	.5512	.5559	.5584	.5128	.5147	.5159	.5152	.5164	.5157	.5169	–	–		
	–	1.25	.5512	.5551	.5576	.5192	.5211	.5223	.5216	.5228	.5221	.5233	–	–		
M16	2	–	.6299	.6363	.6388	.5788	.5802	.5818	.5807	.5823	.5812	.5828	–	–		
	–	1.5	.6299	.6347	.6372	.5916	.5934	.5946	.5939	.5951	.5944	.5956	–	–		
M18	2.5	–	.7087	.7166	.7191	.6448	.6462	.6478	.6467	.6483	.6472	.6488	–	–		
	–	2	.7087	.7150	.7175	.6576	.6590	.6606	.6595	.6611	.6600	.6616	–	–		
	–	1.5	.7087	.7134	.7159	.6703	.6722	.6734	.6727	.6739	.6732	.6744	–	–		
M20	2.5	–	.7874	.7953	.7976	.7235	.7249	.7265	.7254	.7270	.7259	.7275	–	–		
	–	2	.7874	.7937	.7962	.7363	.7377	.7393	.7382	.7398	.7387	.7403	–	–		
	–	1.5	.7874	.7921	.7946	.7490	.7509	.7521	.7514	.7526	.7519	.7531	–	–		
	–	1	.7874	.7906	.7922	.7618	.7639	.7649	.7644	.7654	.7649	.7659	–	–		
M22	2.5	–	.8661	.8741	.8766	.8022	.8037	.8053	.8042	.8058	.8047	.8063	–	–		
	–	2	.8661	.8725	.8750	.8150	.8164	.8180	.8169	.8185	.8174	.8190	–	–		
	–	1.5	.8661	.8709	.8734	.8278	.8296	.8308	.8301	.8313	.8306	.8318	–	–		
	–	1	.8661	.8694	.8710	.8406	.8426	.8436	.8431	.8441	.8436	.8446	–	–		
M24	3	–	.9449	.9544	.9583	.8682	.8696	.8712	.8701	.8717	.8706	.8722	.8711	.8727		
	–	2	.9449	.9512	.9537	.8938	.8952	.8968	.8957	.8973	.8962	.8978	–	–		
	–	1.5	.9449	.9496	.9521	.9065	.9084	.9096	.9089	.9101	.9094	.9106	–	–		
	–	1	.9449	.9481	.9497	.9193	.9214	.9224	.9219	.9229	.9224	.9234	–	–		
M27	3	–	1.0630	1.0725	1.0764	.9863	.9873	.9893	.9878	.9898	.9883	.9903	.9888	.9908		
	–	2	1.0630	1.0693	1.0718	1.0118	1.0133	1.0149	1.0138	1.0154	1.0143	1.0159	–	–		
	–	1.5	1.0630	1.0677	1.0702	1.0246	1.0265	1.0277	1.0270	1.0282	1.0275	1.0287	–	–		
	–	1	1.0630	1.0662	1.0678	1.0374	1.0393	1.0405	1.0398	1.0410	1.0403	1.0415	–	–		
M28	–	2	1.1024	1.1087	1.1112	1.0512	1.0527	1.0543	1.0532	1.0548	1.0537	1.0553	–	–		
	–	1.5	1.1024	1.1071	1.1096	1.0640	1.0659	1.0671	1.0664	1.0676	1.0669	1.0681	–	–		
	–	1	1.1024	1.1056	1.1072	1.0768	1.0786	1.0798	1.0791	1.0803	1.0796	1.0808	–	–		
M30	3.5	–	1.1811	1.1921	1.1961	1.0916	1.0926	1.0946	1.0931	1.0951	1.0936	1.0956	1.0941	1.0961		
	–	3	1.1811	1.1906	1.1945	1.1044	1.1054	1.1074	1.1059	1.1079	1.1064	1.1084	1.1069	1.1089		
	–	2	1.1811	1.1874	1.1899	1.1300	1.1314	1.1330	1.1319	1.1335	1.1324	1.1340	–	–		
	–	1.5	1.1811	1.1858	1.1883	1.1427	1.1446	1.1458	1.1451	1.1463	1.1456	1.1468	–	–		
M33	3.5	–	1.2992	1.3103	1.3142	1.2097	1.2108	1.2128	1.2113	1.2133	1.2118	1.2138	1.2123	1.2143		
	–	3	1.2992	1.3088	1.3127	1.2225	1.2235	1.2255	1.2240	1.2260	1.2245	1.2265	1.2250	1.2270		
	–	2	1.2992	1.3056	1.3081	1.2481	1.2495	1.2511	1.2500	1.2516	1.2505	1.2521	–	–		
	–	1.5	1.2992	1.3040	1.3065	1.2609	1.2627	1.2639	1.2632	1.2644	1.2637	1.2649	–	–		

TECHNICAL DATA

Pipe Tap (Limit)

Tap Thread Limits						Reference Dimensions	
Nominal Size Inches	Threads per Inch	Projection* Inches	Projection Tolerance + or -	Taper per Foot Limits		Length	Tap Drill Size** NPT, ANPT, NPTF
				Min.	Max.	(L_1)	
1/16	27	.312	.063	.719	.781	.160	C
1/8	27	.312	.063	.719	.781	.1615	Q
1/8	18	.459	.063	.719	.781	.2278	7/16
3/8	18	.454	.063	.719	.781	.240	9/16
1/2	14	.579	.063	.719	.781	.320	45/64
3/4	14	.565	.063	.719	.781	.339	29/32
1"	11-1/2	.678	.094	.719	.781	.400	1-9/64
1-1/4	11-1/2	.686	.094	.719	.781	.420	1-31/64
1-1/2	11-1/2	.699	.094	.719	.781	.420	1-23/32
2"	11-1/2	.667	.094	.719	.781	.436	2-3/16
2-1/2	8	.925	.094	.734	.781	.682	2-39/64
3"	8	.925	.094	.734	.781	.766	3-15/64
3-1/2	8	.938	.125	.734	.781	.821	...
4"	8	.950	.125	.734	.781	.844	...

* Distance small end of tap projects through L1 Taper Thread Ring Gage.
** Recommended size given permit direct tapping without reaming the hole, but only give a full thread for approx. the L1 length.



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TECHNICAL DATA

TECHNICAL DATA

TAP DRILL SIZES - UNIFIED THREAD

Size	Threads Per Inch				Minor Diameter			Tap Drill Diameter (Cutting Tap)				
	UNC	UNF	UNEF	UN	Min. 2B&3B	Max. 2B	Max. 3B	80% Thread	75% Thread	70% Thread	65% Thread	60% Thread
#0	-	80	-	-	.0465	.0514	.0514	.0470	.0478	.0486	.0494	.0503
#1	64	-	-	-	.0561	.0623	.0623	.0568	.0578	.0588	.0598	.0608
	-	72	-	-	.0580	.0635	.0635	.0586	.0595	.0604	.0613	.0622
#2	56	-	-	-	.0667	.0737	.0737	.0674	.0686	.0698	.0709	.0721
	-	64	-	-	.0691	.0753	.0753	.0698	.0708	.0718	.0728	.0738
#3	48	-	-	-	.0764	.0845	.0845	.0774	.0787	.0801	.0814	.0828
	-	56	-	-	.0797	.0865	.0865	.0804	.0816	.0828	.0839	.0851
#4	40	-	-	-	.0849	.0939	.0939	.0860	.0876	.0893	.0909	.0925
	-	48	-	-	.0894	.0968	.0968	.0904	.0917	.0931	.0944	.0958
#5	40	-	-	-	.0979	.1062	.1062	.0990	.1006	.1023	.1039	.1055
	-	44	-	-	.1004	.1079	.1079	.1014	.1029	.1043	.1058	.1073
#6	32	-	-	-	.1040	.1140	.1140	.1055	.1076	.1096	.1116	.1136
	-	40	-	-	.1110	.1190	.1186	.1120	.1136	.1153	.1169	.1185
#8	32	-	-	-	.1300	.1390	.1389	.1315	.1336	.1356	.1376	.1396
	-	36	-	-	.1340	.1420	.1416	.1351	.1369	.1387	.1405	.1424
#10	24	-	-	-	.1450	.1560	.1555	.1467	.1494	.1521	.1548	.1575
	-	32	-	-	.1560	.1640	.1641	.1575	.1596	.1616	.1636	.1656
#12	24	-	-	-	.1710	.1810	.1807	.1727	.1754	.1781	.1808	.1835
	-	28	-	-	.1770	.1860	.1857	.1789	.1812	.1835	.1858	.1882
	-	-	32	-	.1820	.1900	.1895	.1835	.1856	.1876	.1896	.1916
1/4	20	-	-	-	.1960	.2070	.2067	.1980	.2013	.2045	.2078	.2110
	-	28	-	-	.2110	.2200	.2190	.2129	.2152	.2175	.2198	.2222
	-	-	32	-	.2160	.2240	.2229	.2175	.2196	.2216	.2236	.2256
5/16	18	-	-	-	.2520	.2650	.2630	.2548	.2584	.2620	.2656	.2692
	-	-	-	20	.2580	.2700	.2680	.2605	.2638	.2670	.2703	.2735
	-	24	-	-	.2670	.2770	.2754	.2692	.2719	.2746	.2773	.2800
	-	-	-	28	.2740	.2820	.2807	.2754	.2777	.2800	.2823	.2847
	-	-	32	-	.2790	.2860	.2847	.2800	.2821	.2841	.2861	.2881
3/8	16	-	-	-	.3070	.3210	.3182	.3101	.3141	.3182	.3222	.3263
	-	-	-	20	.3210	.3320	.3297	.3230	.3263	.3295	.3328	.3360
	-	24	-	-	.3300	.3400	.3372	.3317	.3344	.3371	.3398	.3425
	-	-	-	28	.3360	.3450	.3426	.3379	.3402	.3425	.3448	.3472
	-	-	32	-	.3410	.3490	.3469	.3425	.3446	.3466	.3486	.3506
7/16	14	-	-	-	.3600	.3760	.3717	.3633	.3679	.3726	.3772	.3818
	-	-	-	16	.3700	.3840	.3800	.3726	.3766	.3807	.3847	.3888
	-	20	-	-	.3830	.3950	.3916	.3855	.3888	.3920	.3953	.3985
	-	-	28	-	.3990	.4070	.4051	.4004	.4027	.4050	.4073	.4097
	-	-	-	32	.4040	.4110	.4094	.4050	.4071	.4091	.4111	.4131
1/2	13	-	-	-	.4170	.4340	.4284	.4201	.4251	.4301	.4351	.4400
	-	-	-	16	.4320	.4460	.4419	.4351	.4391	.4432	.4472	.4513
	-	20	-	-	.4460	.4570	.4537	.4480	.4513	.4545	.4578	.4610
	-	-	28	-	.4610	.4700	.4676	.4629	.4652	.4675	.4698	.4722
	-	-	-	32	.4660	.4740	.4719	.4675	.4696	.4716	.4736	.4756
9/16	12	-	-	-	.4720	.4900	.4843	.4759	.4813	.4867	.4921	.4976
	-	-	-	16	.4950	.5090	.5040	.4976	.5016	.5057	.5097	.5138
	-	18	-	-	.5020	.5150	.5106	.5048	.5084	.5120	.5156	.5192
	-	-	-	20	.5080	.5200	.5162	.5105	.5138	.5170	.5203	.5235
	-	-	24	-	.5170	.5270	.5244	.5192	.5219	.5246	.5273	.5300
	-	-	-	28	.5240	.5320	.5301	.5254	.5277	.5300	.5323	.5347
	-	-	-	32	.5290	.5360	.5344	.5300	.5321	.5341	.5361	.5381
5/8	11	-	-	-	.5270	.5460	.5391	.5305	.5364	.5423	.5482	.5541

TECHNICAL DATA

Size	Threads Per Inch				Minor Diameter			Tap Drill Diameter (Cutting Tap)				
	UNC	UNF	UNEF	UN	Min. 2B&3B	Max. 2B	Max. 3B	80% Thread	75% Thread	70% Thread	65% Thread	60% Thread
5/8	-	-	-	12	.5350	.5530	.5463	.5384	.5438	.5492	.5546	.5601
	-	-	-	16	.5570	.5710	.5662	.5601	.5641	.5682	.5722	.5763
	-	18	-	-	.5650	.5780	.5730	.5673	.5709	.5745	.5781	.5817
	-	-	-	20	.5710	.5820	.5787	.5730	.5763	.5795	.5828	.5860
	-	-	24	-	.5800	.5900	.5869	.5817	.5844	.5871	.5898	.5925
	-	-	-	28	.5860	.5950	.5926	.5879	.5902	.5925	.5948	.5972
	-	-	-	32	.5910	.5980	.5969	.5925	.5946	.5966	.5986	.6006
11/16	-	-	-	12	.5970	.6150	.6085	.6009	.6063	.6117	.6171	.6226
	-	-	-	16	.6200	.6340	.6284	.6226	.6266	.6307	.6347	.6388
	-	-	-	20	.6330	.6450	.6412	.6355	.6388	.6420	.6453	.6485
	-	-	24	-	.6420	.6520	.6494	.6442	.6469	.6496	.6523	.6550
	-	-	-	28	.6490	.6570	.6551	.6504	.6527	.6550	.6573	.6597
	-	-	-	32	.6540	.6610	.6594	.6550	.6571	.6591	.6611	.6631
3/4	10	-	-	-	.6420	.6630	.6545	.6461	.6526	.6591	.6656	.6721
	-	-	-	12	.6600	.6780	.6707	.6634	.6688	.6742	.6796	.6851
	-	16	-	-	.6820	.6960	.6908	.6851	.6891	.6932	.6972	.7013
	-	-	20	-	.6960	.7070	.7037	.6980	.7013	.7045	.7078	.7110
	-	-	-	28	.7110	.7200	.7176	.7129	.7152	.7175	.7198	.7222
	-	-	-	32	.7160	.7240	.7219	.7175	.7196	.7216	.7236	.7256
13/16	-	-	-	12	.7220	.7400	.7329	.7259	.7313	.7367	.7421	.7476
	-	-	-	16	.7450	.7590	.7533	.7476	.7516	.7557	.7597	.7638
	-	-	20	-	.7580	.7700	.7662	.7605	.7638	.7670	.7703	.7735
	-	-	-	28	.7740	.7820	.7801	.7754	.7777	.7800	.7823	.7847
	-	-	-	32	.7790	.7860	.7844	.7800	.7821	.7841	.7861	.7881
7/8	9	-	-	-	.7550	.7780	.7681	.7595	.7668	.7740	.7812	.7884
	-	-	-	12	.7850	.8030	.7948	.7884	.7938	.7992	.8046	.8101
	-	14	-	-	.7980	.8140	.8068	.8008	.8054	.8101	.8147	.8193
	-	-	-	16	.8070	.8210	.8158	.8101	.8141	.8182	.8222	.8263
	-	-	20	-	.8210	.8320	.8287	.8230	.8263	.8295	.8328	.8360
	-	-	-	28	.8360	.8450	.8426	.8379	.8402	.8425	.8448	.8472
	-	-	-	32	.8410	.8490	.8469	.8425	.8446	.8466	.8486	.8506
15/16	-	-	-	12	.8470	.8650	.8575	.8509	.8563	.8617	.8671	.8726
	-	-	-	16	.8700	.8840	.8783	.8726	.8766	.8807	.8847	.8888
	-	-	20	-	.8830	.8950	.8912	.8855	.8888	.8920	.8953	.8985
	-	-	-	28	.8990	.9070	.9051	.9004	.9027	.9050	.9073	.9097
	-	-	-	32	.9040	.9110	.9094	.9050	.9071	.9091	.9111	.9131
1"	8	-	-	-	.8650	.8900	.8797	.8701	.8782	.8863	.8945	.9026
	-	12	-	-	.9100	.9280	.9198	.9134	.9188	.9242	.9296	.9351
	-	-	-	16	.9320	.9460	.9408	.9351	.9391	.9432	.9472	.9513
	-	-	20	-	.9460	.9570	.9537	.9480	.9513	.9545	.9578	.9610
	-	-	-	28	.9610	.9700	.9676	.9629	.9652	.9675	.9698	.9722
	-	-	-	32	.9660	.9740	.9719	.9675	.9696	.9716	.9736	.9756
1*1/16	-	-	-	8	.9270	.9520	.9422	.9326	.9407	.9488	.9570	.9651
	-	-	-	12	.9720	.9900	.9823	.9759	.9813	.9867	.9921	.9976
	-	-	-	16	.9950	1.0090	1.0033	.9976	1.0016	1.0057	1.0097	1.0138
	-	-	18	-	1.0020	1.0150	1.0105	1.0048	1.0084	1.0120	1.0156	1.0192
	-	-	-	20	1.0080	1.0200	1.0162	1.0105	1.0138	1.0170	1.0203	1.0235
	-	-	-	28	1.0240	1.0320	1.0301	1.0254	1.0277	1.0300	1.0323	1.0347
1*1/8	7	-	-	-	.9700	.9980	.9875	.9765	.9858	.9951	1.0044	1.0137
	-	-	-	8	.9900	1.0150	1.0047	.9951	1.0032	1.0113	1.0195	1.0276
	-	12	-	-	1.0350	1.0530	1.0448	1.0384	1.0438	1.0492	1.0546	1.0601
	-	-	-	16	1.0570	1.0710	1.0658	1.0601	1.0641	1.0682	1.0722	1.0763
	-	-	18	-	1.0650	1.0780	1.0730	1.0673	1.0709	1.0745	1.0781	1.0817
	-	-	-	20	1.0710	1.0820	1.0787	1.0730	1.0763	1.0795	1.0828	1.0860

HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

TECHNICAL DATA

Size	Threads Per Inch				Minor Diameter			Tap Drill Diameter (Cutting Tap)				
	UNC	UNF	UNEF	UN	Min. 2B&3B	Max. 2B	Max. 3B	80% Thread	75% Thread	70% Thread	65% Thread	60% Thread
1*1/8	-	-	-	28	1.0860	1.0950	1.0926	1.0879	1.0902	1.0925	1.0948	1.0972
1*3/16	-	-	-	8	1.0520	1.0770	1.0672	1.0576	1.0657	1.0738	1.0820	1.0901
	-	-	-	12	1.0970	1.1150	1.1073	1.1009	1.1063	1.1117	1.1171	1.1226
	-	-	-	16	1.1200	1.1340	1.1283	1.1226	1.1266	1.1307	1.1347	1.1388
	-	-	18	-	1.1270	1.1400	1.1355	1.1298	1.1334	1.1370	1.1406	1.1442
	-	-	-	20	1.1330	1.1450	1.1412	1.1355	1.1388	1.1420	1.1453	1.1485
	-	-	-	28	1.1490	1.1570	1.1551	1.1504	1.1527	1.1550	1.1573	1.1597
1*1/4	7	-	-	-	1.0950	1.1230	1.1125	1.1015	1.1108	1.1201	1.1294	1.1387
	-	-	-	8	1.1150	1.1400	1.1297	1.1201	1.1282	1.1363	1.1445	1.1526
	-	12	-	-	1.1600	1.1780	1.1698	1.1634	1.1688	1.1742	1.1796	1.1851
	-	-	-	16	1.1820	1.1960	1.1908	1.1851	1.1891	1.1932	1.1972	1.2013
	-	-	18	-	1.1900	1.2030	1.1980	1.1923	1.1959	1.1995	1.2031	1.2067
	-	-	-	20	1.1960	1.2070	1.2037	1.1980	1.2013	1.2045	1.2078	1.2110
	-	-	-	28	1.2110	1.2200	1.2176	1.2129	1.2152	1.2175	1.2198	1.2222
1*5/16	-	-	-	8	1.1770	1.2020	1.2176	1.1826	1.1907	1.1988	1.2070	1.2151
	-	-	-	12	1.2220	1.2400	1.2323	1.2259	1.2313	1.2367	1.2421	1.2476
	-	-	-	16	1.2450	1.2590	1.2533	1.2476	1.2516	1.2557	1.2597	1.2638
	-	-	18	-	1.2520	1.2650	1.2605	1.2548	1.2584	1.2620	1.2656	1.2692
	-	-	-	20	1.2580	1.2700	1.2662	1.2605	1.2638	1.2670	1.2703	1.2735
	-	-	-	28	1.2740	1.2820	1.2801	1.2754	1.2777	1.2800	1.2823	1.2847
1*3/8	6	-	-	-	1.1950	1.2250	1.2146	1.2018	1.2126	1.2235	1.2343	1.2451
	-	-	-	8	1.2400	1.2650	1.2547	1.2451	1.2532	1.2613	1.2695	1.2776
	-	12	-	-	1.2850	1.3030	1.2948	1.2884	1.2938	1.2992	1.3046	1.3101
	-	-	-	16	1.3070	1.3210	1.3158	1.3101	1.3141	1.3182	1.3222	1.3263
	-	-	18	-	1.3150	1.3280	1.3230	1.3173	1.3209	1.3245	1.3281	1.3317
	-	-	-	20	1.3210	1.3320	1.3287	1.3230	1.3263	1.3295	1.3328	1.3360
	-	-	-	28	1.3360	1.3450	1.3426	1.3379	1.3402	1.3425	1.3448	1.3472
1*7/16	-	-	-	6	1.2570	1.2880	1.2770	1.2643	1.2751	1.2860	1.2968	1.3076
	-	-	-	8	1.3020	1.3270	1.3172	1.3076	1.3157	1.3238	1.3320	1.3401
	-	-	-	12	1.3470	1.3650	1.3573	1.3509	1.3563	1.3617	1.3671	1.3726
	-	-	-	16	1.3700	1.3840	1.3783	1.3726	1.3766	1.3807	1.3847	1.3888
	-	-	18	-	1.3770	1.3900	1.3855	1.3798	1.3834	1.3870	1.3906	1.3942
	-	-	-	20	1.3830	1.3950	1.3912	1.3855	1.3888	1.3920	1.3953	1.3985
	-	-	-	28	1.3990	1.4070	1.4051	1.4004	1.4027	1.4050	1.4073	1.4097
1*1/2	6	-	-	-	1.3200	1.3500	1.3396	1.3268	1.3376	1.3485	1.3593	1.3701
	-	-	-	8	1.3650	1.3900	1.3797	1.3701	1.3782	1.3863	1.3945	1.4026
	-	12	-	-	1.4100	1.4280	1.4198	1.4134	1.4188	1.4242	1.4296	1.4351
	-	-	-	16	1.4320	1.4460	1.4408	1.4351	1.4391	1.4432	1.4472	1.4513
	-	-	18	-	1.4400	1.4520	1.4480	1.4423	1.4459	1.4495	1.4531	1.4567
	-	-	-	20	1.4460	1.4570	1.4537	1.4480	1.4513	1.4545	1.4578	1.4610
	-	-	-	28	1.4610	1.4700	1.4676	1.4629	1.4652	1.4675	1.4698	1.4722
1*9/16	-	-	-	6	1.3820	1.4130	1.4021	1.3893	1.4001	1.4110	1.4218	1.4326
	-	-	-	8	1.4270	1.4520	1.4422	1.4326	1.4407	1.4488	1.4570	1.4651
	-	-	-	12	1.4720	1.4900	1.4823	1.4759	1.4813	1.4867	1.4921	1.4976
	-	-	-	16	1.4950	1.5090	1.5033	1.4976	1.5016	1.5057	1.5097	1.5138
	-	-	18	-	1.5020	1.5150	1.5105	1.5048	1.5084	1.5120	1.5156	1.5192
	-	-	-	20	1.5080	1.5200	1.5162	1.5105	1.5138	1.5170	1.5203	1.5235
1*5/8	-	-	-	6	1.4450	1.4750	1.4646	1.4518	1.4626	1.4735	1.4843	1.4951
	-	-	-	8	1.4900	1.5150	1.5047	1.4951	1.5032	1.5113	1.5195	1.5276
	-	-	-	12	1.5350	1.5530	1.5448	1.5384	1.5438	1.5492	1.5546	1.5601
	-	-	-	16	1.5570	1.5710	1.5658	1.5601	1.5641	1.5682	1.5722	1.5763
	-	-	18	-	1.5650	1.5780	1.5730	1.5673	1.5709	1.5745	1.5781	1.5817
	-	-	-	20	1.5710	1.5820	1.5787	1.5730	1.5763	1.5795	1.5828	1.5860
1*11/16	-	-	-	6	1.5070	1.5380	1.5271	1.5143	1.5251	1.5360	1.5468	1.5576

TECHNICAL DATA

Size	Threads Per Inch				Minor Diameter			Tap Drill Diameter (Cutting Tap)				
	UNC	UNF	UNEF	UN	Min. 2B&3B	Max. 2B	Max. 3B	80% Thread	75% Thread	70% Thread	65% Thread	60% Thread
1*11/16	-	-	-	8	1.5520	1.5770	1.5672	1.5576	1.5657	1.5738	1.5820	1.5901
	-	-	-	12	1.5970	1.6150	1.6073	1.6009	1.6063	1.6117	1.6171	1.6226
	-	-	-	16	1.6200	1.6340	1.6283	1.6226	1.6266	1.6307	1.6347	1.6388
	-	-	18	-	1.6270	1.6400	1.6355	1.6298	1.6334	1.6370	1.6406	1.6442
	-	-	-	20	1.6330	1.6450	1.6412	1.6355	1.6388	1.6420	1.6453	1.6485
1*3/4	5	-	-	-	1.5340	1.5680	1.5575	1.5422	1.5552	1.5681	1.5811	1.5941
	-	-	-	6	1.5700	1.6000	1.5896	1.5768	1.5876	1.5985	1.6093	1.6201
	-	-	-	8	1.6150	1.6400	1.6297	1.6201	1.6282	1.6363	1.6445	1.6526
	-	-	-	12	1.6600	1.6780	1.6698	1.6634	1.6688	1.6742	1.6796	1.6851
	-	-	-	16	1.6820	1.6960	1.6908	1.6851	1.6891	1.6932	1.6972	1.7013
	-	-	-	20	1.6960	1.7070	1.7037	1.6980	1.7013	1.7045	1.7078	1.7110
1*13/16	-	-	-	6	1.6320	1.6630	1.6521	1.6393	1.6501	1.6610	1.6718	1.6826
	-	-	-	8	1.6770	1.7020	1.6922	1.6826	1.6907	1.6988	1.7070	1.7151
	-	-	-	12	1.7220	1.7400	1.7323	1.7259	1.7313	1.7367	1.7421	1.7476
	-	-	-	16	1.7450	1.7590	1.7533	1.7476	1.7516	1.7557	1.7597	1.7638
	-	-	-	20	1.7580	1.7700	1.7662	1.7605	1.7638	1.7670	1.7703	1.7735
1*7/8	-	-	-	6	1.6950	1.7250	1.7146	1.7018	1.7126	1.7235	1.7343	1.7451
	-	-	-	8	1.7400	1.7650	1.7547	1.7451	1.7532	1.7613	1.7695	1.7776
	-	-	-	12	1.7850	1.8030	1.7948	1.7884	1.7938	1.7992	1.8046	1.8101
	-	-	-	16	1.8070	1.8210	1.8158	1.8101	1.8141	1.8182	1.8222	1.8263
	-	-	-	20	1.8210	1.8320	1.8287	1.8230	1.8263	1.8295	1.8328	1.8360
1*15/16	-	-	-	6	1.7570	1.7880	1.7771	1.7643	1.7751	1.7860	1.7968	1.8076
	-	-	-	8	1.8020	1.8270	1.8172	1.8076	1.8157	1.8238	1.8320	1.8401
	-	-	-	12	1.8470	1.8650	1.8573	1.8509	1.8563	1.8617	1.8671	1.8726
	-	-	-	16	1.8700	1.8840	1.8783	1.8726	1.8766	1.8807	1.8847	1.8888
	-	-	-	20	1.8830	1.8950	1.8912	1.8855	1.8888	1.8920	1.8953	1.8985
2"	4 1/2	-	-	-	1.7590	1.7950	1.7861	1.7691	1.7835	1.7979	1.8124	1.8268
	-	-	-	6	1.8200	1.8500	1.8396	1.8268	1.8376	1.8485	1.8593	1.8701
	-	-	-	8	1.8650	1.8900	1.8797	1.8701	1.8782	1.8863	1.8945	1.9026
	-	-	-	12	1.9100	1.9280	1.9198	1.9134	1.9188	1.9242	1.9296	1.9351
	-	-	-	16	1.9320	1.9460	1.9408	1.9351	1.9391	1.9432	1.9472	1.9513
	-	-	-	20	1.9460	1.9570	1.9537	1.9480	1.9513	1.9545	1.9578	1.9610
2*1/8	-	-	-	6	1.9450	1.9750	1.9646	1.9518	1.9626	1.9735	1.9843	1.9951
	-	-	-	8	1.9900	2.0150	2.0047	1.9951	2.0032	2.0113	2.0195	2.0276
	-	-	-	12	2.0350	2.0530	2.0448	2.0384	2.0438	2.0492	2.0546	2.0601
	-	-	-	16	2.0570	2.0710	2.0658	2.0601	2.0641	2.0682	2.0722	2.0763
	-	-	-	20	2.0710	2.0820	2.0787	2.0730	2.0763	2.0795	2.0828	2.0860
2*1/4	4 1/2	-	-	-	2.0090	2.0450	2.0361	2.0191	2.0335	2.0479	2.0624	2.0768
	-	-	-	6	2.0700	2.1000	2.0896	2.0768	2.0876	2.0985	2.1093	2.1201
	-	-	-	8	2.1150	2.1400	2.1297	2.1201	2.1282	2.1363	2.1445	2.1526
	-	-	-	12	2.1600	2.1780	2.1698	2.1634	2.1688	2.1742	2.1796	2.1851
	-	-	-	16	2.1820	2.1960	2.1908	2.1851	2.1891	2.1932	2.1972	2.2013
	-	-	-	20	2.1960	2.2070	2.2037	2.1980	2.2013	2.2045	2.2078	2.2110
2*3/8	-	-	-	6	2.1950	2.2260	2.2146	2.2018	2.2126	2.2235	2.2343	2.2451
	-	-	-	8	2.2400	2.2650	2.2547	2.2451	2.2532	2.2613	2.2695	2.2776
	-	-	-	12	2.2850	2.3030	2.2948	2.2884	2.2938	2.2992	2.3046	2.3101
	-	-	-	16	2.3070	2.3210	2.3158	2.3101	2.3141	2.3182	2.3222	2.3263
	-	-	-	20	2.3210	2.3320	2.3287	2.3230	2.3263	2.3295	2.3328	2.3360
2*1/2	4	-	-	-	2.2290	2.2670	2.2594	2.2402	2.2564	2.2727	2.2889	2.3052
	-	-	-	6	2.3200	2.3500	2.3396	2.3268	2.3376	2.3485	2.3593	2.3701
	-	-	-	8	2.3650	2.3900	2.3797	2.3701	2.3782	2.3863	2.3945	2.4026
	-	-	-	12	2.4100	2.4280	2.4198	2.4134	2.4188	2.4242	2.4296	2.4351
	-	-	-	16	2.4320	2.4460	2.4408	2.4351	2.4391	2.4432	2.4472	2.4513
	-	-	-	20	2.4460	2.4570	2.4537	2.4480	2.4513	2.4545	2.4578	2.4610

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TECHNICAL DATA

TAP DRILL SIZES - METRIC THREAD

Size	Pitch		Minor dia.		Tap Drill Diameter									
	M	MF	Min. 6H	Max. 6H	80% Thread		75% Thread		70% Thread		65% Thread		60% Thread	
					mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch
M1	0.25	–	.729	.798	0.74	.0291	0.76	.0298	0.77	.0304	0.79	.0311	0.81	.0317
	–	0.2	.783	.841	0.79	.0312	0.81	.0317	0.82	.0322	0.83	.0327	0.84	.0332
M1.1	0.25	–	.829	.898	0.84	.0331	0.86	.0337	0.87	.0344	0.89	.0350	0.91	.0356
	–	0.2	.883	.941	0.89	.0351	0.91	.0356	0.92	.0361	0.93	.0367	0.94	.0372
M1.2	0.25	–	.929	.998	0.94	.0370	0.96	.0377	0.97	.0383	0.99	.0389	1.01	.0396
	–	0.2	.983	1.041	0.99	.0391	1.01	.0396	1.02	.0401	1.03	.0406	1.04	.0411
M1.4	0.3	–	1.075	1.159	1.09	.0428	1.11	.0436	1.13	.0444	1.15	.0451	1.17	.0459
	–	0.2	1.183	1.241	1.19	.0469	1.21	.0474	1.22	.0480	1.23	.0485	1.24	.0490
M1.6	0.35	–	1.221	1.321	1.24	.0487	1.26	.0496	1.28	.0505	1.30	.0514	1.33	.0523
	–	0.2	1.383	1.441	1.39	.0548	1.41	.0553	1.42	.0558	1.43	.0563	1.44	.0569
M1.7	0.35	–	1.321	1.421	1.34	.0526	1.36	.0535	1.38	.0544	1.40	.0553	1.43	.0562
	–	0.3	1.375	1.459	1.39	.0547	1.41	.0554	1.43	.0562	1.45	.0570	1.47	.0577
	–	0.25	1.429	1.498	1.44	.0567	1.46	.0573	1.47	.0580	1.49	.0586	1.51	.0593
	–	0.2	1.483	1.541	1.49	.0587	1.51	.0593	1.52	.0598	1.53	.0603	1.54	.0608
M1.8	0.35	–	1.421	1.521	1.44	.0565	1.46	.0574	1.48	.0583	1.50	.0592	1.53	.0601
	–	0.2	1.583	1.641	1.59	.0627	1.61	.0632	1.62	.0637	1.63	.0642	1.64	.0647
M2	0.4	–	1.567	1.679	1.58	.0624	1.61	.0634	1.64	.0644	1.66	.0654	1.69	.0665
	–	0.25	1.729	1.798	1.74	.0685	1.76	.0692	1.77	.0698	1.79	.0704	1.81	.0711
M2.2	0.45	–	1.713	1.838	1.73	.0682	1.76	.0694	1.79	.0705	1.82	.0717	1.85	.0728
	–	0.25	1.929	1.998	1.94	.0764	1.96	.0770	1.97	.0777	1.99	.0783	2.01	.0789
M2.3	0.4	–	1.867	1.979	1.88	.0742	1.91	.0752	1.94	.0762	1.96	.0773	1.99	.0783
	–	0.35	1.921	2.021	1.94	.0762	1.96	.0771	1.98	.0780	2.00	.0789	2.03	.0798
	–	0.25	2.029	2.098	2.04	.0803	2.06	.0810	2.07	.0816	2.09	.0822	2.11	.0829
M2.5	0.45	–	2.013	2.138	2.03	.0800	2.06	.0812	2.09	.0823	2.12	.0835	2.15	.0846
	–	0.35	2.121	2.221	2.14	.0841	2.16	.0850	2.18	.0859	2.20	.0868	2.23	.0877
M2.6	0.45	–	2.113	2.238	2.13	.0840	2.16	.0851	2.19	.0863	2.22	.0874	2.25	.0886
	–	0.35	2.221	2.321	2.24	.0880	2.26	.0889	2.28	.0898	2.30	.0907	2.33	.0916
M3	0.5	–	2.459	2.599	2.48	.0977	2.51	.0989	2.55	.1002	2.58	.1015	2.61	.1028
	–	0.35	2.621	2.721	2.64	.1038	2.66	.1047	2.68	.1056	2.70	.1065	2.73	.1074
M3.5	0.6	–	2.850	3.010	2.88	.1132	2.92	.1148	2.95	.1163	2.99	.1178	3.03	.1194
	–	0.35	3.121	3.221	3.14	.1235	3.16	.1244	3.18	.1253	3.20	.1262	3.23	.1271
M4	0.7	–	3.242	3.422	3.27	.1288	3.32	.1306	3.36	.1324	3.41	.1342	3.45	.1360
	–	0.5	3.459	3.599	3.48	.1370	3.51	.1383	3.55	.1396	3.58	.1409	3.61	.1421
M4.5	0.75	–	3.688	3.878	3.72	.1465	3.77	.1484	3.82	.1503	3.87	.1522	3.92	.1542
	–	0.5	3.959	4.099	3.98	.1567	4.01	.1580	4.05	.1593	4.08	.1605	4.11	.1618
M5	0.9	–	4.026	4.226	4.06	.1600	4.12	.1623	4.18	.1646	4.24	.1669	4.30	.1692
	0.8	–	4.134	4.334	4.17	.1641	4.22	.1662	4.27	.1682	4.32	.1703	4.38	.1723
	–	0.5	4.459	4.599	4.48	.1764	4.51	.1777	4.55	.1790	4.58	.1802	4.61	.1815
M5.5	–	0.9	4.526	4.726	4.56	.1797	4.62	.1820	4.68	.1843	4.74	.1866	4.80	.1889
	–	0.75	4.688	4.878	4.72	.1858	4.77	.1878	4.82	.1897	4.87	.1916	4.92	.1935
	–	0.5	4.959	5.099	4.98	.1961	5.01	.1974	5.05	.1986	5.08	.1999	5.11	.2012
M6	1	–	4.917	5.153	4.96	.1953	5.03	.1979	5.09	.2004	5.16	.2030	5.22	.2055
	–	0.75	5.188	5.378	5.22	.2055	5.27	.2075	5.32	.2094	5.37	.2113	5.42	.2132
	–	0.5	5.459	5.599	5.48	.2158	5.51	.2170	5.55	.2183	5.58	.2196	5.61	.2209
M7	1	–	5.917	6.153	5.96	.2347	6.03	.2372	6.09	.2398	6.16	.2423	6.22	.2449
	–	0.75	6.188	6.378	6.22	.2449	6.27	.2468	6.32	.2487	6.37	.2507	6.42	.2526
	–	0.5	6.459	6.599	6.48	.2551	6.51	.2564	6.55	.2577	6.58	.2590	6.61	.2602
M8	1.25	–	6.647	6.912	6.70	.2638	6.78	.2670	6.86	.2702	6.94	.2734	7.03	.2766
	–	1	6.917	7.153	6.96	.2740	7.03	.2766	7.09	.2792	7.16	.2817	7.22	.2843
	–	0.75	7.188	7.378	7.22	.2843	7.27	.2862	7.32	.2881	7.37	.2900	7.42	.2919
	–	0.5	7.459	7.599	7.48	.2945	7.51	.2958	7.55	.2971	7.58	.2983	7.61	.2996

TECHNICAL DATA

Size	Pitch		Minor dia.		Tap Drill Diameter									
	M	MF	Min. 6H	Max. 6H	80% Thread		75% Thread		70% Thread		65% Thread		60% Thread	
					mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch
M9	1.25	–	7.647	7.912	7.70	.3032	7.78	.3064	7.86	.3096	7.94	.3128	8.03	.3160
	–	1	7.917	8.153	7.96	.3134	8.03	.3160	8.09	.3185	8.16	.3211	8.22	.3236
	–	0.75	8.188	8.378	8.22	.3236	8.27	.3256	8.32	.3275	8.37	.3294	8.42	.3313
	–	0.5	8.459	8.599	8.48	.3339	8.51	.3352	8.55	.3364	8.58	.3377	8.61	.3390
M10	1.5	–	8.376	8.676	8.44	.3323	8.54	.3362	8.64	.3400	8.73	.3438	8.83	.3477
	–	1.25	8.647	8.912	8.70	.3426	8.78	.3458	8.86	.3490	8.94	.3521	9.03	.3553
	–	1	8.917	9.153	8.96	.3528	9.03	.3553	9.09	.3579	9.16	.3605	9.22	.3630
	–	0.75	9.188	9.378	9.22	.3630	9.27	.3649	9.32	.3669	9.37	.3688	9.42	.3707
	–	0.5	9.459	9.599	9.48	.3732	9.51	.3745	9.55	.3758	9.58	.3771	9.61	.3784
M11	1.5	–	9.376	9.676	9.44	.3717	9.54	.3755	9.64	.3794	9.73	.3832	9.83	.3870
	–	1	9.917	10.153	9.96	.3922	10.03	.3947	10.09	.3973	10.16	.3998	10.22	.4024
	–	0.75	10.188	10.378	10.22	.4024	10.27	.4043	10.32	.4062	10.37	.4081	10.42	.4101
	–	0.5	10.459	10.599	10.48	.4126	10.51	.4139	10.55	.4152	10.58	.4164	10.61	.4177
M12	1.75	–	10.106	10.441	10.18	.4008	10.30	.4053	10.41	.4098	10.52	.4143	10.64	.4187
	–	1.5	10.376	10.676	10.44	.4111	10.54	.4149	10.64	.4187	10.73	.4226	10.83	.4264
	–	1.25	10.647	10.912	10.70	.4213	10.78	.4245	10.86	.4277	10.94	.4309	11.03	.4341
	–	1	10.917	11.153	10.96	.4315	11.03	.4341	11.09	.4366	11.16	.4392	11.22	.4418
	–	0.75	11.188	11.378	11.22	.4418	11.27	.4437	11.32	.4456	11.37	.4475	11.42	.4494
	–	0.5	11.459	11.599	11.48	.4520	11.51	.4533	11.55	.4545	11.58	.4558	11.61	.4571
M13	–	1.75	11.106	11.441	11.18	.4402	11.30	.4447	11.41	.4492	11.52	.4536	11.64	.4581
	–	1.5	11.376	11.676	11.44	.4504	11.54	.4543	11.64	.4581	11.73	.4619	11.83	.4658
	–	1.25	11.647	11.912	11.70	.4607	11.78	.4639	11.86	.4671	11.94	.4703	12.03	.4735
	–	1	11.917	12.153	11.96	.4709	12.03	.4735	12.09	.4760	12.16	.4786	12.22	.4811
	–	0.75	12.188	12.378	12.22	.4811	12.27	.4830	12.32	.4850	12.37	.4869	12.42	.4888
	–	0.5	12.459	12.599	12.48	.4914	12.51	.4926	12.55	.4939	12.58	.4952	12.61	.4965
M14	2	–	11.835	12.210	11.92	.4694	12.05	.4745	12.18	.4796	12.31	.4847	12.44	.4898
	–	1.5	12.376	12.676	12.44	.4898	12.54	.4936	12.64	.4975	12.73	.5013	12.83	.5052
	–	1.25	12.647	12.912	12.70	.5000	12.78	.5032	12.86	.5064	12.94	.5096	13.03	.5128
	–	1	12.917	13.153	12.96	.5103	13.03	.5128	13.09	.5154	13.16	.5179	13.22	.5205
	–	0.75	13.188	13.378	13.22	.5205	13.27	.5224	13.32	.5243	13.37	.5262	13.42	.5282
	–	0.5	13.459	13.599	13.48	.5307	13.51	.5320	13.55	.5333	13.58	.5346	13.61	.5358
M15	–	2	12.835	13.210	12.92	.5087	13.05	.5138	13.18	.5190	13.31	.5241	13.44	.5292
	–	1.5	13.376	13.676	13.44	.5292	13.54	.5330	13.64	.5369	13.73	.5407	13.83	.5445
	–	1.25	13.647	13.912	13.70	.5394	13.78	.5426	13.86	.5458	13.94	.5490	14.03	.5522
	–	1	13.917	14.153	13.96	.5496	14.03	.5522	14.09	.5548	14.16	.5573	14.22	.5599
	–	0.75	14.188	14.378	14.22	.5599	14.27	.5618	14.32	.5637	14.37	.5656	14.42	.5675
	–	0.5	14.459	14.599	14.48	.5701	14.51	.5714	14.55	.5727	14.58	.5739	14.61	.5752
M16	2	–	13.835	14.210	13.92	.5481	14.05	.5532	14.18	.5583	14.31	.5634	14.44	.5685
	–	1.5	14.376	14.676	14.44	.5685	14.54	.5724	14.64	.5762	14.73	.5801	14.83	.5839
	–	1	14.917	15.153	14.96	.5890	15.03	.5916	15.09	.5941	15.16	.5967	15.22	.5992
M17	–	2	14.835	15.210	14.92	.5875	15.05	.5926	15.18	.5977	15.31	.6028	15.44	.6079
	–	1.5	15.376	15.676	15.44	.6079	15.54	.6118	15.64	.6156	15.73	.6194	15.83	.6233
	–	1.25	15.647	15.912	15.70	.6181	15.78	.6213	15.86	.6245	15.94	.6277	16.03	.6309
	–	1	15.917	16.153	15.96	.6284	16.03	.6309	16.09	.6335	16.16	.6360	16.22	.6386
	–	0.75	16.188	16.378	16.22	.6386	16.27	.6405	16.32	.6424	16.37	.6444	16.42	.6463
	–	0.5	16.459	16.599	16.48	.6488	16.51	.6501	16.55	.6514	16.58	.6527	16.61	.6539
M18	2.5	–	15.294	15.744	15.40	.6064	15.56	.6128	15.73	.6192	15.89	.6256	16.05	.6319
	–	2	15.835	16.210	15.92	.6268	16.05	.6319	16.18	.6371	16.31	.6422	16.44	.6473
	–	1.5	16.376	16.676	16.44	.6473	16.54	.6511	16.64	.6550	16.73	.6588	16.83	.6626
	–	1	16.917	17.153	16.96	.6677	17.03	.6703	17.09	.6729	17.16	.6754	17.22	.6780
M19	–	2.5	16.294	16.744	16.40	.6457	16.56	.6521	16.73	.6585	16.89	.6649	17.05	.6713
	–	2	16.835	17.210	16.92	.6662	17.05	.6713	17.18	.6764	17.31	.6815	17.44	.6867

HSS
CARBIDE
SOLID CARBIDE THREAD MILLS
COMBO TAPS
SPIRAL FLUTE TAPS
SPIRAL POINT TAPS
STRAIGHT FLUTE TAPS
FORMING TAPS
SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

TECHNICAL DATA

Size	Pitch		Minor dia.		Tap Drill Diameter									
	M	MF	Min. 6H	Max. 6H	80% Thread		75% Thread		70% Thread		65% Thread		60% Thread	
					mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch
M19	–	1.5	17.376	17.676	17.44	.6867	17.54	.6905	17.64	.6943	17.73	.6982	17.83	.7020
	–	1.25	17.647	17.912	17.70	.6969	17.78	.7001	17.86	.7033	17.94	.7065	18.03	.7097
	–	1	17.917	18.153	17.96	.7071	18.03	.7097	18.09	.7122	18.16	.7148	18.22	.7173
	–	0.75	18.188	18.378	18.22	.7173	18.27	.7193	18.32	.7212	18.37	.7231	18.42	.7250
	–	0.5	18.459	18.599	18.48	.7276	18.51	.7289	18.55	.7301	18.58	.7314	18.61	.7327
M20	2.5	–	17.294	17.744	17.40	.6851	17.56	.6915	17.73	.6979	17.89	.7043	18.05	.7107
	–	2	17.835	18.210	17.92	.7056	18.05	.7107	18.18	.7158	18.31	.7209	18.44	.7260
	–	1.5	18.376	18.676	18.44	.7260	18.54	.7299	18.64	.7337	18.73	.7375	18.83	.7414
	–	1	18.917	19.153	18.96	.7465	19.03	.7490	19.09	.7516	19.16	.7542	19.22	.7567
M21	–	2.5	18.294	18.744	18.40	.7245	18.56	.7309	18.73	.7373	18.89	.7437	19.05	.7501
	–	1.5	19.376	19.676	19.44	.7654	19.54	.7692	19.64	.7731	19.73	.7769	19.83	.7807
	–	1	19.917	20.153	19.96	.7859	20.03	.7884	20.09	.7910	20.16	.7935	20.22	.7961
M22	2.5	–	19.294	19.744	19.40	.7639	19.56	.7702	19.73	.7766	19.89	.7830	20.05	.7894
	–	2	19.835	20.210	19.92	.7843	20.05	.7894	20.18	.7945	20.31	.7997	20.44	.8048
	–	1.5	20.376	20.676	20.44	.8048	20.54	.8086	20.64	.8124	20.73	.8163	20.83	.8201
	–	1	20.917	21.153	20.96	.8252	21.03	.8278	21.09	.8303	21.16	.8329	21.22	.8355
M23	–	2.5	20.294	20.744	20.40	.8032	20.56	.8096	20.73	.8160	20.89	.8224	21.05	.8288
	–	2	20.835	21.210	20.92	.8237	21.05	.8288	21.18	.8339	21.31	.8390	21.44	.8441
	–	1.5	21.376	21.676	21.44	.8441	21.54	.8480	21.64	.8518	21.73	.8556	21.83	.8595
	–	1	21.917	22.153	21.96	.8646	22.03	.8672	22.09	.8697	22.16	.8723	22.22	.8748
M24	3	–	20.752	21.252	20.88	.8221	21.08	.8298	21.27	.8375	21.47	.8452	21.66	.8528
	–	2	21.835	22.210	21.92	.8631	22.05	.8682	22.18	.8733	22.31	.8784	22.44	.8835
	–	1.5	22.376	22.676	22.44	.8835	22.54	.8873	22.64	.8912	22.73	.8950	22.83	.8989
	–	1	22.917	23.153	22.96	.9040	23.03	.9065	23.09	.9091	23.16	.9116	23.22	.9142
M25	–	3	21.752	22.252	21.88	.8615	22.08	.8692	22.27	.8769	22.47	.8845	22.66	.8922
	–	2	22.835	23.210	22.92	.9024	23.05	.9075	23.18	.9127	23.31	.9178	23.44	.9229
	–	1.5	23.376	23.676	23.44	.9229	23.54	.9267	23.64	.9306	23.73	.9344	23.83	.9382
	–	1	23.917	24.153	23.96	.9433	24.03	.9459	24.09	.9485	24.16	.9510	24.22	.9536
M26	–	3	22.752	23.252	22.88	.9009	23.08	.9085	23.27	.9162	23.47	.9239	23.66	.9316
	–	2	23.835	24.210	23.92	.9418	24.05	.9469	24.18	.9520	24.31	.9571	24.44	.9623
	–	1.5	24.376	24.676	24.44	.9623	24.54	.9661	24.64	.9699	24.73	.9738	24.83	.9776
M27	3	–	23.752	24.252	23.88	.9402	24.08	.9479	24.27	.9556	24.47	.9633	24.66	.9709
	–	2.5	24.294	24.744	24.40	.9607	24.56	.9671	24.73	.9735	24.89	.9799	25.05	.9863
	–	2	24.835	25.210	24.92	.9812	25.05	.9863	25.18	.9914	25.31	.9965	25.44	1.0016
	–	1.5	25.376	25.676	25.44	1.0016	25.54	1.0055	25.64	1.0093	25.73	1.0131	25.83	1.0170
	–	1	25.917	26.153	25.96	1.0221	26.03	1.0246	26.09	1.0272	26.16	1.0297	26.22	1.0323
M28	–	3	24.752	25.252	24.88	.9796	25.08	.9873	25.27	.9950	25.47	1.0026	25.66	1.0103
	–	2	25.835	26.210	25.92	1.0205	26.05	1.0256	26.18	1.0308	26.31	1.0359	26.44	1.0410
	–	1.5	26.376	26.676	26.44	1.0410	26.54	1.0448	26.64	1.0487	26.73	1.0525	26.83	1.0563
	–	1	26.917	27.153	26.96	1.0614	27.03	1.0640	27.09	1.0666	27.16	1.0691	27.22	1.0717
M30	3.5	–	26.211	26.771	26.36	1.0379	26.59	1.0469	26.82	1.0558	27.04	1.0648	27.27	1.0737
	–	3	26.752	27.252	26.88	1.0584	27.08	1.0660	27.27	1.0737	27.47	1.0814	27.66	1.0890
	–	2	27.835	28.210	27.92	1.0993	28.05	1.1044	28.18	1.1095	28.31	1.1146	28.44	1.1197
	–	1.5	28.376	28.676	28.44	1.1197	28.54	1.1236	28.64	1.1274	28.73	1.1312	28.83	1.1351
	–	1	28.917	29.153	28.96	1.1402	29.03	1.1427	29.09	1.1453	29.16	1.1479	29.22	1.1504
M32	–	3	28.752	29.252	28.88	1.1371	29.08	1.1448	29.27	1.1524	29.47	1.1601	29.66	1.1678
	–	2	29.835	30.210	29.92	1.1780	30.05	1.1831	30.18	1.1882	30.31	1.1934	30.44	1.1985
	–	1.5	30.376	30.676	30.44	1.1985	30.54	1.2023	30.64	1.2061	30.73	1.2100	30.83	1.2138
M33	3.5	–	29.211	29.771	29.36	1.1560	29.59	1.1650	29.82	1.1739	30.04	1.1829	30.27	1.1918
	–	3	29.752	30.252	29.88	1.1765	30.08	1.1841	30.27	1.1918	30.47	1.1995	30.66	1.2072
	–	2	30.835	31.210	30.92	1.2174	31.05	1.2225	31.18	1.2276	31.31	1.2327	31.44	1.2378
	–	1.5	31.376	31.676	31.44	1.2378	31.54	1.2417	31.64	1.2455	31.73	1.2493	31.83	1.2532
	–	1	31.917	32.153	31.96	1.2583	32.03	1.2609	32.09	1.2634	32.16	1.2660	32.22	1.2685

TECHNICAL DATA

Size	Pitch		Minor dia.		Tap Drill Diameter									
	M	MF	Min. 6H	Max. 6H	80% Thread		75% Thread		70% Thread		65% Thread		60% Thread	
					mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch
M34	–	3	30.752	31.252	30.88	1.2158	31.08	1.2235	31.27	1.2312	31.47	1.2389	31.66	1.2465
	–	2	31.835	32.210	31.92	1.2568	32.05	1.2619	32.18	1.2670	32.31	1.2721	32.44	1.2772
	–	1.5	32.376	32.676	32.44	1.2772	32.54	1.2810	32.64	1.2849	32.73	1.2887	32.83	1.2926
	–	1	32.917	33.153	32.96	1.2977	33.03	1.3002	33.09	1.3028	33.16	1.3053	33.22	1.3079
M35	–	3	31.752	32.252	31.88	1.2552	32.08	1.2629	32.27	1.2706	32.47	1.2782	32.66	1.2859
	–	1.5	33.376	33.676	33.44	1.3166	33.54	1.3204	33.64	1.3243	33.73	1.3281	33.83	1.3319
	–	1	33.917	34.153	33.96	1.3370	34.03	1.3396	34.09	1.3422	34.16	1.3447	34.22	1.3473
M36	4	–	31.670	32.270	31.84	1.2537	32.10	1.2639	32.36	1.2741	32.62	1.2844	32.88	1.2946
	–	3	32.752	33.252	32.88	1.2946	33.08	1.3023	33.27	1.3099	33.47	1.3176	33.66	1.3253
	–	2	33.835	34.210	33.92	1.3355	34.05	1.3406	34.18	1.3457	34.31	1.3508	34.44	1.3560
	–	1.5	34.376	34.676	34.44	1.3560	34.54	1.3598	34.64	1.3636	34.73	1.3675	34.83	1.3713
	–	1	34.917	35.153	34.96	1.3764	35.03	1.3790	35.09	1.3815	35.16	1.3841	35.22	1.3866
M37	–	1.5	35.376	35.676	35.44	1.3953	35.54	1.3992	35.64	1.4030	35.73	1.4068	35.83	1.4107
	–	1	35.917	36.153	35.96	1.4158	36.03	1.4183	36.09	1.4209	36.16	1.4234	36.22	1.4260
M38	–	4	33.670	34.270	33.84	1.3324	34.10	1.3426	34.36	1.3529	34.62	1.3631	34.88	1.3733
	–	3	34.752	35.252	34.88	1.3733	35.08	1.3810	35.27	1.3887	35.47	1.3963	35.66	1.4040
	–	2	35.835	36.210	35.92	1.4142	36.05	1.4193	36.18	1.4245	36.31	1.4296	36.44	1.4347
	–	1.5	36.376	36.676	36.44	1.4347	36.54	1.4385	36.64	1.4424	36.73	1.4462	36.83	1.4500
M39	4	–	34.670	35.270	34.84	1.3718	35.10	1.3820	35.36	1.3922	35.62	1.4025	35.88	1.4127
	–	3	35.752	36.252	35.88	1.4127	36.08	1.4204	36.27	1.4280	36.47	1.4357	36.66	1.4434
	–	2	36.835	37.210	36.92	1.4536	37.05	1.4587	37.18	1.4638	37.31	1.4689	37.44	1.4741
	–	1.5	37.376	37.676	37.44	1.4741	37.54	1.4779	37.64	1.4817	37.73	1.4856	37.83	1.4894
	–	1	37.917	38.153	37.96	1.4945	38.03	1.4971	38.09	1.4996	38.16	1.5022	38.22	1.5047
M40	–	4	35.670	36.270	35.84	1.4111	36.10	1.4214	36.36	1.4316	36.62	1.4418	36.88	1.4521
	–	3	36.752	37.252	36.88	1.4521	37.08	1.4597	37.27	1.4674	37.47	1.4751	37.66	1.4827
	–	2	37.835	38.210	37.92	1.4930	38.05	1.4981	38.18	1.5032	38.31	1.5083	38.44	1.5134
	–	1.5	38.376	38.676	38.44	1.5134	38.54	1.5173	38.64	1.5211	38.73	1.5249	38.83	1.5288
	–	1	38.917	39.153	38.96	1.5339	39.03	1.5364	39.09	1.5390	39.16	1.5416	39.22	1.5441
M42	4.5	–	37.129	37.799	37.32	1.4694	37.62	1.4809	37.91	1.4924	38.20	1.5039	38.49	1.5155
	–	4	37.670	38.270	37.84	1.4899	38.10	1.5001	38.36	1.5103	38.62	1.5206	38.88	1.5308
	–	3	38.752	39.252	38.88	1.5308	39.08	1.5385	39.27	1.5461	39.47	1.5538	39.66	1.5615
	–	2	39.835	40.210	39.92	1.5717	40.05	1.5768	40.18	1.5819	40.31	1.5871	40.44	1.5922
	–	1.5	40.376	40.676	40.44	1.5922	40.54	1.5960	40.64	1.5998	40.73	1.6037	40.83	1.6075
M45	4.5	–	40.129	40.799	40.32	1.5875	40.62	1.5990	40.91	1.6106	41.20	1.6221	45.00	1.7717
	–	4	40.670	41.270	40.84	1.6080	41.10	1.6182	41.36	1.6285	41.62	1.6387	41.88	1.6489
	–	3	41.752	42.252	41.88	1.6489	42.08	1.6566	42.27	1.6643	42.47	1.6719	42.66	1.6796
	–	2	42.835	43.210	42.92	1.6898	43.05	1.6949	43.18	1.7001	43.31	1.7052	43.44	1.7103
	–	1.5	43.376	43.676	43.44	1.7103	43.54	1.7141	43.64	1.7180	43.73	1.7218	43.83	1.7256
	–	1	43.917	44.153	43.96	1.7307	44.03	1.7333	44.09	1.7359	44.16	1.7384	44.22	1.7410
M46	–	1.5	44.376	44.676	44.44	1.7497	44.54	1.7535	44.64	1.7573	44.73	1.7612	44.83	1.7650
M48	5	–	42.587	43.297	42.80	1.6852	43.13	1.6980	43.45	1.7108	43.78	1.7235	44.10	1.7363
	–	4	43.670	44.270	43.84	1.7261	44.10	1.7363	44.36	1.7466	44.62	1.7568	44.88	1.7670
	–	3	44.752	45.252	44.88	1.7670	45.08	1.7747	45.27	1.7824	45.47	1.7900	45.66	1.7977
	–	2	45.835	46.210	45.92	1.8079	46.05	1.8130	46.18	1.8182	46.31	1.8233	46.44	1.8284
	–	1.5	46.376	46.676	46.44	1.8284	46.54	1.8322	46.64	1.8361	46.73	1.8399	46.83	1.8437
	–	1	46.917	47.153	46.96	1.8488	47.03	1.8514	47.09	1.8540	47.16	1.8565	47.22	1.8591
M50	–	5	44.587	45.297	44.80	1.7639	45.13	1.7767	45.45	1.7895	45.78	1.8023	46.10	1.8151
	–	3	46.752	47.252	46.88	1.8458	47.08	1.8534	47.27	1.8611	47.47	1.8688	47.66	1.8764
	–	2	47.835	48.210	47.92	1.8867	48.05	1.8918	48.18	1.8969	48.31	1.9020	48.44	1.9071
	–	1.5	48.376	48.676	48.44	1.9071	48.54	1.9110	48.64	1.9148	48.73	1.9186	48.83	1.9225
	–	1	48.917	49.153	48.96	1.9276	49.03	1.9301	49.09	1.9327	49.16	1.9353	49.22	1.9378

HSS
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SCREW THREAD INSERT TAPS
PIPE TAPS
TECHNICAL DATA

TECHNICAL DATA

Size	Pitch		Minor dia.		Tap Drill Diameter									
	M	MF	Min. 6H	Max. 6H	80% Thread		75% Thread		70% Thread		65% Thread		60% Thread	
					mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch
M52	5	–	46.587	47.297	46.80	1.8427	47.13	1.8555	47.45	1.8682	47.78	1.8810	48.10	1.8938
	–	4	47.670	48.270	47.84	1.8836	48.10	1.8938	48.36	1.9040	48.62	1.9143	48.88	1.9245
	–	3	48.752	49.252	48.88	1.9245	49.08	1.9322	49.27	1.9398	49.47	1.9475	49.66	1.9552
	–	2	49.835	50.210	49.92	1.9654	50.05	1.9705	50.18	1.9756	50.31	1.9808	50.44	1.9859
	–	1.5	50.376	50.676	50.44	1.9859	50.54	1.9897	50.64	1.9935	50.73	1.9974	50.83	2.0012
M55	–	4	50.670	51.270	50.84	2.0017	51.10	2.0119	51.36	2.0222	51.62	2.0324	51.88	2.0426
	–	3	51.752	52.252	51.88	2.0426	52.08	2.0503	52.27	2.0580	52.47	2.0656	52.66	2.0733
	–	2	52.835	53.210	52.92	2.0835	53.05	2.0886	53.18	2.0938	53.31	2.0989	53.44	2.1040
	–	1.5	53.376	53.676	53.44	2.1040	53.54	2.1078	53.64	2.1117	53.73	2.1155	53.83	2.1193
M56	5.5	–	50.046	50.796	50.28	1.9797	50.64	1.9938	51.00	2.0078	51.36	2.0219	51.71	2.0360
	–	4	51.670	52.270	51.84	2.0411	52.10	2.0513	52.36	2.0615	52.62	2.0718	52.88	2.0820
	–	3	52.752	53.252	52.88	2.0820	53.08	2.0897	53.27	2.0973	53.47	2.1050	53.66	2.1127
	–	2	53.835	54.210	53.92	2.1229	54.05	2.1280	54.18	2.1331	54.31	2.1382	54.44	2.1434
	–	1.5	54.376	54.676	54.44	2.1434	54.54	2.1472	54.64	2.1510	54.73	2.1549	54.83	2.1587
M58	–	4	53.670	54.270	53.84	2.1198	54.10	2.1300	54.36	2.1403	54.62	2.1505	54.88	2.1607
	–	3	54.752	55.252	54.88	2.1607	55.08	2.1684	55.27	2.1761	55.47	2.1837	55.66	2.1914
	–	2	55.835	56.210	55.92	2.2016	56.05	2.2067	56.18	2.2119	56.31	2.2170	56.44	2.2221
	–	1.5	56.376	56.676	56.44	2.2221	56.54	2.2259	56.64	2.2298	56.73	2.2336	56.83	2.2374
M60	5.5	–	54.046	54.796	54.28	2.1372	54.64	2.1512	55.00	2.1653	55.36	2.1794	55.71	2.1934
	–	4	55.670	56.270	55.84	2.1985	56.10	2.2088	56.36	2.2190	56.62	2.2292	56.88	2.2395
	–	3	56.752	57.252	56.88	2.2395	57.08	2.2471	57.27	2.2548	57.47	2.2625	57.66	2.2701
	–	2	57.835	58.210	57.92	2.2804	58.05	2.2855	58.18	2.2906	58.31	2.2957	58.44	2.3008
	–	1.5	58.376	58.676	58.44	2.3008	58.54	2.3047	58.64	2.3085	58.73	2.3123	58.83	2.3162
M62	–	4	57.670	58.270	57.84	2.2773	58.10	2.2875	58.36	2.2977	58.62	2.3080	58.88	2.3182
	–	3	58.752	59.252	58.88	2.3182	59.08	2.3259	59.27	2.3335	59.47	2.3412	59.66	2.3489
	–	1	60.917	61.153	60.96	2.4000	61.03	2.4026	61.09	2.4051	61.16	2.4077	61.22	2.4103
	–	1.5	60.376	60.676	60.44	2.3796	60.54	2.3834	60.64	2.3872	60.73	2.3911	60.83	2.3949
M64	6	–	57.505	58.305	57.76	2.2742	58.15	2.2895	58.54	2.3049	58.93	2.3202	59.32	2.3356
	–	4	59.670	60.270	59.84	2.3560	60.10	2.3663	60.36	2.3765	60.62	2.3867	60.88	2.3969
	–	3	60.752	61.252	60.88	2.3969	61.08	2.4046	61.27	2.4123	61.47	2.4200	61.66	2.4276
	–	2	61.835	62.210	61.92	2.4379	62.05	2.4430	62.18	2.4481	62.31	2.4532	62.44	2.4583
	–	1.5	62.376	62.676	62.44	2.4583	62.54	2.4621	62.64	2.4660	62.73	2.4698	62.83	2.4737
M65	–	4	60.670	61.270	60.84	2.3954	61.10	2.4056	61.36	2.4159	61.62	2.4261	61.88	2.4363
	–	3	61.752	62.252	61.88	2.4363	62.08	2.4440	62.27	2.4517	62.47	2.4593	62.66	2.4670
	–	2	62.835	63.210	62.92	2.4772	63.05	2.4823	63.18	2.4875	63.31	2.4926	63.44	2.4977
	–	1.5	63.376	63.676	63.44	2.4977	63.54	2.5015	63.64	2.5054	63.73	2.5092	63.83	2.5130

TECHNICAL DATA

TAP DRILL SIZES - UNIFIED THREAD / FORMING TAPS

Size	Threads Per Inch			Minor Diameter			Tap Drill Diameter (Cutting Tap)				
	UNC	UNF	UNEF	Min. 2B&3B	Max. 2B	Max. 3B	75% Thread	70% Thread	65% Thread	60% Thread	55% Thread
#0	-	80	-	.0465	.0514	.0514	.0536	.0541	.0545	.0549	.0553
#1	64	-	-	.0561	.0623	.0623	.0650	.0656	.0661	.0666	.0672
	-	72	-	.0580	.0635	.0635	.0659	.0664	.0669	.0673	.0678
#2	56	-	-	.0667	.0737	.0737	.0769	.0775	.0781	.0787	.0793
	-	64	-	.0691	.0753	.0753	.0780	.0786	.0791	.0796	.0802
#3	48	-	-	.0764	.0845	.0845	.0884	.0891	.0898	.0905	.0912
	-	56	-	.0797	.0865	.0865	.0899	.0905	.0911	.0917	.0923
#4	40	-	-	.0849	.0939	.0939	.0993	.1001	.1010	.1018	.1027
	-	48	-	.0894	.0968	.0968	.1014	.1021	.1028	.1035	.1042
#5	40	-	-	.0979	.1062	.1062	.1123	.1131	.1140	.1148	.1157
	-	44	-	.1004	.1079	.1079	.1134	.1142	.1150	.1157	.1165
#6	32	-	-	.1040	.1140	.1140	.1221	.1231	.1242	.1253	.1263
	-	40	-	.1110	.1190	.1186	.1253	.1261	.1270	.1278	.1287
#8	32	-	-	.1300	.1390	.1389	.1481	.1491	.1502	.1513	.1523
	-	36	-	.1340	.1420	.1416	.1498	.1508	.1517	.1527	.1536
#10	24	-	-	.1450	.1560	.1555	.1688	.1702	.1716	.1730	.1744
	-	32	-	.1560	.1640	.1641	.1741	.1751	.1762	.1773	.1783
#12	24	-	-	.1710	.1810	.1807	.1948	.1962	.1976	.1990	.2004
	-	28	-	.1770	.1860	.1857	.1978	.1990	.2002	.2014	.2026
	-	-	32	.1820	.1900	.1895	.2001	.2011	.2022	.2033	.2043
1/4	20	-	-	.1960	.2070	.2067	.2245	.2262	.2279	.2296	.2313
	-	28	-	.2110	.2200	.2190	.2318	.2330	.2342	.2354	.2366
	-	-	32	.2160	.2240	.2229	.2341	.2351	.2362	.2373	.2383
5/16	18	-	-	.2520	.2650	.2630	.2842	.2861	.2879	.2898	.2917
	-	24	-	.2670	.2770	.2754	.2913	.2927	.2941	.2955	.2969
	-	-	-	.2740	.2820	.2807	.2943	.2955	.2967	.2979	.2991
	-	-	32	.2790	.2860	.2847	.2966	.2976	.2987	.2998	.3008
3/8	16	-	-	.3070	.3210	.3182	.3431	.3453	.3474	.3495	.3516
	-	24	-	.3300	.3400	.3372	.3538	.3552	.3566	.3580	.3594
	-	-	-	.3360	.3450	.3426	.3568	.3580	.3592	.3604	.3616
	-	-	32	.3410	.3490	.3469	.3591	.3601	.3612	.3623	.3633
7/16	14	-	-	.3600	.3760	.3717	.4011	.4035	.4059	.4084	.4108
	-	20	-	.3830	.3950	.3916	.4120	.4137	.4154	.4171	.4188
	-	-	28	.3990	.4070	.4051	.4193	.4205	.4217	.4229	.4241
1/2	13	-	-	.4170	.4340	.4284	.4608	.4634	.4660	.4686	.4712
	-	20	-	.4460	.4570	.4537	.4745	.4762	.4779	.4796	.4813
	-	-	28	.4610	.4700	.4676	.4818	.4830	.4842	.4854	.4866
9/16	12	-	-	.4720	.4900	.4843	.5200	.5228	.5257	.5285	.5313
	-	18	-	.5020	.5150	.5106	.5342	.5361	.5379	.5398	.5417
	-	-	24	.5170	.5270	.5244	.5413	.5427	.5441	.5455	.5469
5/8	11	-	-	.5270	.5460	.5391	.5786	.5817	.5848	.5879	.5910
	-	-	-	.5570	.5710	.5662	.5931	.5953	.5974	.5995	.6016
	-	18	-	.5650	.5780	.5730	.5967	.5986	.6004	.6023	.6042
	-	-	24	.5800	.5900	.5869	.6038	.6052	.6066	.6080	.6094
3/4	10	-	-	.6420	.6630	.6545	.6990	.7024	.7058	.7092	.7126
	-	16	-	.6820	.6960	.6908	.7181	.7203	.7224	.7245	.7266
	-	-	20	.6960	.7070	.7037	.7245	.7262	.7279	.7296	.7313

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TECHNICAL DATA

TECHNICAL DATA

Size	Threads Per Inch			Minor Diameter			Tap Drill Diameter (Cutting Tap)				
	UNC	UNF	UNEF	Min. 2B&3B	Max. 2B	Max. 3B	75% Thread	70% Thread	65% Thread	60% Thread	55% Thread
7/8	9	-	-	.7550	.7780	.7681	.8183	.8221	.8259	.8297	.8334
	-	14	-	.7980	.8140	8068	.8386	.8410	.8434	.8459	.8483
	-	-	20	.8210	.8320	.8287	.8495	.8512	.8529	.8546	.8563
1"	8	-	-	.8650	.8900	.8797	.9363	.9405	.9448	.9490	.9533
	-	12	-	.9100	.9280	.9198	.9575	.9603	.9632	.9660	.9688
	-	-	20	.9460	.9570	.9537	.9745	.9762	.9779	.9796	.9813
1*1/8	7	-	-	.9700	.9980	.9875	1.0521	1.0570	1.0619	1.0667	1.0716
	-	12	-	1.0350	1.0530	1.0448	1.0825	1.0853	1.0882	1.0910	1.0938
	-	-	18	1.0650	1.0780	1.0730	1.0967	1.0986	1.1004	1.1023	1.1042
1*1/4	7	-	-	1.0950	1.1230	1.1125	1.1771	1.1820	1.1869	1.1917	1.1966
	-	12	-	1.1600	1.1780	1.1698	1.2075	1.2103	1.2132	1.2160	1.2188
	-	-	18	1.1900	1.2030	1.1980	1.2217	1.2236	1.2254	1.2273	1.2292

TECHNICAL DATA

TAP DRILL SIZES - METRIC THREAD / FORMING TAPS

Size	Pitch		Minor dia.		Tap Drill Diameter									
	M	MF	Min. 6H	Max. 6H	75% Thread		70% Thread		65% Thread		60% Thread		55% Thread	
					mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch
M1	0.25	–	0.729	0.798	0.87	.0344	0.88	.0347	0.89	.0350	0.90	.0354	0.91	.03569
	–	0.2	0.783	0.841	0.90	.0354	0.90	.0356	0.91	.0359	0.92	.0362	0.93	.03643
M1.1	0.25	–	0.829	0.898	0.97	.0383	0.98	.0386	0.99	.0390	1.00	.0393	1.01	.03963
	–	0.2	0.883	0.941	1.00	.0393	1.00	.0396	1.01	.0398	1.02	.0401	1.03	.04036
M1.2	0.25	–	0.929	0.998	1.07	.0422	1.08	.0426	1.09	.0429	1.10	.0432	1.11	.04356
	–	0.2	0.983	1.041	1.10	.0432	1.10	.0435	1.11	.0438	1.12	.0440	1.13	.04430
M1.4	0.3	–	1.075	1.159	1.25	.0491	1.26	.0495	1.27	.0499	1.28	.0503	1.29	.05070
	–	0.2	1.183	1.241	1.30	.0511	1.30	.0514	1.31	.0516	1.32	.0519	1.33	.05217
M1.6	0.35	–	1.221	1.321	1.42	.0560	1.43	.0564	1.45	.0569	1.46	.0574	1.47	.05784
	–	0.2	1.383	1.441	1.50	.0590	1.50	.0592	1.51	.0595	1.52	.0598	1.53	.06005
M1.7	0.35	–	1.321	1.421	1.52	.0599	1.53	.0604	1.55	.0608	1.56	.0613	1.57	.06178
	–	0.3	1.375	1.459	1.55	.0609	1.56	.0613	1.57	.0617	1.58	.0621	1.59	.06251
	–	0.25	1.429	1.498	1.57	.0619	1.58	.0622	1.59	.0626	1.60	.0629	1.61	.06325
	–	0.2	1.483	1.541	1.60	.0629	1.60	.0632	1.61	.0634	1.62	.0637	1.63	.06398
M1.8	0.35	–	1.421	1.521	1.62	.0638	1.63	.0643	1.65	.0648	1.66	.0652	1.67	.06571
	–	0.2	1.583	1.641	1.70	.0669	1.70	.0671	1.71	.0674	1.72	.0677	1.73	.06792
M2	0.4	–	1.567	1.679	1.80	.0707	1.81	.0712	1.82	.0718	1.84	.0723	1.85	.07285
	–	0.25	1.729	1.798	1.87	.0737	1.88	.0741	1.89	.0744	1.90	.0747	1.91	.07506
M2.2	0.45	–	1.713	1.838	1.97	.0776	1.99	.0782	2.00	.0788	2.02	.0794	2.03	.07999
	–	0.25	1.929	1.998	2.07	.0816	2.08	.0819	2.09	.0823	2.10	.0826	2.11	.08293
M2.3	0.4	–	1.867	1.979	2.10	.0825	2.11	.0831	2.12	.0836	2.14	.0841	2.15	.08466
	–	0.35	1.921	2.021	2.12	.0835	2.13	.0840	2.15	.0845	2.16	.0849	2.17	.08540
	–	0.25	2.029	2.098	2.17	.0855	2.18	.0859	2.19	.0862	2.20	.0865	2.21	.08687
M2.5	0.45	–	2.013	2.138	2.27	.0894	2.29	.0900	2.30	.0906	2.32	.0912	2.33	.09180
	–	0.35	2.121	2.221	2.32	.0914	2.33	.0919	2.35	.0923	2.36	.0928	2.37	.09327
M2.6	0.45	–	2.113	2.238	2.37	.0933	2.39	.0939	2.40	.0945	2.42	.0951	2.43	.09574
	–	0.35	2.221	2.321	2.42	.0953	2.43	.0958	2.45	.0963	2.46	.0967	2.47	.09721
M3	0.5	–	2.459	2.599	2.75	.1081	2.76	.1087	2.78	.1094	2.80	.1101	2.81	.11075
	–	0.35	2.621	2.721	2.82	.1111	2.83	.1116	2.85	.1120	2.86	.1125	2.87	.11296
M3.5	0.6	–	2.850	3.010	3.19	.1257	3.21	.1266	3.23	.1274	3.26	.1282	3.28	.12896
	–	0.35	3.121	3.221	3.32	.1308	3.33	.1312	3.35	.1317	3.36	.1322	3.37	.13264
M4	0.7	–	3.242	3.422	3.64	.1434	3.67	.1444	3.69	.1453	3.71	.1462	3.74	.14717
	–	0.5	3.459	3.599	3.75	.1474	3.76	.1481	3.78	.1488	3.80	.1494	3.81	.15012
M4.5	0.75	–	3.688	3.878	4.12	.1621	4.14	.1631	4.17	.1641	4.19	.1651	4.22	.16612
	–	0.5	3.959	4.099	4.25	.1671	4.26	.1678	4.28	.1685	4.30	.1691	4.31	.16980
M5	0.9	–	4.026	4.226	4.54	.1788	4.57	.1800	4.60	.1812	4.63	.1824	4.66	.18360
	0.8	–	4.134	4.334	4.59	.1808	4.62	.1819	4.65	.1829	4.67	.1840	4.70	.18507
	–	0.5	4.459	4.599	4.75	.1868	4.76	.1875	4.78	.1881	4.80	.1888	4.81	.18949
M6	1	–	4.917	5.153	5.49	.2161	5.52	.2175	5.56	.2188	5.59	.2202	5.63	.22150
	–	0.75	5.188	5.378	5.62	.2212	5.64	.2222	5.67	.2232	5.69	.2242	5.72	.22518
	–	0.5	5.459	5.599	5.75	.2262	5.76	.2269	5.78	.2275	5.80	.2282	5.81	.22886
M7	1	–	5.917	6.153	6.49	.2555	6.52	.2569	6.56	.2582	6.59	.2595	6.63	.26087
	–	0.75	6.188	6.378	6.62	.2605	6.64	.2615	6.67	.2625	6.69	.2635	6.72	.26455
	–	0.5	6.459	6.599	6.75	.2656	6.76	.2662	6.78	.2669	6.80	.2676	6.81	.26823
M8	1.25	–	6.647	6.912	7.36	.2899	7.41	.2915	7.45	.2932	7.49	.2949	7.53	.29656
	–	1	6.917	7.153	7.49	.2949	7.52	.2962	7.56	.2976	7.59	.2989	7.63	.30024
	–	0.75	7.188	7.378	7.62	.2999	7.64	.3009	7.67	.3019	7.69	.3029	7.72	.30392
	–	0.5	7.459	7.599	7.75	.3049	7.76	.3056	7.78	.3063	7.80	.3069	7.81	.30760
M9	1.25	–	7.647	7.912	8.36	.3292	8.41	.3309	8.45	.3326	8.49	.3343	8.53	.33593
	–	1	7.917	8.153	8.49	.3343	8.52	.3356	8.56	.3369	8.59	.3383	8.63	.33961
	–	0.75	8.188	8.378	8.62	.3393	8.64	.3403	8.67	.3413	8.69	.3423	8.72	.34329
	–	0.5	8.459	8.599	8.75	.3443	8.76	.3450	8.78	.3456	8.80	.3463	8.81	.34697

TECHNICAL DATA

Size	Pitch		Minor dia.		Tap Drill Diameter									
	M	MF	Min. 6H	Max. 6H	75% Thread		70% Thread		65% Thread		60% Thread		55% Thread	
					mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch
M10	1.5	–	8.376	8.676	9.24	.3636	9.29	.3656	9.34	.3676	9.39	.3696	9.44	.37161
	–	1.25	8.647	8.912	9.36	.3686	9.41	.3703	9.45	.3719	9.49	.3736	9.53	.37530
	–	1	8.917	9.153	9.49	.3736	9.52	.3750	9.56	.3763	9.59	.3776	9.63	.37898
	–	0.75	9.188	9.378	9.62	.3786	9.64	.3796	9.67	.3806	9.69	.3817	9.72	.38266
	–	0.5	9.459	9.599	9.75	.3837	9.76	.3843	9.78	.3850	9.80	.3857	9.81	.38634
M12	1.75	–	10.106	10.441	11.11	.4373	11.17	.4396	11.23	.4420	11.29	.4443	11.35	.44667
	–	1.5	10.376	10.676	11.24	.4423	11.29	.4443	11.34	.4463	11.39	.4483	11.44	.45035
	–	1.25	10.647	10.912	11.36	.4473	11.41	.4490	11.45	.4507	11.49	.4524	11.53	.45404
	–	1	10.917	11.153	11.49	.4524	11.52	.4537	11.56	.4550	11.59	.4564	11.63	.45772
	–	0.75	11.188	11.378	11.62	.4574	11.64	.4584	11.67	.4594	11.69	.4604	11.72	.46140
	–	0.5	11.459	11.599	11.75	.4624	11.76	.4631	11.78	.4637	11.80	.4644	11.81	.46508
M14	2	–	11.835	12.210	12.98	.5110	13.05	.5137	13.12	.5164	13.18	.5191	13.25	.52173
	–	1.5	12.376	12.676	13.24	.5211	13.29	.5231	13.34	.5251	13.39	.5271	13.44	.52909
	–	1.25	12.647	12.912	13.36	.5261	13.41	.5278	13.45	.5294	13.49	.5311	13.53	.53278
	–	1	12.917	13.153	13.49	.5311	13.52	.5324	13.56	.5338	13.59	.5351	13.63	.53646
	–	0.75	13.188	13.378	13.62	.5361	13.64	.5371	13.67	.5381	13.69	.5391	13.72	.54014
	–	0.5	13.459	13.599	13.75	.5411	13.76	.5418	13.78	.5425	13.80	.5431	13.81	.54382
M16	2	–	13.835	14.210	14.98	.5898	15.05	.5924	15.12	.5951	15.18	.5978	15.25	.60047
	–	1.5	14.376	14.676	15.24	.5998	15.29	.6018	15.34	.6038	15.39	.6058	15.44	.60783
	–	1	14.917	15.153	15.49	.6098	15.52	.6112	15.56	.6125	15.59	.6139	15.63	.61520
M18	2.5	–	15.294	15.744	16.73	.6585	16.81	.6618	16.90	.6652	16.98	.6685	17.07	.67185
	–	2	15.835	16.210	16.98	.6685	17.05	.6712	17.12	.6739	17.18	.6765	17.25	.67921
	–	1.5	16.376	16.676	17.24	.6785	17.29	.6806	17.34	.6826	17.39	.6846	17.44	.68657
	–	1	16.917	17.153	17.49	.6886	17.52	.6899	17.56	.6913	17.59	.6926	17.63	.69394
M20	2.5	–	17.294	17.744	18.73	.7372	18.81	.7406	18.90	.7439	18.98	.7472	19.07	.75059
	–	2	17.835	18.210	18.98	.7472	19.05	.7499	19.12	.7526	19.18	.7553	19.25	.75795
	–	1.5	18.376	18.676	19.24	.7573	19.29	.7593	19.34	.7613	19.39	.7633	19.44	.76531
	–	1	18.917	19.153	19.49	.7673	19.52	.7687	19.56	.7700	19.59	.7713	19.63	.77268
M22	2.5	–	19.294	19.744	20.73	.8159	20.81	.8193	20.90	.8226	20.98	.8260	21.07	.82933
	–	2	19.835	20.210	20.98	.8260	21.05	.8287	21.12	.8313	21.18	.8340	21.25	.83669
	–	1.5	20.376	20.676	21.24	.8360	21.29	.8380	21.34	.8400	21.39	.8420	21.44	.84406
	–	1	20.917	21.153	21.49	.8461	21.52	.8474	21.56	.8487	21.59	.8501	21.63	.85142
M24	3	–	20.752	21.252	22.47	.8846	22.57	.8887	22.67	.8927	22.78	.8967	22.88	.90071
	–	2	21.835	22.210	22.98	.9047	23.05	.9074	23.12	.9101	23.18	.9128	23.25	.91543
	–	1.5	22.376	22.676	23.24	.9148	23.29	.9168	23.34	.9188	23.39	.9208	23.44	.92280
	–	1	22.917	23.153	23.49	.9248	23.52	.9261	23.56	.9275	23.59	.9288	23.63	.93016
M26	–	3	22.752	23.252	24.47	.9634	24.57	.9674	24.67	.9714	24.78	.9754	24.88	.97945
	–	2	23.835	24.210	24.98	.9835	25.05	.9861	25.12	.9888	25.18	.9915	25.25	.99417
	–	1.5	24.376	24.676	25.24	.9935	25.29	.9955	25.34	.9975	25.39	.9995	25.44	1.00154
M27	3	–	23.752	24.252	25.47	1.0028	25.57	1.0068	25.67	1.0108	25.78	1.0148	25.88	1.01882
	–	2.5	24.294	24.744	25.73	1.0128	25.81	1.0161	25.90	1.0195	25.98	1.0228	26.07	1.02618
	–	2	24.835	25.210	25.98	1.0228	26.05	1.0255	26.12	1.0282	26.18	1.0309	26.25	1.03354
	–	1.5	25.376	25.676	26.24	1.0329	26.29	1.0349	26.34	1.0369	26.39	1.0389	26.44	1.04091
	–	1	25.917	26.153	26.49	1.0429	26.52	1.0443	26.56	1.0456	26.59	1.0469	26.63	1.04827
M30	3.5	–	26.211	26.771	28.22	1.1108	28.33	1.1155	28.45	1.1202	28.57	1.1249	28.69	1.12957
	–	3	26.752	27.252	28.47	1.1209	28.57	1.1249	28.67	1.1289	28.78	1.1329	28.88	1.13693
	–	2	27.835	28.210	28.98	1.1409	29.05	1.1436	29.12	1.1463	29.18	1.1490	29.25	1.15165
	–	1.5	28.376	28.676	29.24	1.1510	29.29	1.1530	29.34	1.1550	29.39	1.1570	29.44	1.15902
	–	1	28.917	29.153	29.49	1.1610	29.52	1.1624	29.56	1.1637	29.59	1.1650	29.63	1.16638

TECHNICAL DATA

19 TAP DRILL SIZES - METRIC THREAD / FORMING TAPS

Metric

Size	RECOMMENDATION Drill Size Inch	RECOMMENDATION Drill Size metric (mm)
M2 × 0.4	.0827	2.10
M2.2 × 0.45	.0906	2.30
M2.5 × 0.45	.1024	2.60
M3 × 0.5	.1240	3.15
M3.5 × 0.6	.1457	3.70
M4 × 0.7	.1654	4.20
M5 × 0.8	.2047	5.20
M6 × 1.0	.2480	6.30
M7 × 1.0	.2874	7.30
M8 × 1.0	.3268	8.30
M8 × 1.25	.3307	8.40
M9 × 1.25	.3701	9.40
M10 × 1.25	.4094	10.40
M10 × 1.5	.4134	10.50
M11 × 1.5	.4528	11.50
M12 × 1.25	.4882	12.40
M12 × 1.5	.4921	12.50
M12 × 1.75	.4921	12.50
M14 × 1.5	.5709	14.50
M14 × 2.0	.5709	14.50
M16 × 1.5	.6496	16.50
M16 × 2.0	.6496	16.50
M18 × .5	.7283	18.50
M18 × 2.0	.7283	18.50
M18 × 2.5	.7382	18.75
M20 × 1.5	.8071	20.50
M20 × 2.0	.8071	20.50
M20 × 2.5	.8169	20.75
M22 × 1.5	.8858	22.50
M22 × 2.0	.8858	22.50
M22 × 2.5	.8957	22.75
M24 × 2.0	.9646	24.50
M24 × 3.0	.9843	25.00
M27 × 3.0	1.1024	28.00
M30 × 3.5	1.2205	31.00

Unified

Size	RECOMMENDATION Drill Size Inch	RECOMMENDATION Drill Size metric (mm)
#2 - 56 UNC	.0906	2.30
#3 - 48 UNC	.1063	2.70
#3 - 56 UNF	.1043	2.65
#4 - 40 UNC	.1181	3.00
#4 - 48 UNF	.1181	3.00
#5 - 40 UNC	.1339	3.40
#5 - 44 UNF	.1299	3.30
#6 - 32 UNC	.1457	3.70
#6 - 40 UNF	.1457	3.70
#8 - 32 UNC	.1732	4.40
#8 - 36 UNF	.1732	4.40
#10 - 24 UNC	.2008	5.10
#10 - 32 UNF	.2008	5.10
#12 - 24 UNC	.2283	5.80
1/4 - 20 UNC	.2638	6.70
1/4 - 28 UNF	.2598	6.60
5/16 - 18 UNC	.3307	8.40
5/16 - 24 UNF	.3228	8.20
3/8 - 16 UNC	.3937	10.00
3/8 - 24 UNF	.3858	9.80
7/16 - 14 UNC	.4528	11.50
7/16 - 20 UNF	.4528	11.50
1/2 - 13 UNC	.5236	13.30
1/2 - 20 UNF	.5157	13.10
9/16 - 12 UNC	.5866	14.90
9/16 - 18 UNF	.5787	14.70
5/8 - 11 UNC	.6496	16.50
5/8 - 18 UNF	.6417	16.30
3/4 - 10 UNC	.7795	19.80
3/4 - 16 UNF	.7677	19.50
7/8 - 9 UNC	.9055	23.00
7/8 - 14 UNF	.8858	22.50
1 - 8 UNC	1.0433	26.50
1 - 12 UNF	1.0236	26.00
1-1/8 - 7 UNC	1.1713	29.75
1-1/8 - 8 UN	1.1417	29.00
1-1/8 - 12 UNF	1.1516	29.25
1-1/4 - 7 UNC	1.2992	33.00
1-1/4 - 8 UN	1.2795	32.50
1-1/4 - 12 UNF	1.2795	32.50
1-3/8 - 6 UNC	1.4173	36.00
1-3/8 - 8 UN	1.3976	35.50
1-3/8 - 12 UNF	1.4173	36.00
1-1/2 - 6 UNC	1.5354	39.00
1-1/2 - 8 UN	1.5354	39.00
1-1/2 - 12 UNF	1.5354	39.00

TECHNICAL DATA

20 CONVERSION TABLE

SURFACE FEET PER MINUTE TO REVOLUTIONS PER MINUTE

Surface Feet Per Minute	20	25	30	40	50	60	70	80	90	100	110	120	130	140	150
Tap Size	**Revolutions Per Minute**														
0	1273	1592	1910	2546	3183	3820	4456	5093	5730	6366	7003	7639	8276	8913	9549
1	1047	1308	1570	2093	2617	3140	3663	4186	4710	5233	5756	6279	6808	7326	7849
2	888	1110	1333	1777	2221	2665	3109	3554	3999	4222	4886	5330	5774	6218	6662
3	772	964	1157	1543	1929	2315	2701	3086	3472	3858	4244	4629	5015	5401	5787
4	682	853	1023	1364	1705	2046	2387	2728	3069	3411	3751	4092	4434	4775	5116
5	611	764	917	1222	1528	1833	2139	2445	2750	3056	3361	3367	3973	4278	4584
6	553	691	829	1106	1382	1658	1934	2211	2487	2764	3040	3316	3592	3869	4145
8	466	583	699	932	1165	1398	1631	1864	2097	2330	2563	2796	3029	3262	3495
10	402	502	603	804	1005	1205	1406	1607	1808	2009	2210	2411	2612	2813	3014
12	354	442	531	707	884	1061	1238	1415	1592	1769	1945	2122	2300	2476	2653
1/4	306	382	458	611	764	917	1070	1222	1375	1528	1681	1833	1986	2139	2292
5/16	245	306	367	486	611	733	856	978	1100	1222	1345	1467	1589	1711	1833
3/8	204	255	306	407	509	611	713	815	917	1019	1120	1222	1324	1426	1528
7/16	175	219	262	349	437	524	611	698	786	873	960	1048	1135	1222	1310
1/2	153	191	229	306	382	458	535	611	688	764	840	917	993	1070	1146
9/16	137	172	206	275	344	412	481	550	619	687	756	825	893	963	1031
5/8	122	153	183	244	306	367	428	489	550	611	672	733	794	856	917
3/4	102	128	153	203	255	306	357	407	458	509	560	611	662	713	764
7/8	87	109	131	175	218	252	306	350	392	437	480	524	568	611	655
1	76	96	115	153	191	230	268	306	344	382	420	458	497	535	573

TECHNICAL DATA

20 TROUBLE SHOOTING GUIDE

Specific Problem	Cause	Solution
Dimensional Accuracy		
Oversize Pitch Diameter	Tap	1. Use proper limits of taps 2. Use longer chamfered taps
	Chip Packing	1. Use spiral point or spiral fluted taps 2. Reduce number of flutes to provied extra chip room 3. Use larger hole size 4. If tapping a hole, allow deeper hole where applicable or shorten the thread length of the parts 5. Use proper lubricant
	Galling	1. Apply proper surface treatment such as Hardslick or chrome 2. Use proper cutting lubricant 3. Reduce tapping speed 4. Use proper cutting angle in accordance with material being tapped 5. Use large hole size
	Operating Conditions	1. Apply proper tapping speed 2. Correct alignment of tap and drill hole 3. Free cutting either tap or workpiece 4. Use proper tapping speed to avoid torn or rough threads 5. Use lead screw tapper 6. Use proper tapping machine with suitable power 7. Avoid misalignment of the tap and drill hole from loose spindle or worn holder
	Tool Condition	1. Obtain proper indexing angle for the flutes at the cutting edge 2. Grind proper cutting angle and chamfer angle 3. Avoid too narrow a land width 4. Remove burrs from regrinding
Oversize Internal Diameter	Hole Size	1. Use minimum hole size 2. Avoid tapered hole 3. Use proper chamfered taps
	Galling	1. Galling solutions 1 through 4 above can be applied to this specific problem
Undersize Pitch Diameter	Incorrect Tap	1. Use oversize taps 2. Apply proper chamfer angle 3. Increase cutting angle
	Damaged Thread	1. Use proper reversing speed to avoid damaging tapped thread on the way out of the hole
	Left-over Chips	1. Increase cutting performance to avoid any left over chips in the hole 2. Remove left over chips from the hole for gage checking
Undersize Internal Diameter	Hole Size	1. Use maximum drill size

TECHNICAL DATA

Specific Problem	Cause	Solution
Tool Life		
Breakage	Incorrect Tap Selection	1. Avoid chip packing in the flutes or the bottom of the hole. Use spiral pointed or spiral fluted taps or fluteless taps. 2. Apply correct surface treatment such as Hardslick or bright
	Excessive Tapping Torque	1. Use larger drill size 2. Try to shorten thread length 3. Increase cutting angle 4. Apply a tap with more thread relief and reduced land width 5. Apply correct surface treatment such as Hardslick
	Operating Conditions	1. Reduce tapping speed 2. Avoid misalignment between tap and the hole and tapered hole 3. Use floating type of tapping holder 4. Use tapping holder with torque adjustment 5. Avoid hitting bottom of the hole with tap
	Tool Condition	1. Do not grind the bottom of the flute 2. Avoid too narrow a land width 3. Remove all worn sections when regrindig the flutes 4. Regrind tool more frequently
Chipping	Incorrect Tap Selection	1. Reduce cutting angle 2. Use a different kind of high-speed steel tap 3. Reduce hardness of the tap 4. Increase chamfer length 5. Avoid chip packing in the flutes or in the bottom of the hole by using spiral fluted or spiral pointed taps
	Wear	1. Reduce tapping speed 2. Avoid misalignment between tap and hole 3. Avoid sudden return of reverse in blind hole tapping 4. Avoid galling 5. Use larger hole size
Wear	Incorrect Tap Selection	1. Apply specially designed tap for tapping heat treated materal 2. Change to a type of high-speed steel tap that contains vanadium 3. Apply special surface treatment such as TiCN or Hardslick 4. Increase chamfer length
	Operating Conditions	1. Reduce tapping speed 2. Apply proper cutting lubricants 3. Avoid work hardened hole 4. Use larger hole size
	Tool Condition	1. Grind proper cutting angle 2. Avoid hardness reduction from grinding process
Torn or Rough Thread	Chamfer Too Short	1. Increase chamfer length
	Wrong Cutting Angle	1. Apply proper cutting angle

TECHNICAL DATA

Specific Problem	Cause	Solution
Surface Finish		
Torn or Rough Thread	Galling	1. Use thread relieved taps 2. Reduce land width 3. Apply surface treatment such as Hardslick or chrome 4. Use proper cutting lubricant 5. Reduce tapping speed 6. Use larger hole size 7. Obtain proper alignment between tap and work
	Chip Packing	1. Use spiral pointed or spiral fluted taps 2. Use larger drill size
Chattering on Tapped Thread	**Tool Free Cutting**	1. Reduce cutting angle 2. Reduce amount of thread relief
	Tool Condition	1. Do not grind the bottom of the flute 2. Avoid too narrow a land width

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Best Quality and Punctual Delivery
For world-wide Customers

Thanks to our quality reliability and developing technics, YG-1 has been expanding the market share and growing with partners since 1982. As one of the leading cutting tool manufacturer, we are aiming at having customers experience YG-1's various cutting tool solution all around the world. In order to achieve most efficient logistics, production and marketing, YG-1 has established a global network over 75 countries and international logistics center. This gives the opportunity to provide the best service and satisfy our customer's requirement at all time.

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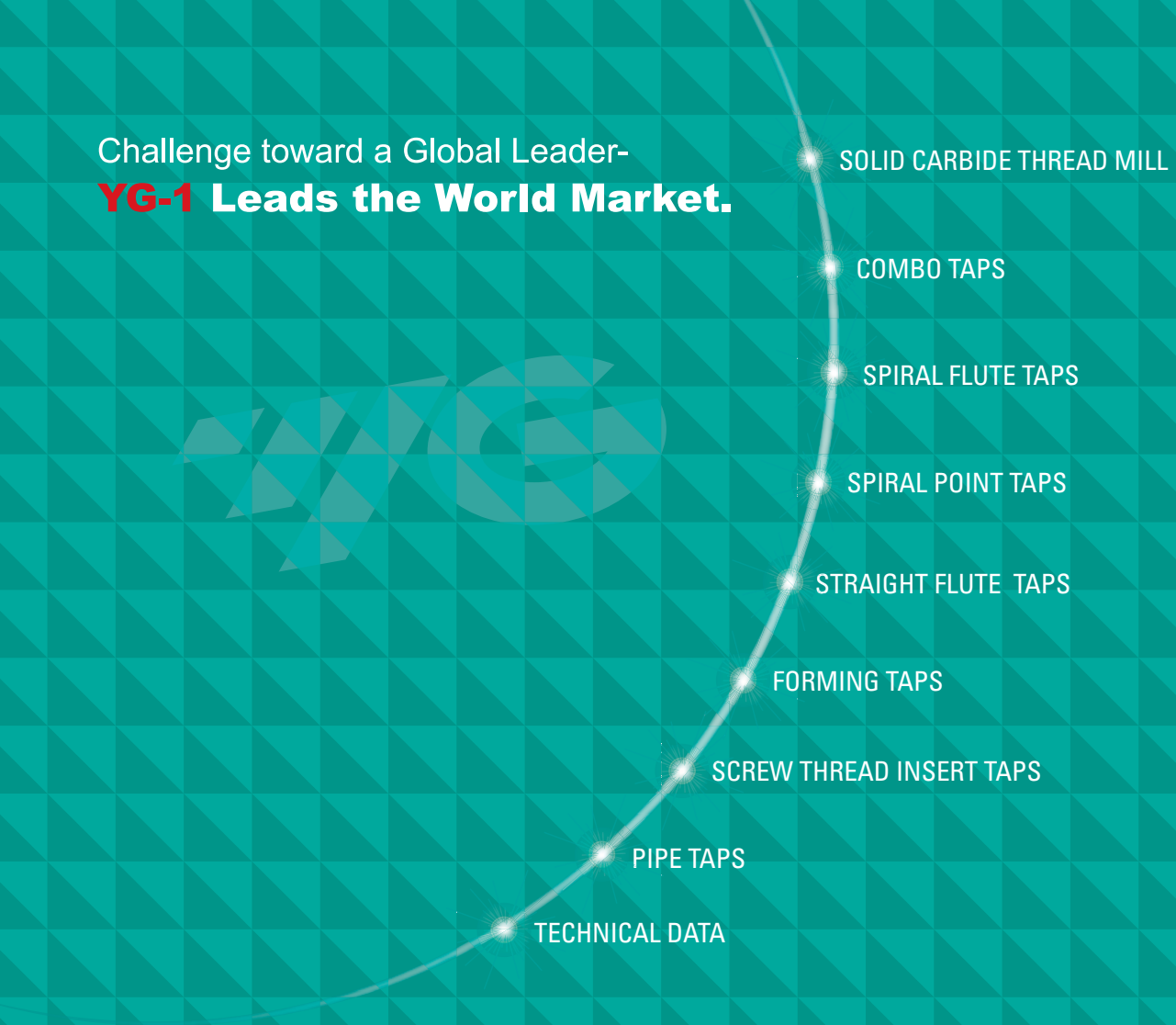
YG-1 Leads the World Market.



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