

THREADING TOOLS

HSS COMBO TAPS (Spiral Point & Spiral Flute)

HSS SPIRAL FLUTE TAPS

HSS SPIRAL POINT TAPS

HSS STRAIGHT FLUTE TAP

HSS TAPER PIPE TAPS

HSS FORMING TAPS

HSS STANDARD TAPS

HSS HAND TAPS

SOLID CARBIDE THREAD MILLS

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THREADING TOOLS

HSS TAPS

CARBIDE THREAD MILLS

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HSS COMBO TAPS (Spiral Point & Spiral Flute)

Multi Purpose tapping, YG-1's Patent, HSS-EX. for Prevention of Oversize Threads

COMBO
TAPS

HSS SPIRAL FLUTE TAPS

Tapping Blind Holes, HSS-E & HSS-PM

SPIRAL
FLUTE TAPS

HSS SPIRAL POINT TAPS

Tapping Through Holes, HSS-E & HSS-PM

SPIRAL
POINT TAPS

HSS STRAIGHT FLUTE TAP

Super-HSS

STRAIGHT
FLUTE TAP

HSS TAPER PIPE TAPS

Tapping NPT and NPTF Pipe threads

TAPER PIPE
TAPS

HSS FORMING TAPS

Tapping by Forming Soft Materials, HSS-E & HSS-PM

FORMING
TAPS

HSS STANDARD TAPS

Spiral Point and Spiral Flute Taps

STANDARD
TAPS

HSS HAND TAPS

HAND TAPS

SOLID CARBIDE THREAD MILLS

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

THREAD
MILLS

TECHNICAL DATA






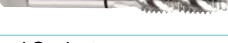








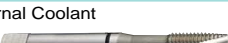



TECHNICAL
DATA



THREADING TOOLS APPLICATION TABLE

COMBO TAPS

INCH






EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
T2 T2-C		HSS-EX	UNC/UNF	ANSI	GH	2 ~ 3P	Bright TiCN	
T6 T6-N	with Internal Coolant 	HSS-EX	UNC/UNF	ANSI	GH	2 ~ 3P	Bright TiN	
T7 T7-C	Short Chamfer 	HSS-EX	UNC/UNF	ANSI	GH	1 ~ 2P	Bright TiCN	
T1-S T1-C		HSS-EX	UNC/UNF	ANSI Shank DIN Length	GH	2 ~ 3P	Steam Oxide TiCN	
TCA-S/C TCB-S/C		Super HSS HSS-EX	UNC/UNF	ANSI	GH	2 ~ 3P	Steam Oxide TiCN	
T5 T5-C		HSS-EX	M	ANSI	D	2 ~ 3P	Bright TiCN	
T8 T8-N	with Internal Coolant 	HSS-EX	M	ANSI	D	2 ~ 3P	Bright TiN	
T9 T9-C	Short Chamfer 	HSS-EX	M	ANSI	D	1 ~ 2P	Bright TiCN	
TA-S TA-C		HSS-EX	M	ANSI Shank DIN Length	D	2 ~ 3P	Steam Oxide TiCN	
TCC-S/C TCD-S/C		Super HSS HSS-EX	M	ANSI	D	2 ~ 3P	Steam Oxide TiCN	
T4 T4-C		HSS-EX	UNC/UNF	ANSI	GH	4 ~ 5P	Bright TiCN	
TB TB-N	with Internal Coolant 	HSS-EX	UNC/UNF	ANSI	GH	4 ~ 5P	Bright TiN	
TC-S TC-C		HSS-EX	UNC/UNF	ANSI Shank DIN Length	GH	4 ~ 5P	Steam Oxide TiCN	
TCE-S/C TCF-S/C		Super HSS HSS-EX	UNC/UNF	ANSI	GH	4P	Steam Oxide TiCN	
T3 T3-C		HSS-EX	M	ANSI	D	4 ~ 5P	Bright TiCN	
TH TH-N	with Internal Coolant 	HSS-EX	M	ANSI	D	4 ~ 5P	Bright TiN	
TK-S TK-C		HSS-EX	M	ANSI Shank DIN Length	D	4 ~ 5P	Steam Oxide TiCN	
TCG-S/C TCH-S/C		Super HSS HSS-EX	M	ANSI	D	4 ~ 5P	Steam Oxide TiCN	

SPIRAL FLUTE TAPS

INCH

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
BG/GB		HSS-EX	UNC/UN8	ANSI	2B	2P ~ 3P	Hardslick Gold & Black	
BB/BI/BF/BK		Super HSS	UNC/UNF	ANSI DIN Length ANSI Shank	H2-H6	2P ~ 3P	Steam Oxide Hardslick	271
H6/H7/H8		P-HSS	UNC/UNF	ANSI	H2-H5	2P ~ 3P	Bright / TiCN Hardslick	272
B3/H9/B5/D6		P-HSS	UNC/UNF	ANSI	H2-H5	2P ~ 3P	Steam Oxide TiCN / TiN Hardslick	273
B1/B0/B2/D2		HSSE-V3	UNC/UNF	ANSI	H2-H6	2P ~ 3P	Bright Steam Oxide TiN / Hardslick	275
G7/G8/G9/H0		P-HSS	UNC/UNF	ANSI Shank	H2-H3	4P ~ 5P	TiN Hardslick	277
H1/H2/H3/H4		P-HSS	UNC/UNF	ANSI Shank	H3	4P ~ 5P	TiN Hardslick	278
D4/D3/E0		HSSE-V3	UNC/UNF	ANSI	H2-H5	2P ~ 3P	Bright Steam Oxide Hardslick	279
C0/D8		HSSE-V3	UNC/UNF	ANSI	H2-H5	2P ~ 3P	Bright Hardslick	281
F4/F8/F6		HSS-V	UNC/UNF	ANSI	H2-H6	1.5P ~ 2P	Steam Oxide TiN / Hardslick	282
G0/G1/G2		HSS-V	UNC/UNF	DIN Length ANSI Shank	H2-H6	2P ~ 3P	Bright TiN / Hardslick	284
ST/SI	STI Tap 	HSSE-V3	UNC/UNF	ANSI	2B	1.5P ~ 2P	Hardslick	286

METRIC

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
BH/BM BD/BO		Super HSS	M/MF	ANSI DIN Length ANSI Shank	D3-D7	2P-3P	Steam Oxide Hardslick	287
BS/BT E6/E8/E9		HSSE-V3	M/MF	ANSI DIN Length ANSI Shank	D3-D7	2P-3P	Steam Oxide TiCN / Hardslick	288
BU/BV E2/E4/E5		HSSE-V3	M/MF	ANSI DIN Length ANSI Shank	D3-D7	2P-3P	Steam Oxide TiCN / Hardslick	289
BW/BX F1/F3		HSSE-V3	M/MF	ANSI DIN Length ANSI Shank	D3-D6	2P-3P	Bright Hardslick	290
G4/G5/G6		HSS-V	M/MF	ANSI	D3-D6	1.5P-2P	Bright TiCN / Hardslick	291





THREADING TOOLS APPLICATION TABLE

SPIRAL POINT TAPS

INCH


EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
M9/O1 N4/O5		Super HSS	UNC/UNF	ANSI DIN Length ANSI Shank	H2-H6	4P-5P	Steam Oxide Hardslick	295
M5/M6/M7		P-HSS	UNC/UNF	ANSI	H2-H5	4P-5P	Bright / TiCN Hardslick	296
I3/M8/15/J6		P-HSS	UNC/UNF	ANSI	H2-H5	4P-5P	Steam Oxide TiCN / TiN Hardslick	297
I0/I2/J2		HSSE-V3	UNC/UNF	ANSI	H2-H6	4P-5P	Steam Oxide TiN / Hardslick	299
M0/M1/M2/M3		P-HSS	UNC/UNF	ANSI Long Shank	H2-H3	4P-5P	TiN Hardslick	301
J4/J8/J3		HSSE-V3	UNC/UNF	ANSI	H2-H5	4P-5P	Bright Steam Oxide Hardslick	302
K9/L0/L1		HSS-V	UNC/UNF	ANSI	H2-H6	4P-5P	Bright TiN / Hardslick	304
L3/L4/L5		HSS-V	UNC/UNF	DIN Length ANSI Shank	H2-H6	4P-5P	Bright TiN / Hardslick	306
ST/SI	STI Tap 	HSSE-V3	UNC/UNF	ANSI	2B	4.5P~5P	Hardslick	307

METRIC

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
N7/N8 N3/O3		Super HSS	M/MF	ANSI DIN Length ANSI Shank	D3-D7	4P-5P	Steam Oxide Hardslick	308
O9/1A K3/K5/K6		HSSE-V3	M/MF	ANSI DIN Length ANSI Shank	D3-D7	4P-5P	Steam Oxide TiCN / Hardslick	309
1B/1C J9/K7/K2		HSSE-V3	M/MF	ANSI DIN Length ANSI Shank	D3-D7	4P-5P	Steam Oxide TiCN / Hardslick	310
L7/L8/L9		HSS-V	M/MF	ANSI	D3-D6	4P-5P	Bright TiCN / Hardslick	311

STRAIGHT FLUTE TAP

INCH





EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
TR, TR-A, TR-R		Super HSS	UNC/UNF	ANSI	H3~H5	2P~3P	TiN	327

METRIC

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
TR, TR-A, TR-R		Super HSS	M	ANSI	D4~D6	2P~3P	TiN	328

TAPER PIPE TAPS




INCH

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
Q0/Q1/Q6		HSSE-V3	NPT/F	ANSI		2P~3P	Bright Steam Oxide Hardslick	315
Q9/R0/R1		HSSE-V3	NPT/F	ANSI		2P~3P	Bright / TiN Hardslick	316
R7/R8/R9/S0		HSSE-V3	NPT/F	ANSI		2P~3P	Bright / TiN Hardslick Nitrided-Steam Oxide	317
S1/S2		HSSE-V3	NPTF	ANSI		2P~3P	Bright / TiCN	318


THREADING TOOLS APPLICATION TABLE

FORMING TAPS

INCH



EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
ZF								
Z0/Z1/Z2/Z3		HSSE-V3	UNC/UNF	ANSI	H3-H8	4P-5P 1.5P-2P	Bright / TiN	321
Z4/Z5/Z6/Z7		HSSE-V3	UNC/UNF	ANSI	H3-H8	4P-5P 1.5P-2P	Bright / TiN	322

METRIC

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
Z8/ZA/ZC		HSSE-V3	M/MF	ANSI	D5-D11	4P-5P 1.5P-2P	Bright TiN / TiCN	323


STANDARD TAPS

INCH

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
C2/C3/C4/D9		HSSE-V3	UNC/UNF	ANSI	H2-H6	1.5P-2P	Steam Oxide Bright / TiN Hardslick	327
I9/J0/J1/J7		HSSE-V3	UNC/UNF	ANSI	H2-H6	4P-5P	Steam Oxide Bright / TiN Hardslick	328

HAND TAPS

INCH




EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
A3/A5/A7		HSS-V	UNC/UNF	ANSI	H2~H4	9/4/1.5P	Bright	331

METRIC

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
A6/A9		HSS-V	M	ANSI	D3~D9	4/1.5P	Bright	332

THREAD MILLS

INCH

EDP No.	MODEL	Description
TE		Solid Carbide Thread mill for Unified Internal Threads - ANSI B 1.1
TD		Solid Carbide Thread mill for Metric Internal Threads - DIN 13
TF		Solid Carbide Thread mill for Taper Pipe Threads - ANSI B 1.20.1(NPT) / ANSI B1.20.3(NPTF)






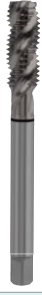



MACHINE TAPS RECOMMENDATION TABLE

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

● = RECOMMENDED

○ = SUITABLE

		SERIES		T2/T2-C	T6/T6-N	T7/T7-C		
		DESCRIPTION		ANSI				
		PAGE						
		THREADS		UNC/UNF	UNC/UNF	UNC/UNF		
		TAP MATERIALS		HSS-EX	HSS-EX	HSS-EX		
		CHAMFER LENGTH		2-3P	2-3P	1-2P		
		SURFACE TREATMENT		Bright TiCN	Bright TiN	Bright TiCN		
		SPIRAL FLUTE ANGLE		R40°	R40°	R40°		
		HOLE TYPE		Blind	Blind	Blind		
		REMARK						
Material Group	Material Sub-Group	Hardness (HRc)	Hardness (BHN)	Cutting Speed(SFM)				
				Uncoated	Coated			
Steel	Low carbon steels Free machining carbon steels	< 15	< 180	25 - 50	50 - 80	●	●	●
	Low carbon steels Free machining carbon steels	< 23	< 240	25 - 50	50 - 80	●	●	●
	Steel castings & forgings Heat-treatable alloy steels	> 24 ≤ 38	> 250 ≤ 350	6 - 30	10 - 35	●	●	●
	Alloyed tool steels Mold steels	> 38 ≤ 44	> 350 ≤ 420	6 - 12	-	●	●	●
Stainless Steel	Free machining stainless steels	< 23	< 240	12 - 35	20 - 50	●	●	●
	Heat-and corrosion-resistant stainless Valve stainless steels	> 24 ≤ 38	> 250 ≤ 350	12 - 15	12 - 15	●	●	●
	Stainless steel castings Precipitation hardening stainless steels	> 38 ≤ 44	> 350 ≤ 420	12 - 15	-	●	●	●
	Pure aluminium Aluminium alloys	-	-	50 - 65	-	●	●	●
Aluminium	Aluminium alloy castings	-	-	40 - 65	45 - 90	●	●	●
	Grey cast iron	-	≤ 220	35 - 50	50 - 65	●	●	●
Cast Iron	Nodular cast iron Chilled cast iron Meehanite iron Ductile iron	-	≥ 250	12 - 45	25 - 55	●	●	●
	718 & 625 INCO Waspaloy Hastelloy Invar Monel Incoloy	≤ 38	≤ 350	10 - 15	-	○	○	○
Nickel Alloys	718 Inconel A286	> 38 ≤ 44	> 350 ≤ 420	10 - 12	-	○	○	○
	Titanium	≤ 38	≤ 350	3 - 15	-	●	●	●
Copper	Pure and alloyed copper	-	-	50 - 60	65 - 100	●	●	●
Brass	Free machining brass Alloyed brass	-	-	30 - 65	-	●	●	●
Bronze		< 44	< 420	12 - 20	35 - 80	●	●	●
Zine		-	-	25 - 65	50 - 80	●	●	●
Magnesium		-	-	-	45 - 100	●	●	●

T1-S/T1-C	TCA-S/C TCB-S/C	T5/T5-C	T8/T8-N	T9/T9-C	TA-S TA-C	TCC-S/C TCD-S/C	T4/T4-C	TB/TB-N	TC-S/TC-C
DIN LENGTH ANSI SHANK	ANSI				DIN LENGTH ANSI SHANK	ANSI			DIN LENGTH
UNC/UNF	UNC/UNF	M	M	M	M	M	UNC/UNF	UNC/UNF	UNC/UNF
HSS-EX	Super HSS HSS-EX	HSS-EX	HSS-EX	HSS-EX	HSS-EX	Super HSS HSS-EX	HSS-EX	HSS-EX	HSS-EX
2-3P	2-3P	2-3P	2-3P	1-2P	2-3P	2-3P	4-5P	4-5P	4-5P
Steam Oxide TiCN	Steam Oxide TiCN	Bright TiCN	Bright TiN	Bright TiCN	Steam Oxide TiCN	Steam Oxide TiCN	Bright TiCN	Bright TiN	Steam Oxide TiCN
R40°	R45°	R40°	R40°	R40°	R40°	R45°	-	-	-
Blind	Blind	Blind	Blind	Blind	Blind	Blind	Through	Through	Through
									
●	○	●	●	●	●	○	●	●	●
●		●	●	●	●		●	●	●
●	○	●	●	●	●	○	●	●	●
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●	●	●	●	●	●	●	●	●	●
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●		●	●	●	●		●	●	●






MACHINE TAPS RECOMMENDATION TABLE

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

● = RECOMMENDED

○ = SUITABLE

		SERIES		TCE-S/C TCF-S/C	T3/T3-C	TH TH-N		
		DESCRIPTION		ANSI				
		PAGE						
		THREADS		UNC/UNF	M	M		
		TAP MATERIALS		Super HSS HSS-EX	HSS-EX	HSS-EX		
		CHAMFER LENGTH		4P	4-5P	4-5P		
		SURFACE TREATMENT		Steam Oxide TiCN	Bright TiCN	Bright		
		SPIRAL FLUTE ANGLE		-	-	TiN		
		HOLE TYPE		Through	Through	-		
		REMARK						
Material Group	Material Sub-Group	Hardness (HRc)	Hardness (BHN)	Cutting Speed(SFM)				
				Uncoated	Coated			
Steel	Low carbon steels Free machining carbon steels	< 15	< 180	25 - 50	50 - 80	○	●	●
	Low carbon steels Free machining carbon steels	< 23	< 240	25 - 50	50 - 80		●	●
	Steel castings & forgings Heat-treatable alloy steels	> 24	> 250	6 - 30	10 - 35	○	●	●
		≤ 38	≤ 350					
	Alloyed tool steels Mold steels	> 38	> 350	6 - 12	-		●	●
≤ 44		≤ 420						
Stainless Steel	Free machining stainless steels	< 23	< 240	12 - 35	20 - 50	●	●	●
	Heat-and corrosion-resistant stainless Valve stainless steels	> 24	> 250	12 - 15	12 - 15	●	●	●
		≤ 38	≤ 350					
	Stainless steel castings Precipitation hardening stainless steels	> 38	> 350	12 - 15	-		●	●
		≤ 44	≤ 420					
Aluminium	Pure aluminium Aluminium alloys	-	-	50 - 65	-		●	●
	Aluminium alloy castings	-	-	40 - 65	45 - 90		●	●
Cast Iron	Grey cast iron	-	≤ 220	35 - 50	50 - 65		●	●
	Nodular cast iron Chilled cast iron Meehanite iron Ductile iron	-	≥ 250	12 - 45	25 - 55		●	●
Nickel Alloys	718 & 625 INCO Waspaloy Hastelloy Invar Monel Incoloy	≤ 38	≤ 350	10 - 15	-		○	○
	718 Inconel A286	> 38	> 350	10 - 12	-		○	○
		≤ 44	≤ 420					
Titanium		≤ 38	≤ 350	3 - 15	-			○
Copper	Pure and alloyed copper	-	-	50 - 60	65 - 100		●	●
Brass	Free machining brass Alloyed brass	-	-	30 - 65	-		●	●
Bronze		< 44	< 420	12 - 20	35 - 80		●	●
Zine		-	-	25 - 65	50 - 80		●	●
Magnesium		-	-	-	45 - 100		●	●

TK-S TK-C	TCG-S/C TCH-S/C	BG/GB	BB/B1/ BF/BK	H6/H7/H8	B3/H9/ B5/D6	B1/B0/ B2/D2	G7/G8/ G9/H0	H1/H2/ H3/H4
DIN LENGTH ANSI SHANK	ANSI	ANSI	ANSI / DIN Length ANSI Shank	ANSI			ANSI Shank	
M	M	UNC/UN8	UNC/UNF	UNC/UNF	UNC/UNF	UNC/UNF	UNC/UNF	UNC/UNF
HSS-EX	Super HSS HSS-EX	HSS-EX	Super HSS	P-HSS	P-HSS	HSSE-V3	HSSE-V3 P-HSS	HSSE-V3 P-HSS
4-5P	4-5P	2P ~ 3P	2 - 3P	2-3P	2-3P	2-3P	4-5P	4-5P
Steam Oxide TiCN	Steam Oxide TiCN	Hardslick Gold & Black	Steam Oxide Hardslick	Bright TiCN Hardslick	Steam Oxide TiN TiCN Hardslick	Bright Steam Oxide TiN Hardslick	TiN Hardslick	TiN Hardslick
-	-		R40°	R15°	R15°	R45°	R45° / L15°	R45° / L15°
Through	Through	Blind	Blind	Blind	Blind	Blind	Blind	Blind
								
●	○		○			○	○	○
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●	○		●	○				
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●	●		●			●	●	●
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●			○			○	○	○















MACHINE TAPS RECOMMENDATION TABLE

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

● = RECOMMENDED

○ = SUITABLE

		SERIES		D4/D3/E0	C0/D8	F4/F8/F6		
		DESCRIPTION		ANSI				
		PAGE						
		THREADS		UNC/UNF	UNC/UNF	UNC/UNF		
		TAP MATERIALS		HSSE-V3	HSSE-V3	HSS-V		
		CHAMFER LENGTH		2-3P	2-3P	1.5-2P		
		SURFACE TREATMENT		Bright SteamOxide Hardslick	Bright Hardslick	Steam Oxide TiN Hardslick		
		SPIRAL FLUTE ANGLE		R45°	R50°	R45°		
		HOLE TYPE		Blind	Blind	Blind		
		REMARK						
Material Group	Material Sub-Group	Hardness (HRC)	Hardness (BHN)	Cutting Speed(SFM)				
				Uncoated	Coated			
Steel	Low carbon steels Free machining carbon steels	< 15	< 180	25 - 50	50 - 80			●
	Low carbon steels Free machining carbon steels	< 23	< 240	25 - 50	50 - 80	●		●
	Steel castings & forgings Heat-treatable alloy steels	> 24 ≤ 38	> 250 ≤ 350	6 - 30	10 - 35	●		○
	Alloyed tool steels Mold steels	> 38 ≤ 44	> 350 ≤ 420	6 - 12	-			
Stainless Steel	Free machining stainless steels	< 23	< 240	12 - 35	20 - 50	○		○
	Heat-and corrosion-resistant stainless Valve stainless steels	> 24 ≤ 38	> 250 ≤ 350	12 - 15	12 - 15	○		○
	Stainless steel castings	> 38	> 350	12 - 15	-			
	Precipitation hardening stainless steels	≤ 44	≤ 420	12 - 15	-			
Aluminium	Pure aluminium Aluminium alloys	-	-	50 - 65	-		●	
	Aluminium alloy castings	-	-	40 - 65	45 - 90		●	○
Cast Iron	Grey cast iron	-	≤ 220	35 - 50	50 - 65			
	Nodular cast iron Chilled cast iron Meehanite iron Ductile iron	-	≥ 250	12 - 45	25 - 55			○
Nickel Alloys	718 & 625 INCO Waspaloy Hastelloy Invar Monel Incoloy	≤ 38	≤ 350	10 - 15	-	○		
	718 Inconel A286	> 38 ≤ 44	> 350 ≤ 420	10 - 12	-			
Titanium		≤ 38	≤ 350	3 - 15	-			
Copper	Pure and alloyed copper	-	-	50 - 60	65 - 100			
Brass	Free machining brass Alloyed brass	-	-	30 - 65	-			
Bronze		< 44	< 420	12 - 20	35 - 80			
Zine		-	-	25 - 65	50 - 80			
Magnesium		-	-	-	45 - 100			

G0/G1/G2	STI TAP (ST/SI)	BH/BM BD/BO	BS/BT E6/E8/E9	BU/BV E2/E4/E5	BW/BX F1/F3	G4/G5/G6	M9/O1/N4/O5	M5/M6/M7
DIN LENGTH ANSI SHANK	ANSI	ANSI DIN LENGTH ANSI SHANK				ANSI	ANSI / DIN Length ANSI Shank	ANSI
UNC/UNF	UNC/UNF	M/MF	M/MF	M/MF	M/MF	M/MF	UNC/UNF	UNC/UNF
HSS-V	HSSE-V3	Super HSS	HSSE-V3	HSSE-V3	HSSE-V3	HSS-V	Super HSS	P-HSS
1.5-2P 2-3P	1.5-2P	2-3P	2-3P	2-3P	2-3P	1.5-2P	4-5P	4-5P
Bright TiN Hardslick	Hardslick	Steam Oxide Hardslick	Steam Oxide TiCN Hardslick	Steam Oxide TiCN Hardslick	Bright Hardslick	Bright TiCN Hardslick	Steam Oxide Hardslick	Bright TiCN Hardslick
R50°	-	R40°	R45°	R45°	R50°	R50°	-	-
Blind	Blind	Blind	Blind	Blind	Blind	Blind	Through	Through
								
●	●	○	○			●	○	
●	●	●	●	○		●	●	
○	○			●		○	●	○
								●
○	○	●	●	○		●	●	
○	○			●		○	●	○
								●
		○	○		●		○	
○	○			○	●	○		
○	○					○		
								○
								○
		○	○				○	
		○	○				○	
								●
		○	○				○	
		○	○				○	
















MACHINE TAPS RECOMMENDATION TABLE

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

● = RECOMMENDED

○ = SUITABLE

		SERIES		13/M8/ 15/J6	10/12/J2	M0/M1/ M2/M3		
		DESCRIPTION		ANSI		ANSI Long Shank		
		PAGE						
		THREADS		UNC/UNF	UNC/UNF	UNC/UNF		
		TAP MATERIALS		P-HSS	HSSE-V3	P-HSS		
		CHAMFER LENGTH		4-5P	4-5P	4-5P		
		SURFACE TREATMENT		Steam Oxide TiN TiCN /Hardslick	Steam Oxide TiN Hardslick	TiN Hardslick		
		SPIRAL FLUTE ANGLE		-	-	-		
		HOLE TYPE		Through	Through	Through		
		REMARK						
Material Group	Material Sub-Group	Hardness (HRC)	Hardness (BHN)	Cutting Speed(SFM)				
				Uncoated	Coated			
Steel	Low carbon steels Free machining carbon steels	< 15	< 180	25 - 50	50 - 80		○	○
	Low carbon steels Free machining carbon steels	< 23	< 240	25 - 50	50 - 80		●	●
	Steel castings & forgings Heat-treatable alloy steels	> 24 ≤ 38	> 250 ≤ 350	6 - 30	10 - 35			
	Alloyed tool steels Mold steels	> 38 ≤ 44	> 350 ≤ 420	6 - 12	-			
Stainless Steel	Free machining stainless steels	< 23	< 240	12 - 35	20 - 50		●	●
	Heat-and corrosion-resistant stainless Valve stainless steels	> 24 ≤ 38	> 250 ≤ 350	12 - 15	12 - 15			
	Stainless steel castings Precipitation hardening stainless steels	> 38 ≤ 44	> 350 ≤ 420	12 - 15	-			
	Pure aluminium Aluminium alloys	-	-	50 - 65	-		○	○
Aluminium	Aluminium alloy castings	-	-	40 - 65	45 - 90			
	Grey cast iron	-	≤ 220	35 - 50	50 - 65			
Cast Iron	Nodular cast iron Chilled cast iron Meehanite iron Ductile iron	-	≥ 250	12 - 45	25 - 55			
	718 & 625 INCO Waspaloy Hastelloy Invar Monel Incoloy	≤ 38	≤ 350	10 - 15	-	●		
Nickel Alloys	718 Inconel A286	> 38 ≤ 44	> 350 ≤ 420	10 - 12	-	●		
	Titanium	≤ 38	≤ 350	3 - 15	-	●		
Copper	Pure and alloyed copper	-	-	50 - 60	65 - 100		○	○
Brass	Free machining brass Alloyed brass	-	-	30 - 65	-		○	○
	Bronze	< 44	< 420	12 - 20	35 - 80			
Zine		-	-	25 - 65	50 - 80		○	○
Magnesium		-	-	-	45 - 100		○	○

J4/J3/J8	K9/L0/L1	L3/L4/L5	STI TAP (ST/SI)	N7/N8 N3/O3	O9/I/A K3/K5/K6	IB/IC J9/K7/K2	L7/L8/L9	TR, TR-A, TR-R	
ANSI		DIN LENGTH ANSI SHANK	ANSI	ANSI DIN Length ANSI Shank			ANSI		
UNC/UNF	UNC/UNF	UNC/UNF	UNC/UNF	M/MF	M/MF	M/MF	M/MF	UNC/UNF	M
HSSE-V3	HSS-V	HSS-V	HSSE-V3	Super HSS	HSSE-V3	HSSE-V3	HSS-V	Super HSS	Super HSS
4-5P	4-5P	4-5P	4.5-5P	4-5P	4-5P	4-5P	4-5P	2P~3P	2P~3P
Bright SteamOxide Hardslick	Bright TiN Hardslick	Bright TiN Hardslick	Hardslick	SteamOxide Hardslick	SteamOxide TiCN Hardslick	SteamOxide TiCN Hardslick	Bright TiCN Hardslick	TiAIN	TiAIN
-	-	-	-	-	-	-	-	-	-
Through	Through	Through	Through	Through	Through	Through	Through	Blind Through	Blind Through
									
	●	●	●	○			●		
●	●	●	●	●	●	●	●		
●	○	○	○	●	○	○	○		
○	○	○	○	●	●	●	●		
○	○	○	○	●	○	○	○		
				○					
	○	○	○		○	○	○		
○									
					○				
					○				
					○				
					○				











MACHINE TAPS RECOMMENDATION TABLE

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

● = RECOMMENDED

○ = SUITABLE

		SERIES		Q0/Q1/Q6	Q9/R0/R1	R7/R8/ R9/S0		
		DESCRIPTION		ANSI				
		PAGE						
		THREADS		NPT/F	NPT/F	NPT/F		
		TAP MATERIALS		HSSE-V3	HSSE-V3	HSSE-V3		
		CHAMFER LENGTH		2-3P	2-3P	2-3P		
		SURFACE TREATMENT		Bright SteamOxide Hardslick	Bright TiN Hardslick	Bright TiN Hardslick Ni-Steam Oxide		
		SPIRAL FLUTE ANGLE		R15°	R15°/-	R15°/-		
		HOLE TYPE		Blind	Blind Through	Blind Through		
		REMARK						
Material Group	Material Sub-Group	Hardness (HRc)	Hardness (BHN)	Cutting Speed(SFM)		Uncoated	Coated	
Steel	Low carbon steels Free machining carbon steels	< 15	< 180	25 - 50	50 - 80	○	●	●
	Low carbon steels Free machining carbon steels	< 23	< 240	25 - 50	50 - 80	●	●	●
	Steel castings & forgings Heat-treatable alloy steels	> 24 ≤ 38	> 250 ≤ 350	6 - 30	10 - 35	○	○	○
	Alloyed tool steels Mold steels	> 38 ≤ 44	> 350 ≤ 420	6 - 12	-			
Stainless Steel	Free machining stainless steels	< 23	< 240	12 - 35	20 - 50	●		
	Heat-and corrosion-resistant stainless Valve stainless steels	> 24 ≤ 38	> 250 ≤ 350	12 - 15	12 - 15	○		
	Stainless steel castings Precipitation hardening stainless steels	> 38 ≤ 44	> 350 ≤ 420	12 - 15	-			
	Pure aluminium Aluminium alloys	-	-	50 - 65	-			
Aluminium	Aluminium alloy castings	-	-	40 - 65	45 - 90	○		
	Grey cast iron	-	≤ 220	35 - 50	50 - 65		●	●
Cast Iron	Nodular cast iron Chilled cast iron Meehanite iron Ductile iron	-	≥ 250	12 - 45	25 - 55	○	●	●
	718 & 625 INCO Waspaloy Hastelloy Invar Monel Incoloy	≤ 38	≤ 350	10 - 15	-			
Nickel Alloys	718 Inconel A286	> 38 ≤ 44	> 350 ≤ 420	10 - 12	-			
	Titanium	≤ 38	≤ 350	3 - 15	-			
Copper	Pure and alloyed copper	-	-	50 - 60	65 - 100			
Brass	Free machining brass Alloyed brass	-	-	30 - 65	-			
Bronze		< 44	< 420	12 - 20	35 - 80			
Zine		-	-	25 - 65	50 - 80			
Magnesium		-	-	-	45 - 100			

S10/S27	ZF	Z0/Z1/Z2/Z3	Z4/Z5/Z6/Z7	Z8/Z9/Z10/ZB ZC/ZD	C2/C3/C4/D9	I9/J0/J1	A3/A5/A7	A6/A9
ANSI		ANSI			ANSI			
NPT/F		UNC/UNF	UNC/UNF	M/MF	UNC/UNF	UNC/UNF	UNC/UNF	M
HSSE-V3		HSSE-V3	HSSE-V3	HSSE-V3	HSSE-V3	HSSE-V3	HSS-V	HSS-V
2-3P		4-5P 1.5-2P	4-5P 1.5-2P	4-5P 1.5-2P	1.5-2P	4-5P	9.0/4.0/1.5P	4.0P/1.5P
Bright TiCN		Bright TiN	Bright TiN	Bright TiN TiCN	Steam Oxide Bright TiN/Hardslick	Steam Oxide Bright TiN Hardslick	Bright	Bright
		-	-	-	R45°	-	-	-
Through		Blind Through	Blind Through	Blind Through	Blind	Through	Blind Through	Blind Through
								
●		●	●	●	●	●	●	●
●		●	●	●	●	●	●	●
○					○	○		○
○		●	●	●	○	○	●	○
○					○	○		○
		●	●	●			●	
○		●	●	●			●	
●								
●					○	○		○
		●	●	●			●	
		●	●	●			●	
		●	●	●			●	
		●	●	●			●	

HARD slick

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



Being the best through innovation



COMBO TAPS


















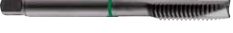
Spiral Point and Spiral Flute Taps
Multi Purpose tapping, YG-1's Patent, HSS-EX
for Prevention of Oversize Threads

SELECTION GUIDE

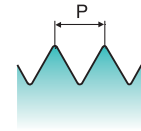
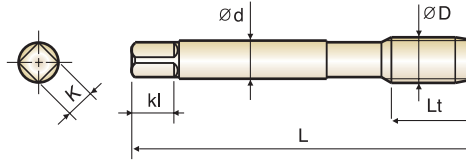
Spiral Point and Spiral Flute Taps

Multi Purpose tapping, YG-1's Patent, HSS-EX for Prevention of Oversize Threads

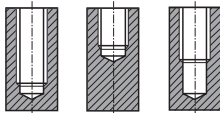
INCH

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
T2 T2-C		HSS-EX	UNC/UNF	ANSI	GH	2 ~ 3P	Bright TiCN	
T6 T6-N	with Internal Coolant 	HSS-EX	UNC/UNF	ANSI	GH	2 ~ 3P	Bright TiN	
T7 T7-C	Short Chamfer 	HSS-EX	UNC/UNF	ANSI	GH	1 ~ 2P	Bright TiCN	
T1-S T1-C		HSS-EX	UNC/UNF	ANSI Shank DIN Length	GH	2 ~ 3P	Steam Oxide TiCN	
TCA-S/C TCB-S/C		Super HSS HSS-EX	UNC/UNF	ANSI	GH	2 ~ 3P	Steam Oxide TiCN	
T5 T5-C		HSS-EX	M	ANSI	D	2 ~ 3P	Bright TiCN	
T8 T8-N	with Internal Coolant 	HSS-EX	M	ANSI	D	2 ~ 3P	Bright TiN	
T9 T9-C	Short Chamfer 	HSS-EX	M	ANSI	D	1 ~ 2P	Bright TiCN	
TA-S TA-C		HSS-EX	M	ANSI Shank DIN Length	D	2 ~ 3P	Steam Oxide TiCN	
TCC-S/C TCD-S/C		Super HSS HSS-EX	M	ANSI	D	2 ~ 3P	Steam Oxide TiCN	
T4 T4-C		HSS-EX	UNC/UNF	ANSI	GH	4 ~ 5P	Bright TiCN	
TB TB-N	with Internal Coolant 	HSS-EX	UNC/UNF	ANSI	GH	4 ~ 5P	Bright TiN	
TC-S TC-C		HSS-EX	UNC/UNF	ANSI Shank DIN Length	GH	4 ~ 5P	Steam Oxide TiCN	
TCE-S/C TCF-S/C		Super HSS HSS-EX	UNC/UNF	ANSI	GH	4P	Steam Oxide TiCN	
T3 T3-C		HSS-EX	M	ANSI	D	4 ~ 5P	Bright TiCN	
TH TH-N	with Internal Coolant 	HSS-EX	M	ANSI	D	4 ~ 5P	Bright TiN	
TK-S TK-C		HSS-EX	M	ANSI Shank DIN Length	D	4 ~ 5P	Steam Oxide TiCN	
TCG-S/C TCH-S/C		Super HSS HSS-EX	M	ANSI	D	4 ~ 5P	Steam Oxide TiCN	

SPIRAL FLUTE TAPS for Multi-Purpose



Hole type



HSS-EX
GH
60°
2P~3P
Bright
TiCN

Unit : Inch

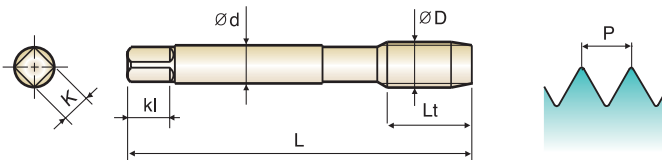
EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiCN Coated	D			L	L _t	D	K	kl	
T2162	T2162C	#4 - 40 UNC		GH2	1.88	.236	.141	.110	.188	2
T2182	T2182C	#4 - 48 UNF		GH2	1.88	.236	.141	.110	.188	2
T2202	T2202C	#5 - 40 UNC		GH2	1.94	.236	.141	.110	.188	3
T2222	T2222C	#5 - 44 UNF		GH2	1.94	.236	.141	.110	.188	3
T2243	T2243C	#6 - 32 UNC		GH3	2.00	.276	.141	.110	.188	3
T2262	T2262C	#6 - 40 UNF		GH2	2.00	.276	.141	.110	.188	3
T2283	T2283C	#8 - 32 UNC		GH3	2.13	.276	.168	.131	.250	3
T2302	T2302C	#8 - 36 UNF		GH2	2.13	.276	.168	.131	.250	3
T2323	T2323C	#10 - 24 UNC		GH3	2.38	.354	.194	.152	.250	3
T2343	T2343C	#10 - 32 UNF		GH3	2.38	.276	.194	.152	.250	3
T2363	T2363C	#12 - 24 UNC		GH3	2.38	.354	.220	.165	.281	3
T2383	T2383C	#12 - 28 UNF		GH3	2.38	.276	.220	.165	.281	3
T2403	T2403C	1/4 - 20 UNC		GH3	2.50	.433	.255	.191	.312	3
T2405	T2405C	1/4 - 20 UNC		GH5	2.50	.433	.255	.191	.312	3
T2423	T2423C	1/4 - 28 UNF		GH3	2.50	.354	.255	.191	.312	3
T2424	T2424C	1/4 - 28 UNF		GH4	2.50	.354	.255	.191	.312	3
T2443	T2443C	5/16 - 18 UNC		GH3	2.72	.472	.318	.238	.375	3
T2445	T2445C	5/16 - 18 UNC		GH5	2.72	.472	.318	.238	.375	3
T2463	T2463C	5/16 - 24 UNF		GH3	2.72	.394	.318	.238	.375	3
T2465	T2465C	5/16 - 24 UNF		GH5	2.72	.394	.318	.238	.375	3

- ▶ Bold H Limits denote most popular limits.
- ▶ 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)

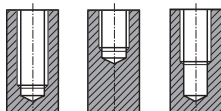
◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose



Hole type



HSS-EX
GH
60°
2P~3P
Bright
TiCN

Unit : Inch

EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiCN Coated	D			L	L _t	D	K	kl	
T2483	T2483C	3/8 - 16 UNC	GH3		2.94	.551	.381	.286	.438	3
T2485	T2485C	3/8 - 16 UNC	GH5		2.94	.551	.381	.286	.438	3
T2503	T2503C	3/8 - 24 UNF	GH3		2.94	.394	.381	.286	.438	3
T2504	T2504C	3/8 - 24 UNF	GH4		2.94	.394	.381	.286	.438	3
T2523	T2523C	7/16 - 14 UNC	GH3		3.16	.591	.323	.242	.406	3
T2525	T2525C	7/16 - 14 UNC	GH5		3.16	.591	.323	.242	.406	3
T2543	T2543C	7/16 - 20 UNF	GH3		3.16	.472	.323	.242	.406	3
T2545	T2545C	7/16 - 20 UNF	GH5		3.16	.472	.323	.242	.406	3
T2565	T2565C	1/2 - 13 UNC	GH5		3.38	.630	.367	.275	.438	3
T2585	T2585C	1/2 - 20 UNF	GH5		3.38	.472	.367	.275	.438	3
T2605	T2605C	9/16 - 12 UNC	GH5		3.59	.709	.429	.322	.500	3
T2625	T2625C	9/16 - 18 UNF	GH5		3.59	.512	.429	.322	.500	3
T2645	T2645C	5/8 - 11 UNC	GH5		3.81	.748	.480	.360	.562	4
T2665	T2665C	5/8 - 18 UNF	GH5		3.81	.512	.480	.360	.562	4
T2705	T2705C	3/4 - 10 UNC	GH5		4.25	.827	.590	.442	.688	4
T2725	T2725C	3/4 - 16 UNF	GH5		4.25	.591	.590	.442	.688	4
T2746	T2746C	7/8 - 9 UNC	GH6		4.69	.827	.697	.523	.750	4
T2766	T2766C	7/8 - 14 UNF	GH6		4.69	.709	.697	.523	.750	4
T2786	T2786C	1" - 8 UNC	GH6		5.13	.984	.800	.600	.812	4
T2806	T2806C	1" - 12 UNF	GH6		5.13	.709	.800	.600	.812	4

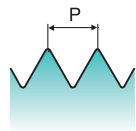
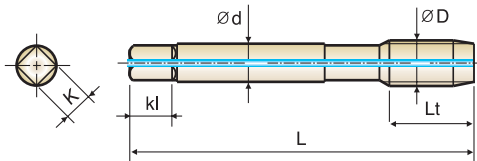
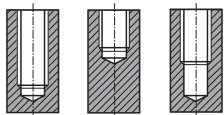
► Bold H Limits denote most popular limits.

► 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 / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose
with Internal Coolant

Hole type


HSS-EX

GH

Bright

TiN

Unit : Inch

EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiN Coated	D			L	L _t	D	K	kl	
T6405	T6405N	1/4 - 20 UNC		GH5	2.50	.433	.255	.191	.312	3
T6424	T6424N	1/4 - 28 UNF		GH4	2.50	.354	.255	.191	.312	3
T6445	T6445N	5/16 - 18 UNC		GH5	2.72	.472	.318	.238	.375	3
T6464	T6464N	5/16 - 24 UNF		GH4	2.72	.394	.318	.238	.375	3
T6485	T6485N	3/8 - 16 UNC		GH5	2.94	.551	.381	.286	.438	3
T6504	T6504N	3/8 - 24 UNF		GH4	2.94	.394	.381	.286	.438	3
T6525	T6525N	7/16 - 14 UNC		GH5	3.16	.591	.323	.242	.406	3
T6545	T6545N	7/16 - 20 UNF		GH5	3.16	.472	.323	.242	.406	3
T6565	T6565N	1/2 - 13 UNC		GH5	3.38	.630	.367	.275	.438	3
T6585	T6585N	1/2 - 20 UNF		GH5	3.38	.472	.367	.275	.438	3
T6605	T6605N	9/16 - 12 UNC		GH5	3.59	.709	.429	.322	.500	3
T6625	T6625N	9/16 - 18 UNF		GH5	3.59	.512	.429	.322	.500	3
T6645	T6645N	5/8 - 11 UNC		GH5	3.81	.748	.480	.360	.562	4
T6665	T6665N	5/8 - 18 UNF		GH5	3.81	.512	.480	.360	.562	4
T6705	T6705N	3/4 - 10 UNC		GH5	4.25	.827	.590	.442	.688	4
T6725	T6725N	3/4 - 16 UNF		GH5	4.25	.591	.590	.442	.688	4
T6746	T6746N	7/8 - 9 UNC		GH6	4.69	.827	.697	.523	.750	4
T6766	T6766N	7/8 - 14 UNF		GH6	4.69	.709	.697	.523	.750	4
T6786	T6786N	1" - 8 UNC		GH6	5.13	.984	.800	.600	.812	4
T6806	T6806N	1" - 12 UNF		GH6	5.13	.709	.800	.600	.812	4

- ▶ Coating(TiCN or TiAlN) 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 / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

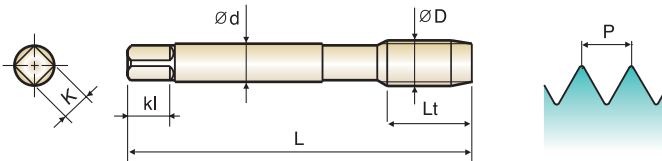
STANDARD TAPS

HAND TAPS

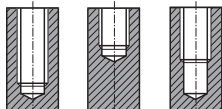
THREAD MILL

TECHNICAL DATA

Short Chamfer



Hole type



HSS-EX
GH
60°
1P~2P
Bright
TiCN

Unit : Inch

EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiCN Coated	D			L	L _t	D	K	kl	
T7162	T7162C	#4 - 40 UNC		GH2	1.88	.236	.141	.110	.188	2
T7182	T7182C	#4 - 48 UNF		GH2	1.88	.236	.141	.110	.188	2
T7202	T7202C	#5 - 40 UNC		GH2	1.94	.236	.141	.110	.188	3
T7222	T7222C	#5 - 44 UNF		GH2	1.94	.236	.141	.110	.188	3
T7243	T7243C	#6 - 32 UNC		GH3	2.00	.276	.141	.110	.188	3
T7262	T7262C	#6 - 40 UNF		GH2	2.00	.276	.141	.110	.188	3
T7283	T7283C	#8 - 32 UNC		GH3	2.13	.276	.168	.131	.250	3
T7302	T7302C	#8 - 36 UNF		GH2	2.13	.276	.168	.131	.250	3
T7323	T7323C	#10 - 24 UNC		GH3	2.38	.354	.194	.152	.250	3
T7343	T7343C	#10 - 32 UNF		GH3	2.38	.276	.194	.152	.250	3
T7363	T7363C	#12 - 24 UNC		GH3	2.38	.354	.220	.165	.281	3
T7383	T7383C	#12 - 28 UNF		GH3	2.38	.276	.220	.165	.281	3
T7405	T7405C	1/4 - 20 UNC		GH5	2.50	.433	.255	.191	.312	3
T7424	T7424C	1/4 - 28 UNF		GH4	2.50	.354	.255	.191	.312	3
T7445	T7445C	5/16 - 18 UNC		GH5	2.72	.472	.318	.238	.375	3
T7464	T7464C	5/16 - 24 UNF		GH4	2.72	.394	.318	.238	.375	3
T7485	T7485C	3/8 - 16 UNC		GH5	2.94	.551	.381	.286	.438	3
T7504	T7504C	3/8 - 24 UNF		GH4	2.94	.394	.381	.286	.438	3
T7525	T7525C	7/16 - 14 UNC		GH5	3.16	.591	.323	.242	.406	3
T7545	T7545C	7/16 - 20 UNF		GH5	3.16	.472	.323	.242	.406	3
T7565	T7565C	1/2 - 13 UNC		GH5	3.38	.630	.367	.275	.438	3
T7585	T7585C	1/2 - 20 UNF		GH5	3.38	.472	.367	.275	.438	3

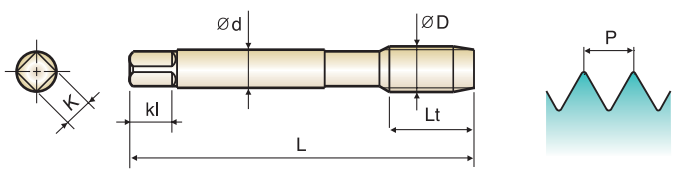
- ▶ Coating(TiN or TiAlN) or Surface Treatment(Steam Oxide) is available on your request.
- ▶ Coating Codes for Combo Tap
Bright Finish No. + N(TiN), F(TiAlN), H(Hardslick), S(Steam Oxide)

◎ : Excellent ○ : Good

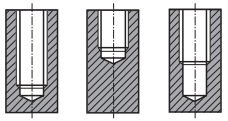
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminum / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose

Short Chamfer



Hole type



HSS-EX
GH
60°
1P~2P
Bright
TiCN

Unit : Inch

EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiCN Coated	D			L	Lt	D	K	kl	
T7605	T7605C	9/16 - 12 UNC		GH5	3.59	.709	.429	.322	.500	3
T7625	T7625C	9/16 - 18 UNF		GH5	3.59	.512	.429	.322	.500	3
T7645	T7645C	5/8 - 11 UNC		GH5	3.81	.748	.480	.360	.562	4
T7665	T7665C	5/8 - 18 UNF		GH5	3.81	.512	.480	.360	.562	4
T7705	T7705C	3/4 - 10 UNC		GH5	4.25	.827	.590	.442	.688	4
T7725	T7725C	3/4 - 16 UNF		GH5	4.25	.591	.590	.442	.688	4
T7746	T7746C	7/8 - 9 UNC		GH6	4.69	.827	.697	.523	.750	4
T7766	T7766C	7/8 - 14 UNF		GH6	4.69	.709	.697	.523	.750	4
T7786	T7786C	1" - 8 UNC		GH6	5.13	.984	.800	.600	.812	4
T7806	T7806C	1" - 12 UNF		GH6	5.13	.709	.800	.600	.812	4

- ▶ Coating(TiCN or TiAlN) 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)

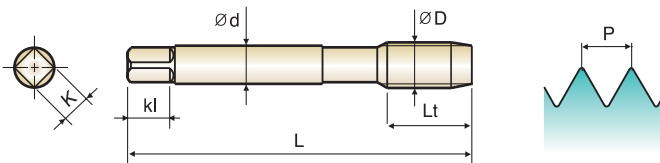
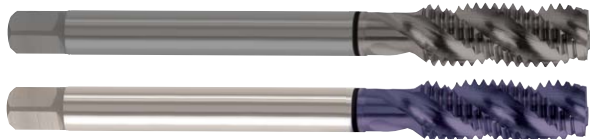
- COMBO TAPS
- SPIRAL FLUTE TAPS
- SPIRAL POINT TAPS
- STRAIGHT FLUTE TAP
- TAPER PIPE TAPS
- FORMING TAPS
- STANDARD TAPS
- HAND TAPS
- THREAD MILL
- TECHNICAL DATA

◎ : Excellent ○ : Good

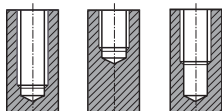
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose

ANSI Shank / DIN Length



Hole type



HSS-EX

GH



Steam Oxide

TiCN

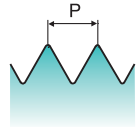
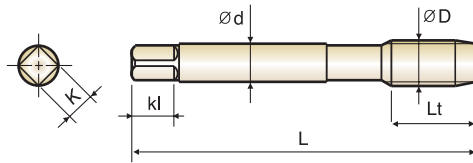
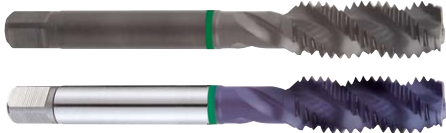
Unit : Inch

EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN Coated	D			L	L _t	D	K	kl	
T1162S	T1162C	#4 - 40 UNC		GH2	2.21	.236	.141	.110	.188	2
T1202S	T1202C	#5 - 40 UNC		GH2	2.21	.236	.141	.110	.188	3
T1243S	T1243C	#6 - 32 UNC		GH3	2.21	.276	.141	.110	.188	3
T1283S	T1283C	#8 - 32 UNC		GH3	2.48	.276	.168	.131	.250	3
T1323S	T1323C	#10 - 24 UNC		GH3	2.76	.354	.194	.152	.250	3
T1343S	T1343C	#10 - 32 UNF		GH3	2.76	.276	.194	.152	.250	3
T1363S	T1363C	#12 - 24 UNC		GH3	3.15	.354	.220	.165	.281	3
T1383S	T1383C	#12 - 28 UNF		GH3	3.15	.276	.220	.165	.281	3
T1405S	T1405C	1/4 - 20 UNC		GH5	3.15	.433	.255	.191	.312	3
T1424S	T1424C	1/4 - 28 UNF		GH4	3.15	.354	.255	.191	.312	3
T1445S	T1445C	5/16 - 18 UNC		GH5	3.54	.472	.318	.238	.375	3
T1464S	T1464C	5/16 - 24 UNF		GH4	3.54	.394	.318	.238	.375	3
T1485S	T1485C	3/8 - 16 UNC		GH5	3.94	.551	.381	.286	.438	3
T1504S	T1504C	3/8 - 24 UNF		GH4	3.94	.394	.381	.286	.438	3
T1525S	T1525C	7/16 - 14 UNC		GH5	3.94	.591	.323	.242	.406	3
T1545S	T1545C	7/16 - 20 UNF		GH5	3.94	.472	.323	.242	.406	3
T1565S	T1565C	1/2 - 13 UNC		GH5	4.33	.630	.367	.275	.438	3
T1585S	T1585C	1/2 - 20 UNF		GH5	3.94	.472	.367	.275	.438	3
T1605S	T1605C	9/16 - 12 UNC		GH5	4.33	.709	.429	.322	.500	3
T1625S	T1625C	9/16 - 18 UNF		GH5	3.94	.512	.429	.322	.500	3
T1645S	T1645C	5/8 - 11 UNC		GH5	4.33	.748	.480	.360	.562	4
T1665S	T1665C	5/8 - 18 UNF		GH5	3.94	.512	.480	.360	.562	4
T1705S	T1705C	3/4 - 10 UNC		GH5	4.92	.827	.590	.442	.688	4
T1725S	T1725C	3/4 - 16 UNF		GH5	4.33	.591	.590	.442	.688	4
T1746S	T1746C	7/8 - 9 UNC		GH6	5.51	.827	.697	.523	.750	4
T1766S	T1766C	7/8 - 14 UNF		GH6	4.92	.709	.697	.523	.750	4
T1786S	T1786C	1" - 8 UNC		GH6	6.30	.984	.800	.600	.812	4
T1806S	T1806C	1" - 12 UNF		GH6	5.51	.709	.800	.600	.812	4

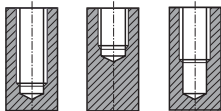
◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminum / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Stainless Steel



Hole type



Super HSS
HSS-EX
GH
60°
2P~3P
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 Coated	D	L		L _t	D	K	kl		
TCA202S	TCA202C	#5 - 40 UNC	GH2	1.94	.236	.141	.110	.188	3	
TCA243S	TCA243C	#6 - 32 UNC	GH3	2.00	.276	.141	.110	.188	3	
TCA283S	TCA283C	#8 - 32 UNC	GH3	2.13	.276	.141	.131	.250	3	
TCA323S	TCA323C	#10 - 24 UNC	GH3	2.38	.354	.141	.152	.250	3	
TCA343S	TCA343C	#10 - 32 UNF	GH3	2.38	.276	.141	.152	.250	3	
TCA403S	TCA403C	1/4 - 20 UNC	GH3	2.50	.433	.141	.191	.312	3	
TCA405S	TCA405C	1/4 - 20 UNC	GH5	2.50	.433	.168	.191	.312	3	
TCA423S	TCA423C	1/4 - 28 UNF	GH3	2.50	.354	.168	.191	.312	3	
TCA443S	TCA443C	5/16 - 18 UNC	GH3	2.72	.472	.194	.238	.375	3	
TCA445S	TCA445C	5/16 - 18 UNC	GH5	2.72	.472	.194	.238	.375	3	
TCA463S	TCA463C	5/16 - 24 UNF	GH3	2.72	.394	.220	.238	.375	3	
TCA483S	TCA483C	3/8 - 16 UNC	GH3	2.94	.551	.220	.286	.438	3	
TCA485S	TCA485C	3/8 - 16 UNC	GH5	2.94	.551	.255	.286	.438	3	
TCA503S	TCA503C	3/8 - 24 UNF	GH3	2.94	.394	.255	.286	.438	3	
TCA523S	TCA523C	7/16 - 14 UNC	GH3	3.16	.591	.255	.242	.406	3	
TCA525S	TCA525C	7/16 - 14 UNC	GH5	3.16	.591	.255	.242	.406	3	
TCA543S	TCA543C	7/16 - 20 UNF	GH3	3.16	.472	.318	.242	.406	3	
TCA545S	TCA545C	7/16 - 20 UNF	GH5	3.16	.472	.318	.242	.406	3	
TCA563S	TCA563C	1/2 - 13 UNC	GH3	3.38	.630	.318	.275	.438	3	
TCA565S	TCA565C	1/2 - 13 UNC	GH5	3.38	.630	.318	.275	.438	3	
TCA583S	TCA583C	1/2 - 20 UNF	GH3	3.38	.472	.381	.275	.438	3	
TCB603S	TCB603C	9/16 - 12 UNC	GH3	3.59	.709	.381	.322	.500	3	
TCB623S	TCB623C	9/16 - 18 UNF	GH3	3.59	.512	.381	.322	.500	3	
TCB625S	TCB625C	9/16 - 18 UNF	GH5	3.59	.512	.381	.322	.500	3	
TCB643S	TCB643C	5/8 - 11 UNC	GH3	3.81	.748	.323	.360	.562	4	
TCB645S	TCB645C	5/8 - 11 UNC	GH5	3.81	.748	.323	.360	.562	4	
TCB663S	TCB663C	5/8 - 18 UNF	GH3	3.81	.512	.323	.360	.562	4	

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

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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

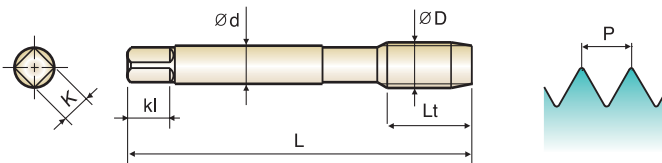


COMBO TAPS

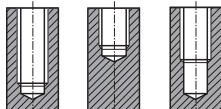
Combo TAP

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

SPIRAL FLUTE TAPS for Stainless Steel



Hole type



Super HSS

HSS-EX

GH

60°

2P~3P

Steam Oxide

TiCN

Unit : Inch

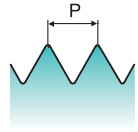
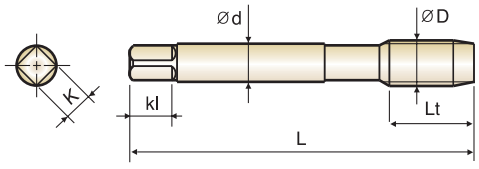
EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN Coated	D			L	Lt	D2	K	kl	
TCB665S	TCB665C	5/8 - 18 UNF		GH5	3.81	.512	.323	.360	.562	4
TCB703S	TCB703C	3/4 - 10 UNC		GH3	4.25	.827	.367	.442	.688	4
TCB705S	TCB705C	3/4 - 10 UNC		GH5	4.25	.827	.367	.442	.688	4
TCB723S	TCB723C	3/4 - 16 UNF		GH3	4.25	.591	.429	.442	.688	4
TCB725S	TCB725C	3/4 - 16 UNF		GH5	4.25	.591	.429	.442	.688	4
TCB744S	TCB744C	7/8 - 9 UNC		GH4	4.69	.827	.480	.523	.750	4
TCB746S	TCB746C	7/8 - 9 UNC		GH6	4.69	.827	.480	.523	.750	4
TCB764S	TCB764C	7/8 - 14 UNF		GH4	4.69	.709	.590	.523	.750	4
TCB766S	TCB766C	7/8 - 14 UNF		GH6	4.69	.709	.590	.523	.750	4
TCB784S	TCB784C	1" - 8 UNC		GH4	5.13	.984	.697	.600	.812	4
TCB786S	TCB786C	1" - 8 UNC		GH6	5.13	.984	.697	.600	.812	4
TCB804S	TCB804C	1" - 12 UNF		GH4	5.13	.709	.800	.600	.812	4
TCB806S	TCB806C	1" - 12 UNF		GH6	5.13	.709	.800	.600	.812	4

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

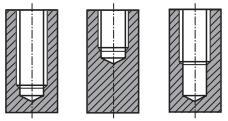
◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys				
◎	◎	◎	◎	◎	◎	◎	◎				
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose



Hole type



HSS-EX
D
60°
2P~3P
Bright
TiCN

Unit : Inch

EDP No.		SIZE		Pitch	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiCN Coated	D	P			L	L _t	D	K	kl	
T5203	T5203C	M3	x 0.5	D3	1.94	.197	.141	.110	.188	3	
T5224	T5224C	M3.5	x 0.6	D4	2.00	.276	.141	.110	.188	3	
T5244	T5244C	M4	x 0.7	D4	2.13	.276	.168	.131	.250	3	
T5284	T5284C	M5	x 0.8	D4	2.38	.354	.194	.152	.250	3	
T5315	T5315C	M6	x 1.0	D5	2.50	.433	.255	.191	.312	3	
T5345	T5345C	M7	x 1.0	D5	2.72	.433	.318	.238	.375	3	
T5365	T5365C	M8	x 1.25	D5	2.72	.472	.318	.238	.375	3	
T5375	T5375C	M8	x 1.0	D5	2.72	.433	.318	.238	.375	3	
T5426	T5426C	M10	x 1.5	D6	2.94	.512	.381	.286	.438	3	
T5435	T5435C	M10	x 1.25	D5	2.94	.472	.381	.286	.438	3	
T5506	T5506C	M12	x 1.75	D6	3.38	.591	.367	.275	.438	3	
T5525	T5525C	M12	x 1.25	D5	3.38	.551	.367	.275	.438	3	
T5547	T5547C	M14	x 2.0	D7	3.59	.709	.429	.322	.500	3	
T5556	T5556C	M14	x 1.5	D6	3.59	.551	.429	.322	.500	3	
T5607	T5607C	M16	x 2.0	D7	3.81	.709	.480	.360	.562	3	
T5616	T5616C	M16	x 1.5	D6	3.81	.551	.480	.360	.562	3	
T5657	T5657C	M18	x 2.5	D7	4.03	.787	.542	.406	.625	4	
T5676	T5676C	M18	x 1.5	D6	4.03	.551	.542	.406	.625	4	
T5707	T5707C	M20	x 2.5	D7	4.47	.787	.652	.489	.688	4	
T5726	T5726C	M20	x 1.5	D6	4.47	.551	.652	.489	.688	4	
T5747	T5747C	M22	x 2.5	D7	4.69	.787	.697	.523	.750	4	
T5766	T5766C	M22	x 1.5	D6	4.69	.551	.697	.523	.750	4	
T5788	T5788C	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)

SET No.	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

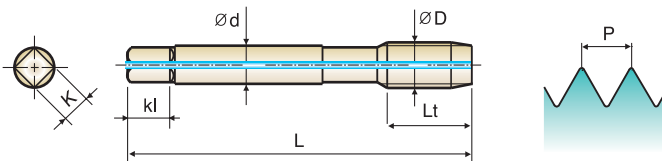
CARBIDE



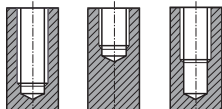

T8 / T8-N SERIES

SPIRAL FLUTE TAPS for Multi-Purpose

with Internal Coolant



Hole type



HSS-EX

D



Bright

TiN

Unit : Inch

EDP No.		SIZE	Pitch	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiN Coated	D	P		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 or TiAlN) or Surface Treatment(Steam Oxide) is available on your request.

► Coating Codes for Combo Tap

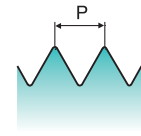
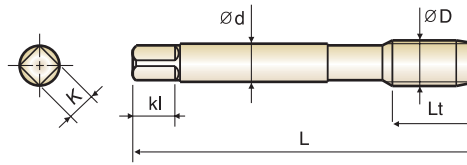
Bright Finish No. + C(TiCN), F(TiAlN), H(Hardslick), S(Steam Oxide)

◎ : Excellent ○ : Good

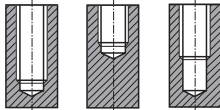
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose

Short Chamfer



Hole type



HSS-EX
D
60°
2P~3P
Bright
TiCN

Unit : Inch

EDP No.		SIZE		Pitch	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiCN Coated	D	P	L		L _t	D	K	kl		
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 or TiAlN) 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 / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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

YG COMBO TAPS

Combo TAP

TA-S / TA-C SERIES

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

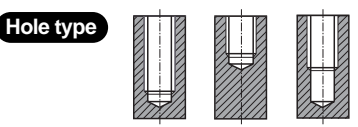
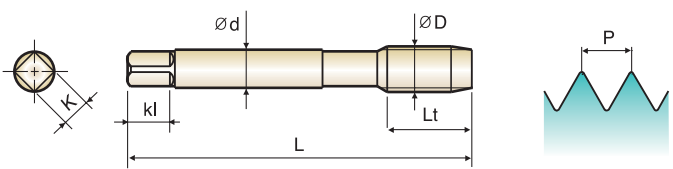
HAND TAPS

THREAD MILL

TECHNICAL DATA

SPIRAL FLUTE TAPS for Multi-Purpose

ANSI Shank / DIN Length



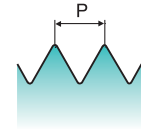
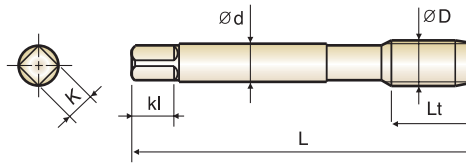
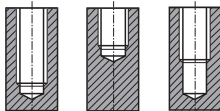
HSS-EX
D
60°
2P~3P
Steam Oxide
TiCN

Unit : Inch

EDP No.		SIZE	Pitch	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN Coated	D	P		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	

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Stainless Steel

Hole type


Super HSS

HSS-EX

D

60°

2P~3P

Steam Oxide

TiCN

Unit : Inch

EDP No.		SIZE		Pitch	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN Coated	D	P	L		L _t	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)

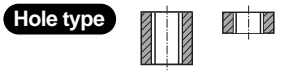
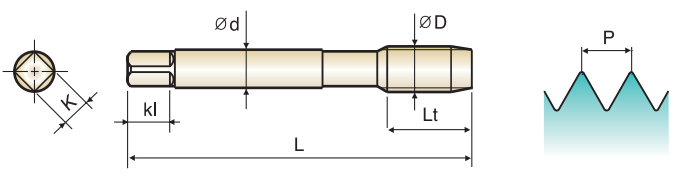
◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose

Short Chamfer



HSS-EX
GH
60°
4P~5P
Bright
TiCN

Unit : Inch

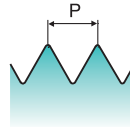
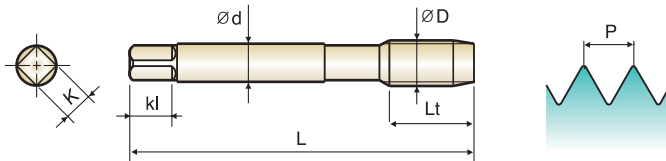
EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiCN Coated	D			L	Lt	D	K	kl	
T4162	T4162C	#4 - 40 UNC		GH2	1.88	.335	.141	.110	.188	2
T4182	T4182C	#4 - 48 UNF		GH2	1.88	.335	.141	.110	.188	2
T4202	T4202C	#5 - 40 UNC		GH2	1.94	.374	.141	.110	.188	3
T4222	T4222C	#5 - 44 UNF		GH2	1.94	.374	.141	.110	.188	3
T4243	T4243C	#6 - 32 UNC		GH3	2.00	.413	.141	.110	.188	3
T4262	T4262C	#6 - 40 UNF		GH2	2.00	.413	.141	.110	.188	3
T4283	T4283C	#8 - 32 UNC		GH3	2.13	.453	.168	.131	.250	3
T4302	T4302C	#8 - 36 UNF		GH2	2.13	.453	.168	.131	.250	3
T4323	T4323C	#10 - 24 UNC		GH3	2.38	.531	.194	.152	.250	3
T4343	T4343C	#10 - 32 UNF		GH3	2.38	.531	.194	.152	.250	3
T4363	T4363C	#12 - 24 UNC		GH3	2.38	.571	.220	.165	.281	3
T4383	T4383C	#12 - 28 UNF		GH3	2.38	.571	.220	.165	.281	3
T4403	T4403C	1/4 - 20 UNC		GH3	2.50	.591	.255	.191	.312	3
T4405	T4405C	1/4 - 20 UNC		GH5	2.50	.591	.255	.191	.312	3
T4423	T4423C	1/4 - 28 UNF		GH3	2.50	.591	.255	.191	.312	3
T4424	T4424C	1/4 - 28 UNF		GH4	2.50	.591	.255	.191	.312	3
T4443	T4443C	5/16 - 18 UNC		GH3	2.72	.669	.318	.238	.375	3
T4445	T4445C	5/16 - 18 UNC		GH5	2.72	.669	.318	.238	.375	3
T4463	T4463C	5/16 - 24 UNF		GH3	2.72	.669	.318	.238	.375	3
T4465	T4465C	5/16 - 24 UNF		GH5	2.72	.669	.318	.238	.375	3
T4483	T4483C	3/8 - 16 UNC		GH3	2.94	.748	.381	.286	.438	3
T4485	T4485C	3/8 - 16 UNC		GH5	2.94	.748	.381	.286	.438	3
T4503	T4503C	3/8 - 24 UNF		GH3	2.94	.748	.381	.286	.438	3
T4504	T4504C	3/8 - 24 UNF		GH4	2.94	.748	.381	.286	.438	3
T4523	T4523C	7/16 - 14 UNC		GH3	3.16	.866	.323	.242	.406	3
T4525	T4525C	7/16 - 14 UNC		GH5	3.16	.866	.323	.242	.406	3

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminum / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose

Short Chamfer



HSS-EX
GH
60°
4P~5P
Bright
TiCN

Unit : Inch

EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiCN Coated	D	L		Lt	D	K	kl		
T4543	T4543C	7/16 - 20 UNF	GH3	GH3	3.16	.866	.323	.242	.406	3
T4545	T4545C	7/16 - 20 UNF	GH5	GH5	3.16	.866	.323	.242	.406	3
T4565	T4565C	1/2 - 13 UNC	GH5	GH5	3.38	.984	.367	.275	.438	3
T4585	T4585C	1/2 - 20 UNF	GH5	GH5	3.38	.984	.367	.275	.438	3
T4605	T4605C	9/16 - 12 UNC	GH5	GH5	3.59	.984	.429	.322	.500	3
T4625	T4625C	9/16 - 18 UNF	GH5	GH5	3.59	.984	.429	.322	.500	3
T4645	T4645C	5/8 - 11 UNC	GH5	GH5	3.81	1.083	.480	.360	.562	3
T4665	T4665C	5/8 - 18 UNF	GH5	GH5	3.81	1.083	.480	.360	.562	3
T4705	T4705C	3/4 - 10 UNC	GH5	GH5	4.25	1.201	.590	.442	.688	3
T4725	T4725C	3/4 - 16 UNF	GH5	GH5	4.25	1.201	.590	.442	.688	3
T4746	T4746C	7/8 - 9 UNC	GH6	GH6	4.69	1.339	.697	.523	.750	3
T4766	T4766C	7/8 - 14 UNF	GH6	GH6	4.69	1.339	.697	.523	.750	3
T4786	T4786C	1" - 8 UNC	GH6	GH6	5.13	1.496	.800	.600	.812	3
T4806	T4806C	1" - 12 UNF	GH6	GH6	5.13	1.496	.800	.600	.812	3

▶ Bold H Limits denote most popular limit.

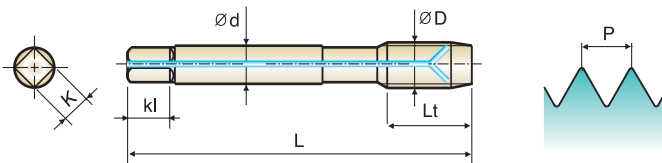
- ▶ Coating(TiN, TiAlN or Hardslick) or Surface Treatment(Steam Oxide) is available on your request.
- ▶ Coating Codes for Combo Tap
Bright Finish No. + N(TiN), F(TiAlN), H(Hardslick), S(Steam Oxide)

◎ : Excellent ○ : Good

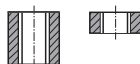
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose

with Internal Coolant



Hole type



HSS-EX
GH
60°
4P~5P
Bright
TiN

Unit : Inch

EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiN Coated	D			L	L _t	D	K	kl	
TB405	TB405N	1/4 - 20 UNC		GH5	2.50	.591	.255	.191	.312	2
TB424	TB424N	1/4 - 28 UNF		GH4	2.50	.591	.255	.191	.312	2
TB445	TB445N	5/16 - 18 UNC		GH5	2.72	.669	.318	.238	.375	3
TB464	TB464N	5/16 - 24 UNF		GH4	2.72	.669	.318	.238	.375	3
TB485	TB485N	3/8 - 16 UNC		GH5	2.94	.748	.381	.286	.438	3
TB504	TB504N	3/8 - 24 UNF		GH4	2.94	.748	.381	.286	.438	3
TB525	TB525N	7/16 - 14 UNC		GH5	3.16	.866	.323	.242	.406	3
TB545	TB545N	7/16 - 20 UNF		GH5	3.16	.866	.323	.242	.406	3
TB565	TB565N	1/2 - 13 UNC		GH5	3.38	.984	.367	.275	.438	3
TB585	TB585N	1/2 - 20 UNF		GH5	3.38	.984	.367	.275	.438	3
TB605	TB605N	9/16 - 12 UNC		GH5	3.59	.984	.429	.322	.500	3
TB625	TB625N	9/16 - 18 UNF		GH5	3.59	.984	.429	.322	.500	3
TB645	TB645N	5/8 - 11 UNC		GH5	3.81	1.083	.480	.360	.562	3
TB665	TB665N	5/8 - 18 UNF		GH5	3.81	1.083	.480	.360	.562	3
TB705	TB705N	3/4 - 10 UNC		GH5	4.25	1.201	.590	.442	.688	3
TB725	TB725N	3/4 - 16 UNF		GH5	4.25	1.201	.590	.442	.688	3
TB746	TB746N	7/8 - 9 UNC		GH6	4.69	1.339	.697	.523	.750	3
TB766	TB766N	7/8 - 14 UNF		GH6	4.69	1.339	.697	.523	.750	3
TB786	TB786N	1" - 8 UNC		GH6	5.13	1.496	.800	.600	.812	3
TB806	TB806N	1" - 12 UNF		GH6	5.13	1.496	.800	.600	.812	3

► Coating(TiCN or TiAlN) 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)

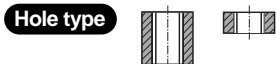
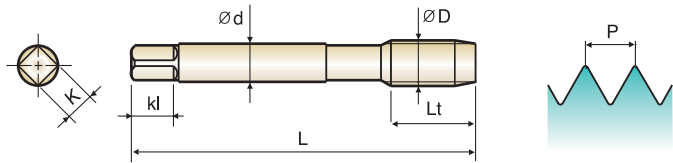
◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminum / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose



ANSI Shank / DIN Length



HSS-EX
GH
60°
4P~5P
Steam Oxide
TiCN

Unit : Inch

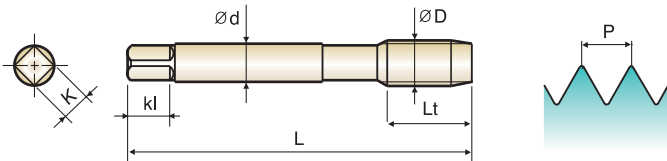
EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiN Coated	D			L	Lt	D	K	kl	
TC162S	TC162C	#4 - 40 UNC		GH2	2.21	.335	.141	.110	.188	2
TC202S	TC202C	#5 - 40 UNC		GH2	2.21	.374	.141	.110	.188	3
TC243S	TC243C	#6 - 32 UNC		GH3	2.21	.413	.141	.110	.188	3
TC283S	TC283C	#8 - 32 UNC		GH3	2.48	.453	.168	.131	.250	3
TC323S	TC323C	#10 - 24 UNC		GH3	2.76	.531	.194	.152	.250	3
TC343S	TC343C	#10 - 32 UNF		GH3	2.76	.531	.194	.152	.250	3
TC363S	TC363C	#12 - 24 UNC		GH3	3.15	.571	.220	.165	.281	3
TC383S	TC383C	#12 - 28 UNF		GH3	3.15	.571	.220	.165	.281	3
TC405S	TC405C	1/4 - 20 UNC		GH5	3.15	.591	.255	.191	.312	3
TC424S	TC424C	1/4 - 28 UNF		GH4	3.15	.591	.255	.191	.312	3
TC445S	TC445C	5/16 - 18 UNC		GH5	3.54	.669	.318	.238	.375	3
TC464S	TC464C	5/16 - 24 UNF		GH4	3.54	.669	.318	.238	.375	3
TC485S	TC485C	3/8 - 16 UNC		GH5	3.94	.748	.381	.286	.438	3
TC504S	TC504C	3/8 - 24 UNF		GH4	3.94	.748	.381	.286	.438	3
TC525S	TC525C	7/16 - 14 UNC		GH5	3.94	.866	.323	.242	.406	3
TC545S	TC545C	7/16 - 20 UNF		GH5	3.94	.866	.323	.242	.406	3
TC565S	TC565C	1/2 - 13 UNC		GH5	4.33	.984	.367	.275	.438	3
TC585S	TC585C	1/2 - 20 UNF		GH5	3.94	.984	.367	.275	.438	3
TC605S	TC605C	9/16 - 12 UNC		GH5	4.33	.984	.429	.322	.500	3
TC625S	TC625C	9/16 - 18 UNF		GH5	3.94	.984	.429	.322	.500	3
TC645S	TC645C	5/8 - 11 UNC		GH5	4.33	1.083	.480	.360	.562	3
TC665S	TC665C	5/8 - 18 UNF		GH5	3.94	1.083	.480	.360	.562	3
TC705S	TC705C	3/4 - 10 UNC		GH5	4.92	1.201	.590	.442	.688	3
TC725S	TC725C	3/4 - 16 UNF		GH5	4.33	1.201	.590	.442	.688	3
TC746S	TC746C	7/8 - 9 UNC		GH6	5.51	1.339	.697	.523	.750	3
TC766S	TC766C	7/8 - 14 UNF		GH6	4.92	1.339	.697	.523	.750	3
TC786S	TC786C	1" - 8 UNC		GH6	6.30	1.496	.800	.600	.812	3
TC806S	TC806C	1" - 12 UNF		GH6	5.51	1.496	.800	.600	.812	3

◎ : Excellent ○ : Good

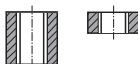
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Stainless Steel

Short Chamfer



Hole type



Super HSS
HSS-EX
GH
60°
4P
Steam Oxide
TiCN

Unit : Inch

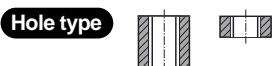
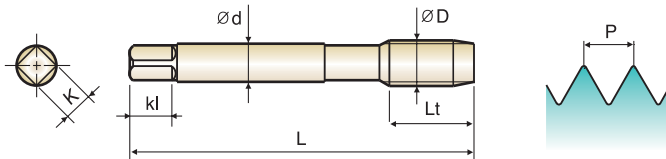
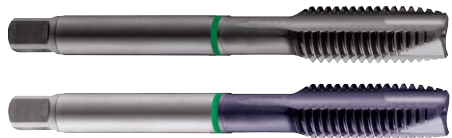
EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN Coated	D			L	L _t	D	K	kl	
TCE202S	TCE202C	#5 - 40 UNC		GH2	1.94	.374	.141	.110	.188	3
TCE203S	TCE203C	#5 - 40 UNC		GH3	1.94	.374	.141	.110	.188	3
TCE243S	TCE243C	#6 - 32 UNC		GH3	2.00	.413	.141	.110	.188	3
TCE283S	TCE283C	#8 - 32 UNC		GH3	2.13	.453	.168	.131	.250	3
TCE323S	TCE323C	#10 - 24 UNC		GH3	2.38	.531	.194	.152	.250	3
TCE343S	TCE343C	#10 - 32 UNF		GH3	2.38	.531	.194	.152	.250	3
TCE403S	TCE403C	1/4 - 20 UNC		GH3	2.50	.591	.255	.191	.312	3
TCE405S	TCE405C	1/4 - 20 UNC		GH5	2.50	.591	.255	.191	.312	3
TCE423S	TCE423C	1/4 - 28 UNF		GH3	2.50	.591	.255	.191	.312	3
TCE443S	TCE443C	5/16 - 18 UNC		GH3	2.72	.669	.318	.238	.375	3
TCE445S	TCE445C	5/16 - 18 UNC		GH5	2.72	.669	.318	.238	.375	3
TCE463S	TCE463C	5/16 - 24 UNF		GH3	2.72	.669	.318	.238	.375	3
TCE483S	TCE483C	3/8 - 16 UNC		GH3	2.94	.748	.381	.286	.438	3
TCE485S	TCE485C	3/8 - 16 UNC		GH5	2.94	.748	.381	.286	.438	3
TCE503S	TCE503C	3/8 - 24 UNF		GH3	2.94	.748	.381	.286	.438	3
TCE523S	TCE523C	7/16 - 14 UNC		GH3	3.16	.866	.323	.242	.406	3
TCE525S	TCE525C	7/16 - 14 UNC		GH5	3.16	.866	.323	.242	.406	3
TCE543S	TCE543C	7/16 - 20 UNF		GH3	3.16	.866	.323	.242	.406	3
TCE545S	TCE545C	7/16 - 20 UNF		GH5	3.16	.866	.323	.242	.406	3
TCE563S	TCE563C	1/2 - 13 UNC		GH3	3.38	.984	.367	.275	.438	3
TCE565S	TCE565C	1/2 - 13 UNC		GH5	3.38	.984	.367	.275	.438	3
TCE583S	TCE583C	1/2 - 20 UNF		GH3	3.38	.984	.367	.275	.438	3
TCF603S	TCF603C	9/16 - 12 UNC		GH3	3.59	.984	.429	.322	.500	3
TCF623S	TCF623C	9/16 - 18 UNF		GH3	3.59	.984	.429	.322	.500	3
TCF643S	TCF643C	5/8 - 11 UNC		GH3	3.81	1.083	.480	.360	.562	3
TCF645S	TCF645C	5/8 - 11 UNC		GH5	3.81	1.083	.480	.360	.562	3

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Stainless Steel

Short Chamfer



Super HSS
HSS-EX
GH
60°
4P
Steam Oxide
TiCN

Unit : Inch

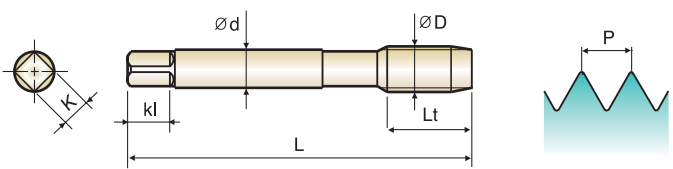
EDP No.		SIZE	TPI	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN Coated	D			L	L _t	D	K	kl	
TCF665S	TCF665C	5/8 - 18 UNF		GH5	3.81	1.083	.480	.360	.562	3
TCF703S	TCF703C	3/4 - 10 UNC		GH3	4.25	1.201	.590	.442	.688	3
TCF705S	TCF705C	3/4 - 10 UNC		GH5	4.25	1.201	.590	.442	.688	3
TCF744S	TCF744C	7/8 - 9 UNC		GH4	4.69	1.339	.697	.523	.750	3
TCF746S	TCF746C	7/8 - 9 UNC		GH6	4.69	1.339	.697	.523	.750	3
TCF766S	TCF766C	7/8 - 14 UNF		GH6	4.69	1.339	.697	.523	.750	3
TCF784S	TCF784C	1" - 8 UNC		GH4	5.13	1.496	.800	.600	.812	3
TCF786S	TCF786C	1" - 8 UNC		GH6	5.13	1.496	.800	.600	.812	3
TCF806S	TCF806C	1" - 12 UNF		GH6	5.13	1.496	.800	.600	.812	3

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

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose



HSS-EX
D
60°
4P~5P
Bright
TiCN

Unit : Inch

EDP No.		SIZE	Pitch	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiCN Coated	D	P		L	Lt	D	K	kl	
T3203	T3203C	M3 x	0.5	D3	1.94	.374	.141	.110	.188	2
T3224	T3224C	M3.5 x	0.6	D4	2.00	.413	.141	.110	.188	2
T3244	T3244C	M4 x	0.7	D4	2.13	.453	.168	.131	.250	3
T3284	T3284C	M5 x	0.8	D4	2.38	.531	.194	.152	.250	3
T3315	T3315C	M6 x	1.0	D5	2.50	.591	.255	.191	.312	3
T3345	T3345C	M7 x	1.0	D5	2.72	.669	.318	.238	.375	3
T3365	T3365C	M8 x	1.25	D5	2.72	.669	.318	.238	.375	3
T3375	T3375C	M8 x	1.0	D5	2.72	.669	.318	.238	.375	3
T3426	T3426C	M10 x	1.5	D6	2.94	.748	.381	.286	.438	3
T3435	T3435C	M10 x	1.25	D5	2.94	.748	.381	.286	.438	3
T3506	T3506C	M12 x	1.75	D6	3.38	.984	.367	.275	.438	3
T3525	T3525C	M12 x	1.25	D5	3.38	.984	.367	.275	.438	3
T3547	T3547C	M14 x	2.0	D7	3.59	.984	.429	.322	.500	3
T3556	T3556C	M14 x	1.5	D6	3.59	.984	.429	.322	.500	3
T3607	T3607C	M16 x	2.0	D7	3.81	1.083	.480	.360	.562	3
T3616	T3616C	M16 x	1.5	D6	3.81	1.083	.480	.360	.562	3
T3657	T3657C	M18 x	2.5	D7	4.03	1.083	.542	.406	.625	3
T3676	T3676C	M18 x	1.5	D6	4.03	1.083	.542	.406	.625	3
T3707	T3707C	M20 x	2.5	D7	4.47	1.201	.652	.489	.688	3
T3726	T3726C	M20 x	1.5	D6	4.47	1.201	.652	.489	.688	3
T3747	T3747C	M22 x	2.5	D7	4.69	1.339	.697	.523	.750	3
T3766	T3766C	M22 x	1.5	D6	4.69	1.339	.697	.523	.750	3
T3788	T3788C	M24 x	3.0	D8	4.91	1.339	.760	.570	.750	3

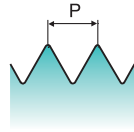
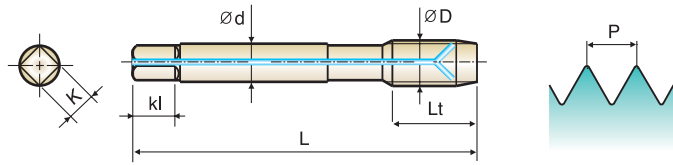
► Coating (TiN, TiAlN or Hardslick) or Surface Treatment (Steam Oxide) is available on your request.
 ► Coating Codes for Combo Tap
 Bright Finish No. + N (TiN), F (TiAlN), H (Hardslick), S (Steam Oxide)

◎ : Excellent ○ : Good

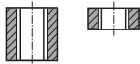
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminum / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose

with Internal Coolant



Hole type



HSS-EX
D
60°
4P~5P
Bright
TiN

Unit : Inch

EDP No.		SIZE		Pitch	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Bright Finish	TiN Coated	D	P	L		L _t	D	K	kl		
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 or TiAlN) 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 / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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



TK-S / TK-C SERIES

COMBO TAPS

SPIRAL POINT TAPS for Multi-Purpose

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

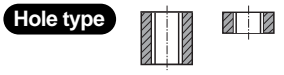
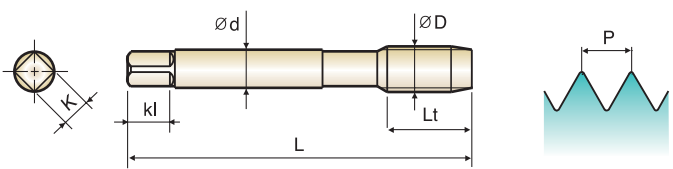
HAND TAPS

THREAD MILL

TECHNICAL DATA



ANSI Shank / DIN Length



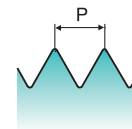
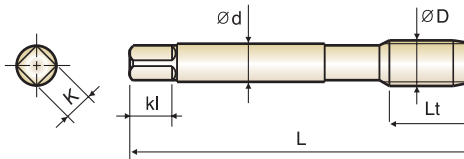
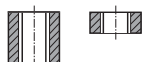
HSS-EX
D
60°
4P~5P
Steam Oxide
TiCN

Unit : Inch

EDP No.		SIZE	Pitch	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN Coated	D	P		L	Lt	D	K	kl	
TK203S	TK203C	M3 x	0.5	D3	2.21	.374	.141	.110	.188	3
TK224S	TK224C	M3.5 x	0.6	D4	2.21	.413	.141	.110	.188	3
TK244S	TK244C	M4 x	0.7	D4	2.48	.453	.168	.131	.250	3
TK284S	TK284C	M5 x	0.8	D4	2.76	.531	.194	.152	.250	3
TK315S	TK315C	M6 x	1.0	D5	3.15	.591	.255	.191	.312	3
TK365S	TK365C	M8 x	1.25	D5	3.54	.669	.318	.238	.375	3
TK426S	TK426C	M10 x	1.5	D6	3.94	.748	.381	.286	.438	3
TK435S	TK435C	M10 x	1.25	D5	3.94	.748	.381	.286	.438	3
TK506S	TK506C	M12 x	1.75	D6	4.33	.984	.367	.275	.438	3
TK525S	TK525C	M12 x	1.25	D5	3.94	.984	.367	.275	.438	3
TK547S	TK547C	M14 x	2.0	D7	4.33	.984	.429	.322	.500	3
TK556S	TK556C	M14 x	1.5	D6	3.94	.984	.429	.322	.500	3
TK607S	TK607C	M16 x	2.0	D7	4.33	1.083	.480	.360	.562	3
TK616S	TK616C	M16 x	1.5	D6	3.94	1.083	.480	.360	.562	3
TK657S	TK657C	M18 x	2.5	D7	4.92	1.083	.542	.406	.625	3
TK676S	TK676C	M18 x	1.5	D6	4.33	1.083	.542	.406	.625	3

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 for Multi-Purpose

Hole type


Super HSS
HSS-EX
D
60°
4P~5P
Steam Oxide
TiCN

Unit : Inch

EDP No.		SIZE		Pitch	Limit	Overall Length	Thread Length	Shank Diameter	Square Size	Square Length	No. of Flute
Steam Oxide	TiCN Coated	D	P	L		L _t	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

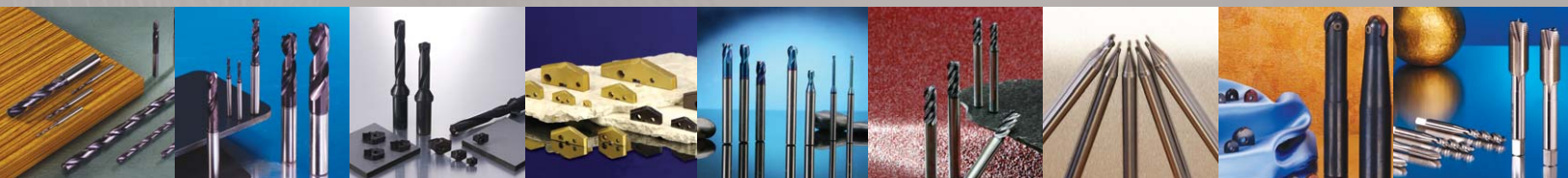
▶ Super HSS(M3~M12) and HSS-EX(M14~M18)

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	◎	◎	◎	◎	◎	◎			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 FLUTE TAPS

Tapping Blind Holes, HSS-E & HSS-PM






SELECTION GUIDE

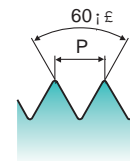
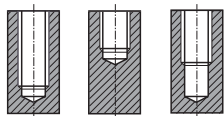
SPIRAL FLUTE TAPS

INCH

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
BG/GB		HSS-EX	UNC/UN8	ANSI	2B	2P ~ 3P	Hardslick Gold & Black	
BB/BI/BF/BK		Super HSS	UNC/UNF	ANSI DIN Length ANSI Shank	H2-H6	2P ~ 3P	Steam Oxide Hardslick	271
H6/H7/H8		P-HSS	UNC/UNF	ANSI	H2-H5	2P ~ 3P	Bright / TiCN Hardslick	272
B3/H9/B5/D6		P-HSS	UNC/UNF	ANSI	H2-H5	2P ~ 3P	Steam Oxide TiCN / TiN Hardslick	273
B1/B0/B2/D2		HSSE-V3	UNC/UNF	ANSI	H2-H6	2P ~ 3P	Bright Steam Oxide TiN / Hardslick	275
G7/G8/G9/H0		P-HSS	UNC/UNF	ANSI Shank	H2-H3	4P ~ 5P	TiN Hardslick	277
H1/H2/H3/H4		P-HSS	UNC/UNF	ANSI Shank	H3	4P ~ 5P	TiN Hardslick	278
D4/D3/E0		HSSE-V3	UNC/UNF	ANSI	H2-H5	2P ~ 3P	Bright Steam Oxide Hardslick	279
C0/D8		HSSE-V3	UNC/UNF	ANSI	H2-H5	2P ~ 3P	Bright Hardslick	281
F4/F8/F6		HSS-V	UNC/UNF	ANSI	H2-H6	1.5P ~ 2P	Steam Oxide TiN / Hardslick	282
G0/G1/G2		HSS-V	UNC/UNF	DIN Length ANSI Shank	H2-H6	2P ~ 3P	Bright TiN / Hardslick	284
ST/SI	STI Tap 	HSSE-V3	UNC/UNF	ANSI	2B	1.5P ~ 2P	Hardslick	286

METRIC

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
BH/BM BD/BO		Super HSS	M/MF	ANSI DIN Length ANSI Shank	D3-D7	2P-3P	Steam Oxide Hardslick	287
BS/BT E6/E8/E9		HSSE-V3	M/MF	ANSI DIN Length ANSI Shank	D3-D7	2P-3P	Steam Oxide TiCN / Hardslick	288
BU/BV E2/E4/E5		HSSE-V3	M/MF	ANSI DIN Length ANSI Shank	D3-D7	2P-3P	Steam Oxide TiCN / Hardslick	289
BW/BX F1/F3		HSSE-V3	M/MF	ANSI DIN Length ANSI Shank	D3-D6	2P-3P	Bright Hardslick	290
G4/G5/G6		HSS-V	M/MF	ANSI	D3-D6	1.5P-2P	Bright TiCN / Hardslick	291

**SPIRAL FLUTE TAPS MODIFIED BOTTOMING STYLE
for Stainless Steel up to 35HRc**
Oil Field
Hole type


HSS-EX
UNC UN8
2B
60°
2P~3P
Hardslick
Gold&Black
R40

Unit : Inch

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Hardslick Coated	Gold-Black Coated		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 ANSI Length Taps, refer to MCT1 302 on page 338.

◎ : Excellent ○ : Good

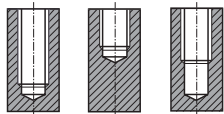
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎			◎			○			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

YG SPIRAL FLUTE TAPS

BB/BI SERIES
BF/BK SERIES

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

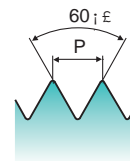
Hole type



BB/BI : ANSI



BF/BK : DIN Length ANSI Shank



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

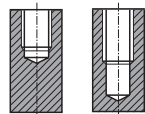
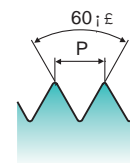
EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	Hardslick Coated	Steam Oxide	Hardslick Coated		UNC	UNF		
BB082	BI082	BF082	BK082	2	56		H2	2
BB162	BI162	BF162	BK162	4	40		H2	2
BB202	BI202	BF202	BK202	5	40		H2	3
BB243	BI243	BF243	BK243	6	32		H3	3
BB283	BI283	BF283	BK283	8	32		H3	3
BB323	BI323	BF323	BK323	10	24		H3	3
BB343	BI343	BF343	BK343			32	H3	3
BB403	BI403	BF403	BK403	1/4	20		H3	3
BB405	BI405	BF405	BK405				H5	3
BB423	BI423	BF423	BK423			28	H3	3
BB424	BI424	BF424	BK424				H4	3
BB445	BI445	BF445	BK445	5/16	18		H5	3
BB464	BI464	BF464	BK464			24	H4	3
BB485	BI485	BF485	BK485	3/8	16		H5	3
BB504	BI504	BF504	BK504			24	H4	3
BB525	BI525	BF525	BK525	7/16	14		H5	3
BB545	BI545	BF545	BK545			20	H5	3
BB565	BI565	BF565	BK565	1/2	13		H5	3
BB585	BI585	BF585	BK585			20	H5	3
BB605	BI605	BF605	BK605	9/16	12		H5	3
BB625	BI625	BF625	BK625			18	H5	3
BB645	BI645	BF645	BK645	5/8	11		H5	4
BB665	BI665	BF665	BK665			18	H5	4
BB705	BI705	BF705	BK705	3/4	10		H5	4
BB725	BI725	BF725	BK725			16	H5	4
BB746	BI746	BF746	BK746	7/8	9		H6	4
BB766	BI766	BF766	BK766			14	H6	4
BB786	BI786	BF786	BK786	1	8		H6	4
BB806	BI806	BF806	BK806			12	H6	4
BB836	BI836	BF836	BK836	1-1/8	8		H6	4
BB876	BI876	BF876	BK876	1-1/4	8		H6	4
BB916	BI916	BF916	BK916	1-3/8	8		H6	4
BB956	BI956	BF956	BK956	1-1/2	8		H6	4

Unit : Inch

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.
► For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 336 & 337.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminum / Aluminium alloys			
○	◎			◎			○			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE
Steels up to 45HRc
Hole type

ANSI


P-HSS	UNC UNF	H2~H5	60°	2P~3P	Bright	TiCN	Hardslick	R15
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Unit : Inch

Bright Finish	EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
	TiCN Coated	Hardslick Coated		UNC	UNF		
H6082	H7082	H8082	2	56		H2	3
H6162	H7162	H8162	4	40		H2	3
H6202	H7202	H8202	5	40		H2	3
H6243	H7243	H8243	6	32		H3	3
H6283	H7283	H8283	8	32		H3	3
H6323	H7323	H8323	10	24		H3	3
H6343	H7343	H8343			32	H3	3
H6405	H7405	H8405	1/4	20		H5	3
H6424	H7424	H8424			28	H4	3
H6445	H7445	H8445	5/16	18		H5	3
H6464	H7464	H8464			24	H4	3
H6485	H7485	H8485	3/8	16		H5	3
H6504	H7504	H8504			24	H4	3
H6525	H7525	H8525	7/16	14		H5	3
H6545	H7545	H8545			20	H5	3
H6565	H7565	H8565	1/2	13		H5	3
H6585	H7585	H8585			20	H5	3
H6645	H7645	H8645	5/8	11		H5	4
H6665	H7665	H8665			18	H5	4
H6705	H7705	H8705	3/4	10		H5	4
H6725	H7725	H8725			16	H5	4

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

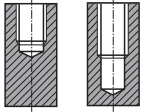
◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
		○	◎		○	◎				
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○	○	○			◎		

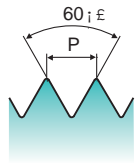
SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE for Titanium Alloys & Nickel Base Alloys up to 44HRc

- COMBO TAPS
- SPIRAL FLUTE TAPS
- SPIRAL POINT TAPS
- STRAIGHT FLUTE TAP
- TAPER PIPE TAPS
- FORMING TAPS
- STANDARD TAPS
- HAND TAPS
- THREAD MILL
- TECHNICAL DATA

Hole type



ANSI



P-HSS
UNC UNF
H2~H5
60°
2P~3P
Steam Oxide
TiN
TiCN
Hardslick

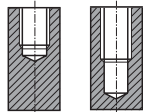
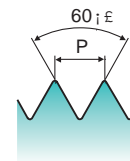
EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiN Coated	TiCN Coated	Hardslick Coated		UNC	UNF		
B3082	H9082	B5082	D6082	2	56		H2	3
B3162	H9162	B5162	D6162	4	40		H2	3
B3202	H9202	B5202	D6202	5	40		H2	3
B3243	H9243	B5243	D6243	6	32		H3	3
B3283	H9283	B5283	D6283	8	32		H3	3
B3323	H9323	B5323	D6323	10	24		H3	3
B3343	H9343	B5343	D6343			32	H3	3
B3403	H9403	B5403	D6403	1/4	20		H3	3
B3405	H9405	B5405	D6405				H5	3
B3423	H9423	B5423	D6423			28	H3	3
B3424	H9424	B5424	D6424				H4	3
B3443	H9443	B5443	D6443	5/16	18		H3	3
B3445	H9445	B5445	D6445				H5	3
B3463	H9463	B5463	D6463			24	H3	3
B3483	H9483	B5483	D6483	3/8	16		H3	3
B3485	H9485	B5485	D6485				H5	3
B3503	H9503	B5503	D6503			24	H3	3
B3504	H9504	B5504	D6504				H4	3
B3523	H9523	B5523	D6523	7/16	14		H3	3
B3525	H9525	B5525	D6525				H5	3
B3543	H9543	B5543	D6543			20	H3	3
B3545	H9545	B5545	D6545				H5	3
B3563	H9563	B5563	D6563	1/2	13		H3	3
B3565	H9565	B5565	D6565				H5	3
B3583	H9583	B5583	D6583			20	H3	3
B3585	H9585	B5585	D6585				H5	3

Unit : Inch

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			◎	◎	◎					

**SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE
for Titanium Alloys & Nickel Base Alloys up to 44HRc**
Hole type

ANSI


P-HSS

UNC UNF

H2~H5

60°

2P~3P

Steam Oxide

TiN

TiCN

Hardslick

R15

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiN Coated	TiCN Coated	Hardslick Coated		UNC	UNF		
B3603	H9603	B5603	D6603	9/16	12		H3	3
B3605	H9605	B5605	D6605				H5	3
B3623	H9623	B5623	D6623			18	H3	3
B3625	H9625	B5625	D6625				H5	3
B3643	H9643	B5643	D6643	5/8	11		H3	4
B3645	H9645	B5645	D6645				H5	4
B3663	H9663	B5663	D6663			18	H3	4
B3665	H9665	B5665	D6665				H5	4
B3703	H9703	B5703	D6703	3/4	10		H3	4
B3705	H9705	B5705	D6705				H5	4
B3723	H9723	B5723	D6723			16	H3	4
B3725	H9725	B5725	D6725				H5	4

► For tapping depth on ANSI Length Taps, refer to MCT1 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys				
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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
- COMBO TAPS
- SPIRAL FLUTE TAPS
- SPIRAL POINT TAPS
- STRAIGHT FLUTE TAP
- TAPER PIPE TAPS
- FORMING TAPS
- STANDARD TAPS
- HAND TAPS
- THREAD MILL
- TECHNICAL DATA

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

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

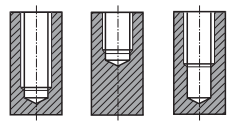
STANDARD TAPS

HAND TAPS

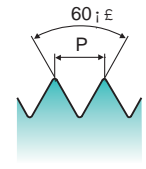
THREAD MILL

TECHNICAL DATA

Hole type



ANSI



HSSE-V3
UNC UNF
H2~H6
60°
2P~3P
Bright
Steam Oxide
TiN
Hardslick
R45

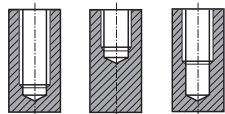
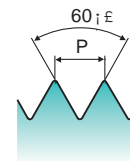
EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Bright Finish	Steam Oxide	TiN Coated	Hardslick Coated		UNC	UNF		
B1082	B0082	B2082	D2082	2	56		H2	2
B1162	B0162	B2162	D2162	4	40		H2	2
B1202	B0202	B2202	D2202	5	40		H2	3
B1203	B0203	B2203	D2203				H3	3
B1243	B0243	B2243	D2243	6	32		H3	3
B1283	B0283	B2283	D2283	8	32		H3	3
B1323	B0323	B2323	D2323	10	24		H3	3
B1343	B0343	B2343	D2343			32	H3	3
B1403	B0403	B2403	D2403	1/4	20		H3	3
B1405	B0405	B2405	D2405				H5	3
B1423	B0423	B2423	D2423			28	H3	3
B1443	B0443	B2443	D2443	5/16	18		H3	3
B1445	B0445	B2445	D2445				H5	3
B1463	B0463	B2463	D2463			24	H3	3
B1483	B0483	B2483	D2483	3/8	16		H3	3
B1485	B0485	B2485	D2485				H5	3
B1503	B0503	B2503	D2503			24	H3	3
B1523	B0523	B2523	D2523	7/16	14		H3	3
B1525	B0525	B2525	D2525				H5	3
B1543	B0543	B2543	D2543			20	H3	3
B1545	B0545	B2545	D2545				H5	3
B1563	B0563	B2563	D2563	1/2	13		H3	3
B1565	B0565	B2565	D2565				H5	3
B1583	B0583	B2583	D2583			20	H3	3
B1603	B0603	B2603	D2603	9/16	12		H3	3
B1623	B0623	B2623	D2623			18	H3	3

Unit : Inch

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎			◎			○			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

**SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE
for Stainless Steels up to 28HRc**
Hole type

ANSI


HSSE-V3

UNC
UNF

H2~H6

60°

2P~3P

Bright

Steam
Oxide

TiN

Hardslick

R45

Unit : Inch

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Bright Finish	Steam Oxide	TiN Coated	Hardslick Coated		UNC	UNF		
B1625	B0625	B2625	D2625				H5	3
B1643	B0643	B2643	D2643	5/8	11		H3	4
B1645	B0645	B2645	D2645				H5	4
B1663	B0663	B2663	D2663			18	H3	4
B1665	B0665	B2665	D2665				H5	4
B1703	B0703	B2703	D2703	3/4	10		H3	4
B1705	B0705	B2705	D2705				H5	4
B1723	B0723	B2723	D2723			16	H3	4
B1725	B0725	B2725	D2725				H5	4
B1744	B0744	B2744	D2744	7/8	9		H4	4
B1746	B0746	B2746	D2746				H6	4
B1764	B0764	B2764	D2764			14	H4	4
B1766	B0766	B2766	D2766				H6	4
B1784	B0784	B2784	D2784	1	8		H4	4
B1786	B0786	B2786	D2786				H6	4
B1804	B0804	B2804	D2804			12	H4	4
B1806	B0806	B2806	D2806				H6	4
B1824	B0824	B2824	D2824	1-1/8	7		H4	4
B1864	B0864	B2864	D2864	1-1/4	7		H4	4
B1904	B0904	B2904	D2904	1-3/8	6		H4	4
B1944	B0944	B2944	D2944	1-1/2	6		H4	4

▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎			◎			○			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

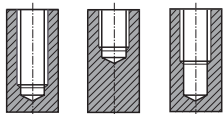
SPIRAL FLUTE TAPS

G7/G8/G9/H0 SERIES

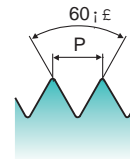
SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE for Stainless Steels up to 28HRc

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

Hole type



ANSI Long Shank



P-HSS
UNC UNF
H2~H3
60°
4P~5P
TiN
Hardslick
R45

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

HAND TAPS

THREAD MILL

TECHNICAL DATA

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
TiN Coated 4" OAL	TiN Coated 6" OAL	Hardslick Coated 4" OAL	Hardslick Coated 6" OAL		UNC	UNF		
G7162	—	G9162	—	4	40		H2	3
G7243	G8243	G9243	H0243	6	32		H3	3
G7283	G8283	G9283	H0283	8	32		H3	3
G7323	G8323	G9323	H0323	10	24		H3	3
G7343	G8343	G9343	H0343			32	H3	3
G7403	G8403	G9403	H0403	1/4	20		H3	3
—	G8423	—	H0423			28	H3	3
—	G8443	—	H0443	5/16	18		H3	3
—	G8463	—	H0463			24	H3	3
—	G8483	—	H0483	3/8	16		H3	3
—	G8503	—	H0503			24	H3	3
—	G8523	—	H0523	7/16	14		H3	3
—	G8543	—	H0543			20	H3	3
—	G8563	—	H0563	1/2	13		H3	3
—	G8583	—	H0583			20	H3	3
—	G8643	—	H0643	5/8	11		H3	4

Unit : Inch

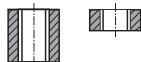
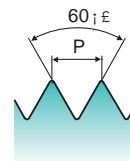
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎			◎			○			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

◎ : Excellent ○ : Good

SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE

Machining Center Tap

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

Hole type

ANSI Long Shank


P-HSS

UNC UNF

H3

60°

4P~5P

TiN

Hardslick

L15

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
TiN Coated 4" OAL	TiN Coated 6" OAL	Hardslick Coated 4" OAL	Hardslick Coated 6" OAL		UNC	UNF		
H1403	H2403	H3403	H4403	1/4	20		H3	2
—	H2423	—	H4423			28	H3	3
—	H2443	—	H4443	5/16	18		H3	3
—	H2483	—	H4483	3/8	16		H3	3
—	H2523	—	H4523	7/16	14		H3	3
—	H2563	—	H4563	1/2	13		H3	3
—	H2643	—	H4643	5/8	11		H3	3

◎ : Excellent ○ : Good

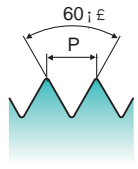
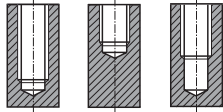
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎			◎			○			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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
- COMBO TAPS
- SPIRAL FLUTE TAPS
- SPIRAL POINT TAPS
- STRAIGHT FLUTE TAP
- TAPER PIPE TAPS
- FORMING TAPS
- STANDARD TAPS
- HAND TAPS
- THREAD MILL
- TECHNICAL DATA

SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE
Steels up to 38HRc

- COMBO TAPS
- SPIRAL FLUTE TAPS
- SPIRAL POINT TAPS
- STRAIGHT FLUTE TAP
- TAPER PIPE TAPS
- FORMING TAPS
- STANDARD TAPS
- HAND TAPS
- THREAD MILL
- TECHNICAL DATA

Hole type



HSSE-V3
UNC UNF
H2~H5
60°
2P~3P
Bright
Steam Oxide
Hardslick
R45

Unit : Inch

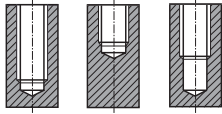
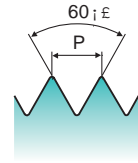
Bright Finish	EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
	Steam Oxide	Hardslick Coated		UNC	UNF		
D4082	D3082	EO082	2	56		H2	2
D4162	D3162	EO162	4	40		H2	2
D4202	D3202	EO202	5	40		H2	3
D4243	D3243	EO243	6	32		H3	3
D4283	D3283	EO283	8	32		H3	3
D4323	D3323	EO323	10	24		H3	3
D4343	D3343	EO343	10		32	H3	3
D4403	D3403	EO403	1/4	20		H3	3
D4405	D3405	EO405	1/4	20		H5	3
D4423	D3423	EO423	1/4		28	H3	3
D4425	D3425	EO425	1/4		28	H5	3
D4443	D3443	EO443	5/16	18		H3	3
D4445	D3445	EO445	5/16	18		H5	3
D4463	D3463	EO463	5/16		24	H3	3
D4465	D3465	EO465	5/16		24	H5	3
D4483	D3483	EO483	3/8	16		H3	3
D4485	D3485	EO485	3/8	16		H5	3
D4503	D3503	EO503	3/8		24	H3	3
D4505	D3505	EO505	3/8		24	H5	3
D4523	D3523	EO523	7/16	14		H3	3
D4525	D3525	EO525	7/16	14		H5	3
D4543	D3543	EO543	7/16		20	H3	3
D4545	D3545	EO545	7/16		20	H5	3
D4563	D3563	EO563	1/2	13		H3	3
D4565	D3565	EO565	1/2	13		H5	3
D4583	D3583	EO583	1/2		20	H3	3
D4585	D3585	EO585	1/2		20	H5	3

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
	◎	◎		○	○					
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE
 Steels up to 38HRc

Hole type

ANSI


HSSE-V3

UNC
UNF

H2~H5

60°

2P~3P

Bright

Steam
Oxide

Hardslick

R45

Unit : Inch

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Bright Finish	Steam Oxide	Hardslick Coated		UNC	UNF		
D4605	D3605	E0605	9/16	12		H5	3
D4625	D3625	E0625	9/16		18	H5	3
D4643	D3643	E0643	5/8	11		H3	4
D4645	D3645	E0645	5/8	11		H5	4
D4663	D3663	E0663	5/8		18	H3	4
D4665	D3665	E0665	5/8		18	H5	4
D4703	D3703	E0703	3/4	10		H3	4
D4705	D3705	E0705	3/4	10		H5	4
D4723	D3723	E0723	3/4		16	H3	4
D4725	D3725	E0725	3/4		16	H5	4
D4784	D3784	E0784	1	8		H4	4
D4786	D3786	E0786	1	8		H6	4
D4804	D3804	E0804	1		12	H4	4
D4806	D3806	E0806	1		12	H6	4
D4824	D3824	E0824	1-1/8	7		H4	4
D4864	D3864	E0864	1-1/4	7		H4	4
D4904	D3904	E0904	1-3/8	6		H4	4
D4944	D3944	E0944	1-1/2	6		H4	4

▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

- COMBO TAPS
- SPIRAL FLUTE TAPS
- SPIRAL POINT TAPS
- STRAIGHT FLUTE TAP
- TAPER PIPE TAPS
- FORMING TAPS
- STANDARD TAPS
- HAND TAPS
- THREAD MILL
- TECHNICAL DATA

◎ : Excellent ○ : Good

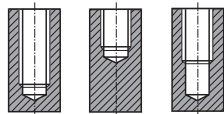
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
	◎	◎		○	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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

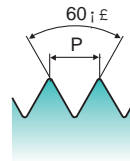
CO/D8 SERIES

SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE for Aluminum Alloys or Die Cast Aluminium

Hole type



ANSI



HSSE-V3
UNC UNF
H2~H5
60°
2P~3P
Bright
Hardslick
R50

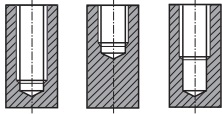
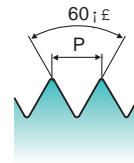
Unit : Inch

EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
Bright Finish	Hardslick Coated		UNC	UNF		
C0162	D8162	4	40		H2	2
C0242	D8242	6	32		H2	2
C0243	D8243				H3	2
C0283	D8283	8	32		H3	2
C0323	D8323	10	24		H3	2
C0343	D8343			32	H3	2
C0403	D8403	1/4	20		H3	2
C0405	D8405				H5	2
C0423	D8423			28	H3	2
C0443	D8443	5/16	18		H3	2
C0445	D8445				H5	2
C0463	D8463			24	H3	2
C0465	D8465				H5	2
C0483	D8483	3/8	16		H3	2
C0485	D8485				H5	2
C0503	D8503			24	H3	2
C0505	D8505				H5	2

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
							◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎										

**SPIRAL FLUTED TAPS BOTTOMING STYLE
for Multi Purpose**
Hole type

ANSI


HSS-V

UNC
UNF

H2~H6

60°

1.5P~2P

Steam
Oxide

TiN

Hardslick

R45

Unit : Inch

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

▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

SPIRAL FLUTED TAPS BOTTOMING STYLE for Multi Purpose

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

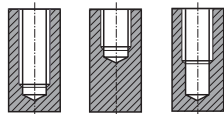
STANDARD TAPS

HAND TAPS

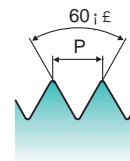
THREAD MILL

TECHNICAL DATA

Hole type



ANSI



HSS-V
UNC UNF
H2~H6
60°
1.5P~2P
Steam Oxide
TiN
Hardslick

Unit : Inch

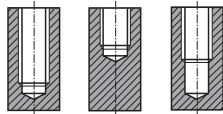
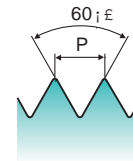
Steam Oxide	EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute	
	TiN Coated	Hardslick Coated		UNC	UNF			
F4625	F8625	F6625	5/8	11		H5	3	
F4643	F8643	F6643				H3	4	
F4645	F8645	F6645	3/4	10		H5	4	
F4663	F8663	F6663				18	H3	4
F4665	F8665	F6665				H5	4	
F4703	F8703	F6703	7/8	9		H3	4	
F4705	F8705	F6705	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

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○										

SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE for Multi Purpose

Hole type

DIN Length ANSI Shank


HSS-V

UNC UNF

H2~H6

60°

2P~3P

Bright

TiN

Hardslick

Unit : Inch

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Bright Finish	TiN Coated	Hardslick Coated		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			32	H3	3
G0403	G1403	G2403	1/4	20		H3	3
G0405	G1405	G2405				H5	3
G0423	G1423	G2423			28	H3	3
G0443	G1443	G2443	5/16	18		H3	3
G0445	G1445	G2445				H5	3
G0463	G1463	G2463			24	H3	3
G0483	G1483	G2483	3/8	16		H3	3
G0485	G1485	G2485				H5	3
G0503	G1503	G2503			24	H3	3
G0523	G1523	G2523	7/16	14		H3	3
G0525	G1525	G2525				H5	3
G0543	G1543	G2543			20	H3	3
G0545	G1545	G2545				H5	3
G0563	G1563	G2563	1/2	13		H3	3
G0565	G1565	G2565				H5	3
G0583	G1583	G2583			20	H3	3
G0585	G1585	G2585				H5	3
G0603	G1603	G2603	9/16	12		H3	3
G0605	G1605	G2605				H5	3
G0623	G1623	G2623			18	H3	3

► For tapping depth on DIN Length ANSI Length Taps, refer to DIN table on page 336 & 337.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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

Y/G SPIRAL FLUTE TAPS

G0/G1/G2 SERIES

SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE for Multi Purpose

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

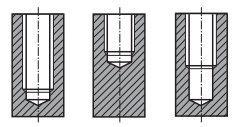
STANDARD TAPS

HAND TAPS

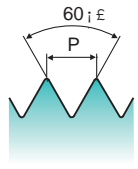
THREAD MILL

TECHNICAL DATA

Hole type



DIN Length ANSI Shank



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

Unit : Inch

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

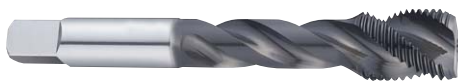
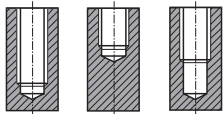
► For tapping depth on DIN Length ANSI Length Taps, refer to DIN table on page 336 & 337.

◎ : Excellent ○ : Good

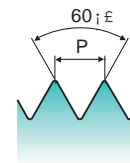
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 TAP

Hole type



ANSI



HSSE-V3
UNC UNF
2B
60°
1.5P ~ 2P
Hardslick

STI Tap

Unit : Inch

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

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

HAND TAPS

THREAD MILL

TECHNICAL DATA

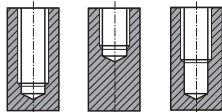
◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								



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

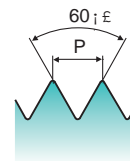
Hole type



BH/BM : ANSI



BD/BO : DIN Length ANSI Shank



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

Unit : mm

EDP No.				SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick Coated	Steam Oxide	Hardslick Coated				
BH203	BM203	BD203	B0203	M3	0.5	D3	3
BH224	BM224	BD224	B0224	M3.5	0.6	D4	3
BH244	BM244	BD244	B0244	M4	0.7	D4	3
BH284	BM284	BD284	B0284	M5	0.8	D4	3
BH315	BM315	BD315	B0315	M6	1.0	D5	3
BH345	BM345	BD345	B0345	M7	1.0	D5	3
BH365	BM365	BD365	B0365	M8	1.25	D5	3
BH375	BM375	BD375	B0375	M8	1.0	D5	3
BH426	BM426	BD426	B0426	M10	1.5	D6	3
BH435	BM435	BD435	B0435	M10	1.25	D5	3
BH506	BM506	BD506	B0506	M12	1.75	D6	3
BH525	BM525	BD525	B0525	M12	1.25	D5	3
BH547	BM547	BD547	B0547	M14	2.0	D7	3
BH556	BM556	BD556	B0556	M14	1.5	D6	3
BH607	BM607	BD607	B0607	M16	2.0	D7	3
BH616	BM616	BD616	B0616	M16	1.5	D6	3
BH657	BM657	BD657	B0657	M18	2.5	D7	4
BH676	BM676	BD676	B0676	M18	1.5	D6	4

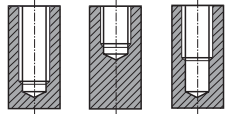
- ▶ For tapping depth on ANSI Length Taps, refer to MCT1 302 on page 338.
- ▶ For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 336 & 337.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎			◎			○			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

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

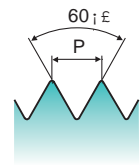
Hole type



BS/BT : ANSI



E6/E8/E9 : DIN Length ANSI Shank



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

EDP No.					SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick Coated	Steam Oxide	TiCN Coated	Hardslick Coated				
BS203	BT203	E6203	E8203	E9203	M3	0.5	D3	3
BS224	BT224	E6224	E8224	E9224	M3.5	0.6	D4	3
BS244	BT244	E6244	E8244	E9244	M4	0.7	D4	3
BS284	BT284	E6284	E8284	E9284	M5	0.8	D4	3
BS315	BT315	E6315	E8315	E9315	M6	1.0	D5	3
BS345	BT345	E6345	E8345	E9345	M7	1.0	D5	3
BS365	BT365	E6365	E8365	E9365	M8	1.25	D5	3
BS375	BT375	E6375	E8375	E9375	M8	1.0	D5	3
BS426	BT426	E6426	E8426	E9426	M10	1.5	D6	3
BS435	BT435	E6435	E8435	E9435	M10	1.25	D5	3
BS506	BT506	E6506	E8506	E9506	M12	1.75	D6	3
BS525	BT525	E6525	E8525	E9525	M12	1.25	D5	3
BS547	BT547	E6547	E8547	E9547	M14	2.0	D7	3
BS556	BT556	E6556	E8556	E9556	M14	1.5	D6	3
BS607	BT607	E6607	E8607	E9607	M16	2.0	D7	3
BS616	BT616	E6616	E8616	E9616	M16	1.5	D6	3
BS657	BT657	E6657	E8657	E9657	M18	2.5	D7	4
BS676	BT676	E6676	E8676	E9676	M18	1.5	D6	4

▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.
▶ For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 336 & 337.

▶ Tapping depth for DIN and ANSI style are the same, refer to MCTI table 302

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎			◎			○			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

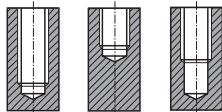
- COMBO TAPS
- SPIRAL FLUTE TAPS
- SPIRAL POINT TAPS
- STRAIGHT FLUTE TAP
- TAPER PIPE TAPS
- FORMING TAPS
- STANDARD TAPS
- HAND TAPS
- THREAD MILL
- TECHNICAL DATA



METRIC SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE

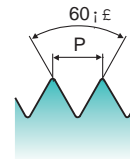
Steels up to 38HRc

Hole type



BU/BV : ANSI

E2/E4/E5 : DIN Length ANSI Shank



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

Unit : mm

EDP No.					SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick Coated	Steam Oxide	TiCN Coated	Hardslick Coated				
BU203	BV203	E2203	E4203	E5203	M3	0.5	D3	3
BU224	BV224	E2224	E4224	E5224	M3.5	0.6	D4	3
BU244	BV244	E2244	E4244	E5244	M4	0.7	D4	3
BU284	BV284	E2284	E4284	E5284	M5	0.8	D4	3
BU315	BV315	E2315	E4315	E5315	M6	1.0	D5	3
BU345	BV345	E2345	E4345	E5345	M7	1.0	D5	3
BU365	BV365	E2365	E4365	E5365	M8	1.25	D5	3
BU375	BV375	E2375	E4375	E5375	M8	1.0	D5	3
BU426	BV426	E2426	E4426	E5426	M10	1.5	D6	3
BU435	BV435	E2435	E4435	E5435	M10	1.25	D5	3
BU506	BV506	E2506	E4506	E5506	M12	1.75	D6	3
BU525	BV525	E2525	E4525	E5525	M12	1.25	D5	3
BU547	BV547	E2547	E4547	E5547	M14	2.0	D7	3
BU556	BV556	E2556	E4556	E5556	M14	1.5	D6	3
BU607	BV607	E2607	E4607	E5607	M16	2.0	D7	3
BU616	BV616	E2616	E4616	E5616	M16	1.5	D6	3
BU657	BV657	E2657	E4657	E5657	M18	2.5	D7	4
BU676	BV676	E2676	E4676	E5676	M18	1.5	D6	4

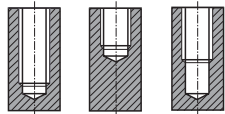
- ▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.
- ▶ For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 336 & 337.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
	◎	◎		○	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

METRIC SPIRAL FLUTED TAPS MODIFIED BOTTOMING STYLE
for Aluminum Alloys or Die Cast Aluminum

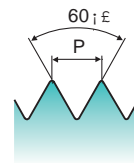
Hole type



BW/BX : ANSI



F1/F3 : DIN Length ANSI Shank



HSSE-V3
M MF
D3~D6
60°
2P~3P
Bright
Hardslick
R50

Unit : mm

EDP No.				SIZE	Pitch	Limit	No. of Flute
Bright Finish	Hardslick Coated	Bright Finish	Hardslick Coated				
BW203	BX203	F1203	F3203	M3	0.5	D3	2
BW244	BX244	F1244	F3244	M4	0.7	D4	2
BW285	BX285	F1285	F3285	M5	0.8	D5	2
BW315	BX315	F1315	F3315	M6	1.0	D5	2
BW365	BX365	F1365	F3365	M8	1.25	D5	2
BW426	BX426	F1426	F3426	M10	1.5	D6	2
BW435	BX435	F1435	F3435	M10	1.25	D5	2

- ▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.
- ▶ For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 336 & 337.

- COMBO TAPS
- SPIRAL FLUTE TAPS
- SPIRAL POINT TAPS
- STRAIGHT FLUTE TAP
- TAPER PIPE TAPS
- FORMING TAPS
- STANDARD TAPS
- HAND TAPS
- THREAD MILL
- TECHNICAL DATA

◎ : Excellent ○ : Good

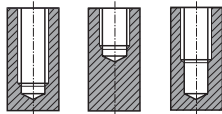
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
							◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎										

YG SPIRAL FLUTE TAPS

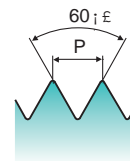
G4/G5/G6 SERIES

METRIC SPIRAL FLUTED TAPS BOTTOMING STYLE for Multi Purpose

Hole type



ANSI



HSS-V
M MF
D3~D6
60°
1.5P~2P
Bright
TiCN
Hardslick
R50

Unit : mm

Bright Finish	EDP No.		SIZE	Pitch	Limit	No. of Flute
	TiCN Coated	Hardslick Coated				
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 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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



SPIRAL POINT TAPS





SELECTION GUIDE

SPIRAL POINT TAPS

INCH

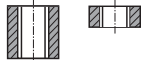
EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
M9/O1 N4/O5		Super HSS	UNC/UNF	ANSI DIN Length ANSI Shank	H2-H6	4P-5P	Steam Oxide Hardslick	295
M5/M6/M7		P-HSS	UNC/UNF	ANSI	H2-H5	4P-5P	Bright / TiCN Hardslick	296
I3/M8/15/J6		P-HSS	UNC/UNF	ANSI	H2-H5	4P-5P	Steam Oxide TiCN / TiN Hardslick	297
I0/I2/J2		HSSE-V3	UNC/UNF	ANSI	H2-H6	4P-5P	Steam Oxide TiN / Hardslick	299
M0/M1/M2/M3		P-HSS	UNC/UNF	ANSI Long Shank	H2-H3	4P-5P	TiN Hardslick	301
J4/J8/J3		HSSE-V3	UNC/UNF	ANSI	H2-H5	4P-5P	Bright Steam Oxide Hardslick	302
K9/L0/L1		HSS-V	UNC/UNF	ANSI	H2-H6	4P-5P	Bright TiN / Hardslick	304
L3/L4/L5		HSS-V	UNC/UNF	DIN Length ANSI Shank	H2-H6	4P-5P	Bright TiN / Hardslick	306
ST/SI	STI Tap 	HSSE-V3	UNC/UNF	ANSI	2B	4.5P~5P	Hardslick	307

METRIC

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
N7/N8 N3/O3		Super HSS	M/MF	ANSI DIN Length ANSI Shank	D3-D7	4P-5P	Steam Oxide Hardslick	308
O9/1A K3/K5/K6		HSSE-V3	M/MF	ANSI DIN Length ANSI Shank	D3-D7	4P-5P	Steam Oxide TiCN / Hardslick	309
1B/1C J9/K7/K2		HSSE-V3	M/MF	ANSI DIN Length ANSI Shank	D3-D7	4P-5P	Steam Oxide TiCN / Hardslick	310
L7/L8/L9		HSS-V	M/MF	ANSI	D3-D6	4P-5P	Bright TiCN / Hardslick	311

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

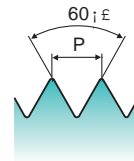
Hole type



M9/O1 : ANSI



N4/O5 : DIN Length ANSI Shank



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 Coated	Steam Oxide	Hardslick Coated		UNC	UNF		
M9082	01082	N4082	05082	2	56		H2	2
M9162	01162	N4162	05162	4	40		H2	2
M9202	01202	N4202	05202	5	40		H2	3
M9243	01243	N4243	05243	6	32		H3	3
M9283	01283	N4283	05283	8	32		H3	3
M9323	01323	N4323	05323	10	24		H3	3
M9343	01343	N4343	05343			32	H3	3
M9403	01403	N4403	05403	1/4	20		H3	3
M9405	01405	N4405	05405				H5	3
M9423	01423	N4423	05423			28	H3	3
M9445	01445	N4445	05445	5/16	18		H5	3
M9464	01464	N4464	05464			24	H4	3
M9485	01485	N4485	05485	3/8	16		H5	3
M9504	01504	N4504	05504			24	H4	3
M9525	01525	N4525	05525	7/16	14		H5	3
M9545	01545	N4545	05545			20	H5	3
M9565	01565	N4565	05565	1/2	13		H5	3
M9585	01585	N4585	05585			20	H5	3
M9605	01605	N4605	05605	9/16	12		H5	3
M9625	01625	N4625	05625			18	H5	3
M9645	01645	N4645	05645	5/8	11		H5	3
M9665	01665	N4665	05665			18	H5	3
M9705	01705	N4705	05705	3/4	10		H5	3
M9725	01725	N4725	05725			16	H5	3
M9746	01746	N4746	05746	7/8	9		H6	3
M9766	01766	N4766	05766			14	H6	3
M9786	01786	N4786	05786	1	8		H6	3
M9806	01806	N4806	05806			12	H6	3
M9836	01836	N4836	05836	1-1/8	8		H6	4
M9876	01876	N4876	05876	1-1/4	8		H6	4
M9916	01916	N4916	05916	1-3/8	8		H6	4
M9956	01956	N4956	05956	1-1/2	8		H6	4

▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.
▶ For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 336 & 337.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎			◎			○			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

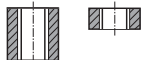
- COMBO TAPS
- SPIRAL FLUTE TAPS
- SPIRAL POINT TAPS
- STRAIGHT FLUTE TAP
- TAPER PIPE TAPS
- FORMING TAPS
- STANDARD TAPS
- HAND TAPS
- THREAD MILL
- TECHNICAL DATA



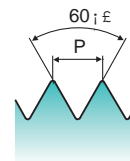
M5/M6/M7 SERIES

SPIRAL POINTED TAPS PLUG STYLE
Steels up to 45HRc

Hole type



ANSI



P-HSS
UNC UNF
H2~H5
60°
4P~5P
Bright
TiCN
Hardslick

Unit : Inch

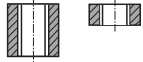
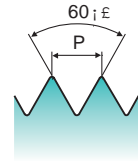
Bright Finish	EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
	TiCN Coated	Hardslick Coated		UNC	UNF		
M5082	M6082	M7082	2	56		H2	2
M5162	M6162	M7162	4	40		H2	2
M5202	M6202	M7202	5	40		H2	3
M5243	M6243	M7243	6	32		H3	3
M5283	M6283	M7283	8	32		H3	3
M5323	M6323	M7323	10	24		H3	3
M5343	M6343	M7343			32	H3	3
M5405	M6405	M7405	1/4	20		H5	3
M5424	M6424	M7424			28	H4	3
M5445	M6445	M7445	5/16	18		H5	3
M5464	M6464	M7464			24	H4	3
M5485	M6485	M7485	3/8	16		H5	3
M5504	M6504	M7504			24	H4	3
M5525	M6525	M7525	7/16	14		H5	3
M5545	M6545	M7545			20	H5	3
M5565	M6565	M7565	1/2	13		H5	3
M5585	M6585	M7585			20	H5	3
M5605	M6605	M7605	9/16	12		H5	3
M5625	M6625	M7625			18	H5	3
M5645	M6645	M7645	5/8	11		H5	3
M5665	M6665	M7665				H5	3
M5705	M6705	M7705	3/4	10		H5	3
M5725	M6725	M7725			16	H5	3

► For tapping depth on ANSI Length Taps, refer to MCT1 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
		○	◎		○	◎				
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○	○	○			◎		

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

Hole type

ANSI


P-HSS

UNC UNF

H2~H5

60°

4P~5P

Steam Oxide

TiN

TiCN

Hardslick

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiN Coated	TiCN Coated	Hardslick Coated		UNC	UNF		
I3082	M8082	I5082	J6082	2	56		H2	2
I3162	M8162	I5162	J6162	4	40		H2	2
I3202	M8202	I5202	J6202	5	40		H2	3
I3243	M8243	I5243	J6243	6	32		H3	3
I3283	M8283	I5283	J6283	8	32		H3	3
I3323	M8323	I5323	J6323	10	24		H3	3
I3343	M8343	I5343	J6343			32	H3	3
I3403	M8403	I5403	J6403	1/4	20		H3	3
I3405	M8405	I5405	J6405				H5	3
I3423	M8423	I5423	J6423			28	H3	3
I3424	M8424	I5424	J6424				H4	3
I3443	M8443	I5443	J6443	5/16	18		H3	3
I3445	M8445	I5445	J6445				H5	3
I3463	M8463	I5463	J6463			24	H3	3
I3483	M8483	I5483	J6483	3/8	16		H3	3
I3485	M8485	I5485	J6485				H5	3
I3503	M8503	I5503	J6503			24	H3	3
I3504	M8504	I5504	J6504				H4	3
I3523	M8523	I5523	J6523	7/16	14		H3	3
I3525	M8525	I5525	J6525				H5	3
I3543	M8543	I5543	J6543			20	H3	3
I3545	M8545	I5545	J6545				H5	3
I3563	M8563	I5563	J6563	1/2	13		H3	3
I3565	M8565	I5565	J6565				H5	3
I3583	M8583	I5583	J6583			20	H3	3
I3585	M8585	I5585	J6585				H5	3

▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			◎	◎	◎					

HSS

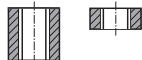
CARBIDE



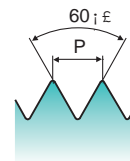
SPIRAL POINT TAPS

13/M8/I5/J6 SERIES

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

Hole type


ANSI



Unit : Inch

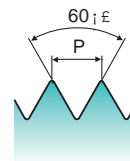
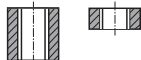
EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiN Coated	TiCN Coated	Hardslick Coated		UNC	UNF		
I3603	M8603	I5603	J6603	9/16	12		H3	3
I3605	M8605	I5605	J6605				H5	3
I3623	M8623	I5623	J6623			18	H3	3
I3625	M8625	I5625	J6625				H5	3
I3643	M8643	I5643	J6643	5/8	11		H3	3
I3645	M8645	I5645	J6645				H5	3
I3663	M8663	I5663	J6663			18	H3	3
I3665	M8665	I5665	J6665				H5	3
I3703	M8703	I5703	J6703	3/4	10		H3	3
I3705	M8705	I5705	J6705				H5	3
I3723	M8723	I5723	J6723			16	H3	3
I3725	M8725	I5725	J6725				H5	3

► For tapping depth on ANSI Length Taps, refer to MCT1 302 on page 334~335.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys				
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium	
			◎	◎	◎						

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

Hole type


HSSE-V3

UNC UNF

H2~H6

60°

4P~5P

Steam Oxide

TiN

Hardslick

Unit : Inch

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiN Coated	Hardslick Coated		UNC	UNF		
	I2082	J2082	2	56		H2	2
	I2162	J2162	4	40		H2	2
	I2202	J2202	5	40		H2	3
	I2203	J2203				H3	3
	I2243	J2243	6	32		H3	3
	I2283	J2283	8	32		H3	3
	I2323	J2323	10	24		H3	3
	I2343	J2343			32	H3	3
	I2403	J2403	1/4	20		H3	3
	I2405	J2405				H5	3
	I2423	J2423			28	H3	3
	I2443	J2443	5/16	18		H3	3
	I2445	J2445				H5	3
	I2463	J2463			24	H3	3
	I2483	J2483	3/8	16		H3	3
	I2485	J2485				H5	3
	I2503	J2503			24	H3	3
	I2523	J2523	7/16	14		H3	3
	I2525	J2525				H5	3
	I2543	J2543			20	H3	3
	I2545	J2545				H5	3
	I2563	J2563	1/2	13		H3	3
	I2565	J2565				H5	3
	I2583	J2583			20	H3	3
	I2603	J2603	9/16	12		H3	3
	I2623	J2623			18	H3	3

▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎			◎			○			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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

10/12/J2 SERIES

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

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

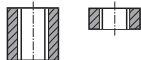
STANDARD TAPS

HAND TAPS

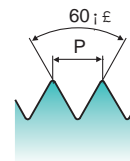
THREAD MILL

TECHNICAL DATA

Hole type



ANSI



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

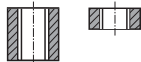
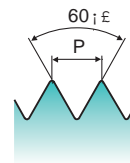
EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Steam Oxide	TiN Coated	Hardslick Coated		UNC	UNF		
I0643	I2643	J2643	5/8	11		H3	3
I0645	I2645	J2645				H5	3
I0665	I2665	J2665			18	H5	3
I0703	I2703	J2703	3/4	10		H3	3
I0705	I2705	J2705				H5	3
I0723	I2723	J2723	3/4		16	H3	3
I0725	I2725	J2725	3/4		16	H5	3
I0744	I2744	J2744	7/8	9		H4	3
I0746	I2746	J2746				H6	3
I0766	I2766	J2766			14	H6	3
I0784	I2784	J2784	1	8		H4	3
I0786	I2786	J2786				H6	3
I0806	I2806	J2806			12	H6	3

Unit : Inch

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎			◎			○			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL POINTED TAPS PLUG STYLE
for Stainless Steels up to 28HRc
Hole type

ANSI Long Shank


P-HSS

UNC UNF

H2~H3

60°

4P~5P

TiN

Hardslick

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute	Maximum Tapping Depth
TiN Coated 4" OAL	TiN Coated 6" OAL	Hardslick Coated 4" OAL	Hardslick Coated 6" OAL		UNC	UNF			
MO162	—	M2162	—	4	40		H2	2	0.844
MO243	M1243	M2243	M3243	6	32		H3	2	1.031
MO283	M1283	M2283	M3283	8	32		H3	3	1.125
MO323	M1323	M2323	M3323	10	24		H3	3	1.312
MO343	M1343	M2343	M3343			32	H3	3	1.312
MO403	M1403	M2403	M3403	1/4	20		H3	3	1.500
—	M1423	—	M3423			28	H3	3	1.500
—	M1443	—	M3443	5/16	18		H3	3	1.688
—	M1463	—	M3463			24	H3	3	1.688
—	M1483	—	M3483	3/8	16		H3	3	1.875
—	M1503	—	M3503			24	H3	3	
—	M1523	—	M3523	7/16	14		H3	3	
—	M1543	—	M3543			20	H3	3	
—	M1563	—	M3563	1/2	13		H3	3	
—	M1583	—	M3583			20	H3	3	
—	M1603	—	M3603	9/16	12		H3	3	
—	M1623	—	M3623			18	H3	3	
—	M1643	—	M3643	5/8	11		H3	3	

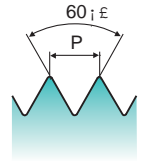
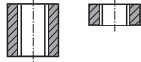
▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎			◎			○			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

SPIRAL POINTED TAPS PLUG STYLE
Steels up to 38HRc

Hole type



HSSE-V3
UNC UNF
H2~H5
60°
4P~5P
Bright
Steam Oxide
Hardslick

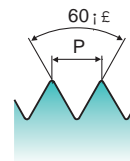
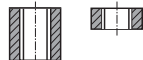
Unit : Inch

Bright Finish	EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
	Steam Oxide	Hardslick Coated		UNC	UNF		
J4082	J3082	J8082	2	56		H2	2
J4162	J3162	J8162	4	40		H2	2
J4202	J3202	J8202	5	40		H2	3
J4243	J3243	J8243	6	32		H3	3
J4283	J3283	J8283	8	32		H3	3
J4323	J3323	J8323	10	24		H3	3
J4343	J3343	J8343	10		32	H3	3
J4403	J3403	J8403	1/4	20		H3	3
J4405	J3405	J8405	1/4	20		H5	3
J4423	J3423	J8423	1/4		28	H3	3
J4425	J3425	J8425	1/4		28	H5	3
J4443	J3443	J8443	5/16	18		H3	3
J4445	J3445	J8445	5/16	18		H5	3
J4463	J3463	J8463	5/16		24	H3	3
J4465	J3465	J8465	5/16		24	H5	3
J4483	J3483	J8483	3/8	16		H3	3
J4485	J3485	J8485	3/8	16		H5	3
J4503	J3503	J8503	3/8		24	H3	3
J4505	J3505	J8505	3/8		24	H5	3
J4523	J3523	J8523	7/16	14		H3	3
J4525	J3525	J8525	7/16	14		H5	3
J4543	J3543	J8543	7/16		20	H3	3
J4545	J3545	J8545	7/16		20	H5	3
J4563	J3563	J8563	1/2	13		H3	3
J4565	J3565	J8565	1/2	13		H5	3
J4583	J3583	J8583	1/2		20	H3	3
J4585	J3585	J8585	1/2		20	H5	3

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
	◎	◎		○	○					
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

SPIRAL POINTED TAPS PLUG STYLE
Steels up to 38HRc
Hole type


HSSE-V3

UNC UNF

H2~H5

60°

4P~5P

Bright

Steam Oxide

Hardslick

Unit : Inch

Bright Finish	EDP No.		SIZE	Thread Per Inch		Limit	No. of Flute
	Steam Oxide	Hardslick Coated		UNC	UNF		
J4605	J3605	J8605	9/16	12		H5	3
J4625	J3625	J8625	9/16		18	H5	3
J4643	J3643	J8643	5/8	11		H3	3
J4645	J3645	J8645	5/8			H5	3
J4663	J3663	J8663	5/8		18	H3	3
J4665	J3665	J8665	5/8		18	H5	3
J4703	J3703	J8703	3/4	10		H3	3
J4705	J3705	J8705	3/4	10		H5	3
J4723	J3723	J8723	3/4		16	H3	3
J4725	J3725	J8725	3/4		16	H5	3
J4784	J3784	J8784	1	8		H4	3
J4786	J3786	J8786	1	8		H6	3
J4804	J3804	J8804	1		12	H4	3
J4806	J3806	J8806	1		12	H6	3
J4824	J3824	J8824	1-1/8	7		H4	4
J4864	J3864	J8864	1-1/4	7		H4	4
J4904	J3904	J8904	1-3/8	6		H4	4
J4944	J3944	J8944	1-1/2	6		H4	4

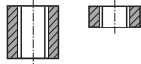
► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

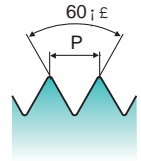
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
	◎	◎		○	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

SPIRAL POINTED TAPS PLUG STYLE for Multi Purpose

Hole type



ANSI



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

Unit : Inch

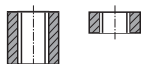
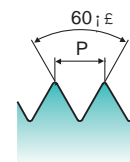
	EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
	Bright Finish	TiN Coated	Hardslick Coated		UNC	UNF		
K9082	L0082	L1082	2	56		H2	2	
K9162	L0162	L1162	4	40		H2	2	
K9202	L0202	L1202	5	40		H2	2	
K9243	L0243	L1243	6	32		H3	2	
K9283	L0283	L1283	8	32		H3	2	
K9323	L0323	L1323	10	24		H3	2	
K9343	L0343	L1343			32	H3	2	
K9403	L0403	L1403	1/4	20		H3	2	
K9405	L0405	L1405				H5	2	
K9423	L0423	L1423			28	H3	3	
K9443	L0443	L1443	5/16	18		H3	2	
K9445	L0445	L1445				H5	3	
K9463	L0463	L1463			24	H3	3	
K9483	L0483	L1483	3/8	16		H3	3	
K9485	L0485	L1485				H5	3	
K9503	L0503	L1503			24	H3	3	
K9523	L0523	L1523	7/16	14		H3	3	
K9525	L0525	L1525				H5	3	
K9543	L0543	L1543			20	H3	3	
K9545	L0545	L1545				H5	3	
K9563	L0563	L1563	1/2	13		H3	3	
K9565	L0565	L1565				H5	3	
K9583	L0583	L1583			20	H3	3	
K9585	L0585	L1585				H5	3	
K9603	L0603	L1603	9/16	12		H3	3	
K9623	L0623	L1623			18	H3	3	
K9625	L0625	L1625				H5	3	

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○	○							

SPIRAL POINTED TAPS PLUG STYLE for Multi Purpose

Hole type

ANSI


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

Unit : Inch

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Bright Finish	TiN Coated	Hardslick Coated		UNC	UNF		
K9643	L0643	L1643	5/8	11		H3	3
K9645	L0645	L1645				H5	3
K9663	L0663	L1663			18	H3	3
K9665	L0665	L1665				H5	3
K9703	L0703	L1703	3/4	10		H3	3
K9705	L0705	L1705				H5	3
K9723	L0723	L1723			16	H3	3
K9725	L0725	L1725				H5	3
K9746	L0746	L1746	7/8	9		H6	3
K9764	L0764	L1764			14	H4	3
K9766	L0766	L1766				H6	3
K9786	L0786	L1786	1	8		H6	3
K9806	L0806	L1806			12	H6	3

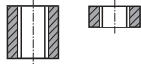
▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

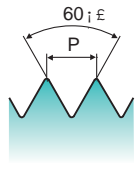
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○	○							

SPIRAL POINTED TAPS PLUG STYLE for Multi Purpose

Hole type



DIN Length ANSI Shank



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

Unit : Inch

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

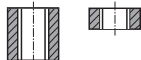
► For tapping depth on DIN / ANSI shank Taps, refer to DIN Table on page 336 & 337.

◎ : Excellent ○ : Good

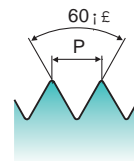
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 TAP

Hole type



ANSI



HSSE-V3
UNC UNF
2B
60°
4.5P ~ 5P
Hardslick

STI Tap

Unit : Inch

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

HSS

CARBIDE

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

HAND TAPS

THREAD MILL

TECHNICAL DATA

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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



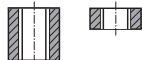
SPIRAL POINT TAPS

N7/N8 SERIES

N3/O3 SERIES

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

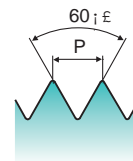
Hole type



N7/N8 : ANSI



N3/O3 : DIN Length ANSI Shank



Unit : mm

EDP No.				SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick Coated	Steam Oxide	Hardslick Coated				
N7203	N8203	N3203	O3203	M3	0.5	D3	3
N7224	N8224	N3224	O3224	M3.5	0.6	D4	3
N7244	N8244	N3244	O3244	M4	0.7	D4	3
N7284	N8284	N3284	O3284	M5	0.8	D4	3
N7315	N8315	N3315	O3315	M6	1.0	D5	3
N7345	N8345	N3345	O3345	M7	1.0	D5	3
N7365	N8365	N3365	O3365	M8	1.25	D5	3
N7375	N8375	N3375	O3375	M8	1.0	D5	3
N7426	N8426	N3426	O3426	M10	1.5	D6	3
N7435	N8435	N3435	O3435	M10	1.25	D5	3
N7506	N8506	N3506	O3506	M12	1.75	D6	3
N7525	N8525	N3525	O3525	M12	1.25	D5	3
N7547	N8547	N3547	O3547	M14	2.0	D7	3
N7556	N8556	N3556	O3556	M14	1.5	D6	3
N7607	N8607	N3607	O3607	M16	2.0	D7	3
N7616	N8616	N3616	O3616	M16	1.5	D6	3
N7657	N8657	N3657	O3657	M18	2.5	D7	3
N7676	N8676	N3676	O3676	M18	1.5	D6	3

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

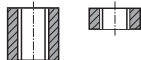
► For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 336 & 337.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎			◎			○			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
						○	○		○	○

METRIC SPIRAL POINT TAPS PLUG STYLE
Steels up to 28HRc

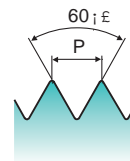
Hole type



09/1A : ANSI



K3/K5/K6 : DIN Length ANSI Shank



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

Unit : mm

EDP No.					SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick Coated	Steam Oxide	TiCN Coated	Hardslick Coated				
09203	IA203	K3203	K5203	K6203	M3	0.5	D3	3
09224	IA224	K3224	K5224	K6224	M3.5	0.6	D4	3
09244	IA244	K3244	K5244	K6244	M4	0.7	D4	3
09284	IA284	K3284	K5284	K6284	M5	0.8	D4	3
09315	IA315	K3315	K5315	K6315	M6	1.0	D5	3
09345	IA345	K3345	K5345	K6345	M7	1.0	D5	3
09365	IA365	K3365	K5365	K6365	M8	1.25	D5	3
09375	IA375	K3375	K5375	K6375	M8	1.0	D5	3
09426	IA426	K3426	K5426	K6426	M10	1.5	D6	3
09435	IA435	K3435	K5435	K6435	M10	1.25	D5	3
09506	IA506	K3506	K5506	K6506	M12	1.75	D6	3
09525	IA525	K3525	K5525	K6525	M12	1.25	D5	3
09547	IA547	K3547	K5547	K6547	M14	2.0	D7	3
09556	IA556	K3556	K5556	K6556	M14	1.5	D6	3
09607	IA607	K3607	K5607	K6607	M16	2.0	D7	3
09616	IA616	K3616	K5616	K6616	M16	1.5	D6	3
09657	IA657	K3657	K5657	K6657	M18	2.5	D7	3
09676	IA676	K3676	K5676	K6676	M18	1.5	D6	3

- ▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.
- ▶ For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 336 & 337.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
	◎	○		◎	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○										



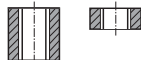
SPIRAL POINT TAPS

IB/IC SERIES

J9/K7/K2 SERIES

METRIC SPIRAL POINTED TAPS PLUG STYLE
Steels up to 35HRc

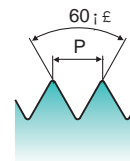
Hole type



IB/IC : ANSI



J9/K7/K2 : DIN Length ANSI Shank



HSSE-V3

M MF

D3~D7



Steam Oxide

TiCN

Hardslick

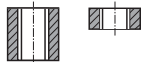
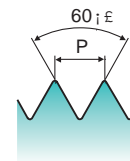
Unit : mm

EDP No.					SIZE	Pitch	Limit	No. of Flute
Steam Oxide	Hardslick Coated	Steam Oxide	TiCN Coated	Hardslick Coated				
IB203	IC203	J9203	K7203	K2203	M3	0.5	D3	3
IB224	IC224	J9224	K7224	K2224	M3.5	0.6	D4	3
IB244	IC244	J9244	K7244	K2244	M4	0.7	D4	3
IB284	IC284	J9284	K7284	K2284	M5	0.8	D4	3
IB315	IC315	J9315	K7315	K2315	M6	1.0	D5	3
IB345	IC345	J9345	K7345	K2345	M7	1.0	D5	3
IB365	IC365	J9365	K7365	K2365	M8	1.25	D5	3
IB375	IC375	J9375	K7375	K2375	M8	1.0	D5	3
IB426	IC426	J9426	K7426	K2426	M10	1.5	D6	3
IB435	IC435	J9435	K7435	K2435	M10	1.25	D5	3
IB506	IC506	J9506	K7506	K2506	M12	1.75	D6	3
IB525	IC525	J9525	K7525	K2525	M12	1.25	D5	3
IB547	IC547	J9547	K7547	K2547	M14	2.0	D7	3
IB556	IC556	J9556	K7556	K2556	M14	1.5	D6	3
IB607	IC607	J9607	K7607	K2607	M16	2.0	D7	3
IB616	IC616	J9616	K7616	K2616	M16	1.5	D6	3
IB657	IC657	J9657	K7657	K2657	M18	2.5	D7	4
IB676	IC676	J9676	K7676	K2676	M18	1.5	D6	4

- ▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.
- ▶ For tapping depth on DIN / ANSI Shank Taps, refer to DIN Table on page 336 & 337.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
	◎	◎		○	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
			○							

**METRIC SPIRAL POINTED TAPS PLUG STYLE
for Multi Purpose**
Hole type

ANSI


HSS-V

M MF

D3~D6

60°

4P~5P

Bright

TiCN

Hardslick

Unit : mm

EDP No.			SIZE	Pitch	Limit	No. of Flute
Bright Finish	TiCN Coated	Hardslick Coated				
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

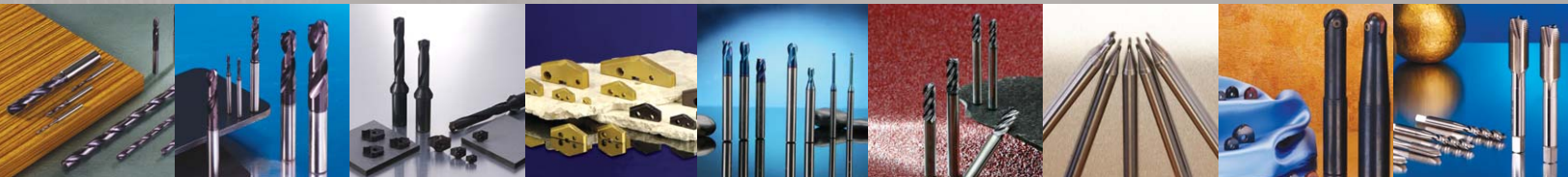
► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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



STRAIGHT FLUTE TAP


- Super-HSS

SELECTION GUIDE

HSS STRAIGHT FLUTE TAP

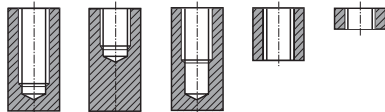
Super-HSS

INCH

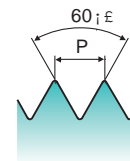
EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
TR, TR-A, TR-R		Super HSS	UNC/UNF	ANSI	H3-H5	2P-3P	TAlN	327

METRIC

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
TR, TR-A, TR-R		Super HSS	M	ANSI	D4-D6	2P-3P	TAlN	328

STRAIGHT FLUTE TAP MODIFIED BOTTOMING STYLE for CAST IRON
Hole type

Without Coolant Hole

Through Coolant Hole

Radial Coolant Hole

Super HSS
UNC UNF
H3/H5

2P~3P Bottoming
TiAlN

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Without Coolant Hole	Through Coolant Hole	Radial Coolant Hole		UNC	UNF		
TR323	TR323A	TR323R	10	24		H3	4
TR325	TR325A	TR325R	10		32	H5	4
TR343	TR343A	TR343R	10		32	H3	4
TR403	TR403A	TR403R	1/4	20		H3	4
TR405	TR405A	TR405R	1/4			H5	4
TR423	TR423A	TR423R	1/4		28	H3	4
TR443	TR443A	TR443R	5/16	18		H3	4
TR445	TR445A	TR445R	5/16			H5	4
TR463	TR463A	TR463R	5/16		24	H3	4
TR483	TR483A	TR483R	3/8	16		H3	4
TR485	TR485A	TR485R	3/8			H5	4
TR503	TR503A	TR503R	3/8		24	H3	4
TR523	TR523A	TR523R	7/16	14		H3	4
TR525	TR525A	TR525R	7/16			H5	4
TR543	TR543A	TR543R	7/16		20	H3	4
TR545	TR545A	TR545R	7/16			H5	4
TR563	TR563A	TR563R	1/2	13		H3	4
TR565	TR565A	TR565R	1/2			H5	4
TR583	TR583A	TR583R	1/2		20	H3	4
TR585	TR585A	TR585R	1/2			H5	4
TR603	TR603A	TR603R	9/16	12		H3	4
TR605	TR605A	TR605R	9/16			H5	4
TR623	TR623A	TR623R	9/16		18	H3	4
TR625	TR625A	TR625R	9/16			H5	4
TR643	TR643A	TR643R	5/8	11		H3	4
TR645	TR645A	TR645R	5/8			H5	4
TR663	TR663A	TR663R	5/8		18	H3	4
TR665	TR665A	TR665R	5/8			H5	4
TR703	TR703A	TR703R	3/4	10		H3	4
TR705	TR705A	TR705R	3/4			H5	4
TR723	TR723A	TR723R	3/4		16	H3	4
TR725	TR725A	TR725R	3/4			H5	4

Unit : Inch

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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

YG STRAIGHT FLUTE TAP

TR, TR-A, TR-R SERIES

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

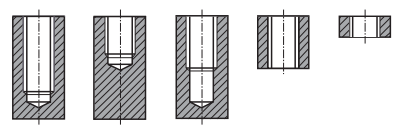
HAND TAPS

THREAD MILL

TECHNICAL DATA

STRAIGHT FLUTE TAP MODIFIED BOTTOMING STYLE for CAST IRON

Hole type



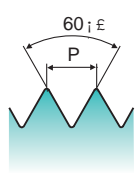
Without Coolant Hole



Through Coolant Hole



Radial Coolant Hole



Super HSS

D4~D6

60°

2P~3P Bottoming

TiAlN

Unit : mm

EDP No.			SIZE	Pitch	Limit	No. of Flute
Without Coolant Hole	Through Coolant Hole	Radial Coolant Hole				
TR284	TR284A	TR284R	M5	0.8	D4	4
TR315	TR315A	TR315R	M6	1	D5	4
TR365	TR365A	TR365R	M8	1.25	D5	4
TR426	TR426A	TR426R	M10	1.5	D6	4
TR526	TR526A	TR526R	M12	1.25	D6	4
TR506	TR506A	TR506R	M12	1.75	D6	4
TR566	TR566A	TR566R	M14	1.25	D6	4
TR556	TR556A	TR556R	M14	1.5	D6	4
TR676	TR676A	TR676R	M18	1.5	D6	4

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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



TAPER PIPE TAPS





- Tapping NPT & NPTF threads

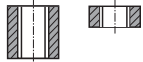
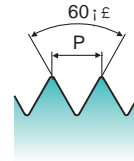
SELECTION GUIDE

TAPER PIPE TAPS

Tapping NPT & NPTF threads

INCH

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
Q1/Q0/Q6		HSSE-V3	NPT/F	ANSI		2P~3P	Bright Steam Oxide Hardslick	315
Q9/R0/R1		HSSE-V3	NPT/F	ANSI		2P~3P	Bright / TiN Hardslick	316
R7/R8/R9/S0		HSSE-V3	NPT/F	ANSI		2P~3P	Bright / TiN Hardslick Nitrided-Steam Oxide	317
S1/S2		HSSE-V3	NPTF	ANSI		2P~3P	Bright / TiCN	318

TAPER PIPE TAPS : SPIRAL FLUTED
for Steels & Stainless Steels
Hole type

ANSI


HSSE-V3

NPT/F

60°

2P~3P

Bright

Steam Oxide

Hardslick

R15

Unit : Inch

EDP No.			SIZE	Thread Per Inch	No. of Flute
Bright Finish	Steam Oxide	Hardslick Coated			
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.

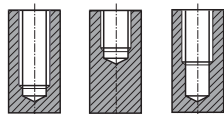
◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
○	◎	○		◎	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

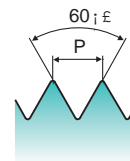


TAPER PIPE TAPS : SPIRAL FLUTED
for Cast Irons & Steels

Hole type



ANSI



HSSE-V3

NPT/F

60°

2P~3P

Bright

TiN

Hardslick

R15

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

HAND TAPS

THREAD MILL

TECHNICAL DATA

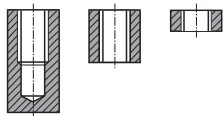
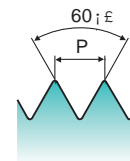
Unit : Inch

Bright Finish	EDP No.		SIZE	Thread Per Inch	No. of Flute
	TiN Coated	Hardslick Coated			
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	ROD20	R1D20	2	11-1/2	7

► These Taps meet both NPT and NPTF Standards.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○								
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
	◎	◎								

**TAPER PIPE TAPS : STRAIGHT FLUTED
for Cast Irons & Steels**
Hole type

ANSI


HSSE-V3

NPT/F

60°

2P~3P

Bright

TiN

Hardslick

NiNitrided
Steam Oxide

Unit : Inch

EDP No.				SIZE	Thread Per Inch	No. of Flute
Bright Finish	TiN Coated	Hardslick Coated	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.

◎ : Excellent ○ : Good

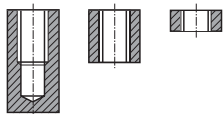
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○								
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
	◎	◎								

YG TAPER PIPE TAPS

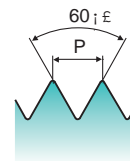
S1/S2 SERIES

TAPER PIPE TAPS : INTERRUPTED THREAD for Cast Irons & Steels

Hole type



ANSI



HSSE-V3
NPTF
60°
2P~3P
Bright
TiCN

Unit : Inch

EDP No.		SIZE	Thread Per Inch	No. of Flute
Bright Finish	TiCN Coated			
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 and NPTF Standards.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○								
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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



FORMING TAPS




- Tapping by Forming Soft Materials

SELECTION GUIDE


FORMING TAPS

Tapping by Forming Soft Materials

INCH

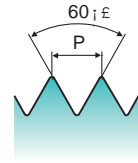
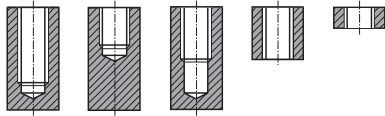
EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
ZF								
Z0/Z1/Z2/Z3		HSSE-V3	UNC/UNF	ANSI	H3-H8	4P-5P 1.5P-2P	Bright / TiN	321
Z4/Z5/Z6/Z7		HSSE-V3	UNC/UNF	ANSI	H3-H8	4P-5P 1.5P-2P	Bright / TiN	322

METRIC

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
Z8/ZA/ZC		HSSE-V3	M/MF	ANSI	D5-D11	4P-5P 1.5P-2P	Bright TiN / TiCN	323

MINIATURE FORMING TAPS MODI BOTTOMING STYLE

Hole type



Unit : Inch

EDP No.	SIZE	Nominal Size (mm)	Pitch		Limit
			UNC	UNF	
TiAlN					
ZFM12	#0000	0.53334	160		H2
ZFM13					H3
ZFM32	#000	0.8636	120		H2
ZFM33					H3
ZFM52	#00	1.1938	90		H2
ZFM53					H3
ZFM82	#00	1.1938		96	H2
ZFM83					H3
ZF022	#0	1.524		80	H2
ZF023					H3
ZF024					H4
ZF042	#1	1.854	64		H2
ZF043					H3
ZF044					H4
ZF062	#1	1.854		72	H2
ZF063					H3
ZF064					H4
ZF082	#2	2.1844	56		H2
ZF083					H3
ZF084					H4
ZF102	#2	2.1844		64	H2
ZF103					H3
ZF104					H4
ZF122	#3	2.5146	48		H2
ZF123					H3
ZF124					H4
ZF125					H5
ZF142	#3	2.5146		56	H2
ZF143					H3
ZF144					H4
ZF145					H5

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

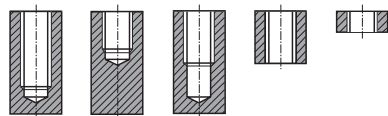
HAND TAPS

THREAD MILL

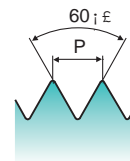
TECHNICAL DATA

FORMING TAPS PLUG & BOTTOMING STYLE for Multi Purpose

Hole type



ANSI



HSSE-V3
UNC UNF
H3~H8
60°
4P~5P Plug
1.5P~2P Bottoming
Bright
TiN

Unit : Inch

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Bright Finish Plug	TiN Coated Plug	Bright Finish Bottoming	TiN Coated Bottoming		UNC	UNF		
-	-	Z2022	Z3022	0		80	H2	
-	-	Z2023	Z3023	0		80	H3	
-	-	Z2042	Z3042	1	64		H2	
-	-	Z2062	Z3062	1		72	H2	
-	-	Z2063	Z3063	1		72	H3	
-	-	Z2082	Z3082	2	56		H2	
-	-	Z2083	Z3083	2	56		H3	
-	-	Z2102	Z3102	2		64	H2	
-	-	Z2122	Z3122	3	48		H2	
-	-	Z2123	Z3123	3	48		H3	
-	-	Z2143	Z3143	3		56	H3	
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			H5	4
Z0225	Z1225	Z2225	Z3225	5		44	H5	4
Z0243	Z1243	Z2243	Z3243	6	32		H3	4
Z0245	Z1245	Z2245	Z3245	6			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			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			H6	4
Z0344	Z1344	Z2344	Z3344	10		32	H4	4
Z0346	Z1346	Z2346	Z3346	10			H6	4
Z0364	Z1364	Z2364	Z3364	12	24		H4	4
Z0366	Z1366	Z2366	Z3366	12	24		H6	4

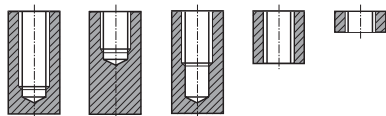
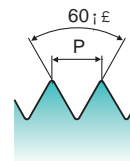
► For tapping depth on ANSI Length Taps, refer to MCT1 302 on page 338.

► Hardslick coating is available on your request (Bright Finish EDP No + H)

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎			◎			◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 PLUG & BOTTOMING STYLE for Multi Purpose

Hole type

ANSI


HSSE-V3

UNC UNF

H3~H8

60°

4P~5P
Plug

1.5P~2P
Bottoming

Bright

TiN

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Bright Finish Plug	TiN Coated Plug	Bright Finish Bottoming	TiN Coated Bottoming		UNC	UNF		
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 338.
▶ Hardslck coating is available on your request (Bright Finish EDP No + H)

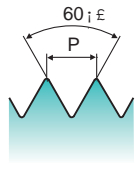
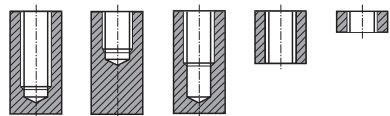
◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎			◎			◎			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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
- COMBO TAPS
- SPIRAL FLUTE TAPS
- SPIRAL POINT TAPS
- STRAIGHT FLUTE TAP
- TAPER PIPE TAPS
- FORMING TAPS
- STANDARD TAPS
- HAND TAPS
- THREAD MILL
- TECHNICAL DATA

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

Hole type



HSSE-V3
UNC UNF
H3~H8
60°
4P~5P Plug
1.5P~2P Bottoming
Bright
TiN

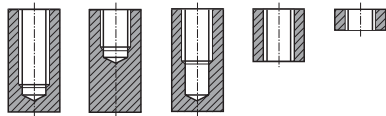
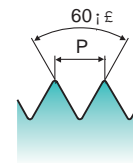
- COMBO TAPS
- SPIRAL FLUTE TAPS
- SPIRAL POINT TAPS
- STRAIGHT FLUTE TAP
- TAPER PIPE TAPS
- FORMING TAPS
- STANDARD TAPS
- HAND TAPS
- THREAD MILL
- TECHNICAL DATA

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Bright Finish Plug	TiN Coated Plug	Bright Finish Bottoming	TiN Coated Bottoming		UNC	UNF		
Z4163	Z5163	Z6163	Z7163	4	40		H3	4
Z4165	Z5165	Z6165	Z7165				H5	4
Z4183	Z5183	Z6183	Z7183	4		48	H3	4
Z4185	Z5185	Z6185	Z7185			48	H5	4
Z4203	Z5203	Z6203	Z7203	5	40		H3	4
Z4205	Z5205	Z6205	Z7205				H5	4
Z4225	Z5225	Z6225	Z7225			44	H5	4
Z4243	Z5243	Z6243	Z7243	6	32		H3	4
Z4245	Z5245	Z6245	Z7245				H5	4
Z4263	Z5263	Z6263	Z7263	6		40	H3	4
Z4265	Z5265	Z6265	Z7265			40	H5	4
Z4283	Z5283	Z6283	Z7283	8	32		H3	4
Z4285	Z5285	Z6285	Z7285				H5	4
Z4303	Z5303	Z6303	Z7303	8		36	H3	4
Z4305	Z5305	Z6305	Z7305			36	H5	4
Z4324	Z5324	Z6324	Z7324	10	24		H4	4
Z4326	Z5326	Z6326	Z7326				H6	4
Z4344	Z5344	Z6344	Z7344			32	H4	4
Z4346	Z5346	Z6346	Z7346				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				H6	4
Z4424	Z5424	Z6424	Z7424			28	H4	4
Z4426	Z5426	Z6426	Z7426				H6	4
Z4445	Z5445	Z6445	Z7445	5/16	18		H5	4
Z4447	Z5447	Z6447	Z7447				H7	4
Z4465	Z5465	Z6465	Z7465			24	H5	4
Z4467	Z5467	Z6467	Z7467				H7	4
Z4485	Z5485	Z6485	Z7485	3/8	16		H5	4
Z4487	Z5487	Z6487	Z7487				H7	4
Z4505	Z5505	Z6505	Z7505			24	H5	4

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.
 ► Hardslick coating is available on your request (Bright Finish EDP No + H) ◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎			◎			◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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 WITH OIL GROOVE PLUG & BOTTOMING STYLE for Multi Purpose

Hole type

ANSI


HSSE-V3

UNC UNF

H3~H8

60°

4P~5P Plug

1.5P~2P Bottoming

Bright

TiN

Unit : Inch

EDP No.				SIZE	Thread Per Inch		Limit	No. of Flute
Bright Finish Plug	TiN Coated Plug	Bright Finish Bottoming	TiN Coated Bottoming		UNC	UNF		
Z4507	Z5507	Z6507	Z7507				H7	4
Z4528	Z5528	Z6528	Z7528	7/16	14		H8	4
Z4548	Z5548	Z6548	Z7548			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			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 338.
 ► Hardslick coating is available on your request (Bright Finish EDP No + H)

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎			◎			◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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



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

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

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

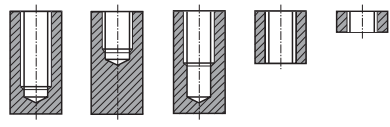
STANDARD TAPS

HAND TAPS

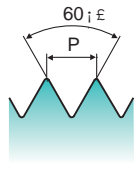
THREAD MILL

TECHNICAL DATA

Hole type



ANSI



HSSE-V3
M MF
D5~D11
60°
4P~5P Plug
1.5P~2P Bottoming
Bright
TiN
TiCN

Unit : mm

EDP No.						SIZE	Pitch	Limit	No. of Flute
Bright Finish Plug	Bright Finish Bottoming	TiN Coated Plug	TiN Coated Bottoming	TiCN Coated Plug	TiCN Coated Bottoming				
-	Z9133	-	ZB133	-	ZD133	M2	O4	-	4
Z8205	Z9205	ZA205	ZB205	ZC205	ZD205	M3	0.5	D5	4
Z8246	Z9246	ZA246	ZB246	ZC246	ZD246	M4	0.7	D6	4
Z8287	Z9287	ZA287	ZB287	ZC287	ZD287	M5	0.8	D7	4
Z8318	Z9318	ZA318	ZB318	ZC318	ZD318	M6	1.0	D8	4
Z8369	Z9369	ZA369	ZB369	ZC369	ZD369	M8	1.25	D9	4
Z8420	Z9420	ZA420	ZB420	ZC420	ZD420	M10	1.5	D10	4
Z850A	Z950A	ZA50A	ZB50A	ZC50A	ZD50A	M12	1.75	D11	4

- ▶ For tapping depth on ANSI length taps, refer to MCTI 302 on page338
- ▶ Hardslck coating is available on your request (Bright Finish EDP No + H)

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎			◎			◎			
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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



STANDARD TAPS



_ Spiral Point and Spiral Flute Taps

SELECTION GUIDE

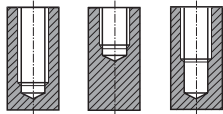
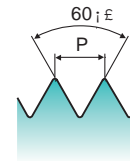
STANDARD TAPS

Spiral Point and Spiral Flute Taps

INCH

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
C2/C3/C4/D9		HSSE-V3	UNC/UNF	ANSI	H2-H6	1.5P~2P	Steam Oxide Bright / TiN Hardslick	327
I9/J0/J1/J7		HSSE-V3	UNC/UNF	ANSI	H2-H6	4P~5P	Steam Oxide Bright / TiN Hardslick	328

STANDARD TAPS : SPIRAL FLUTED BOTTOMING STYLE for Multi Purpose

Hole type

ANSI


HSSE-V3

UNC
UNF

H2~H6

60°

1.5P~2P

Steam
Oxide

Bright

TiN

Hardslick

R45

Unit : Inch

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

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

STANDARD TAPS : SPIRAL POINTED PLUG STYLE for Multi Purpose

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

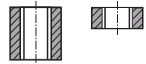
STANDARD TAPS

HAND TAPS

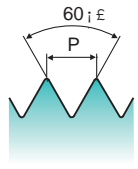
THREAD MILL

TECHNICAL DATA

Hole type



ANSI



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

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

Unit : Inch

► For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &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




HAND TAPS

SELECTION GUIDE

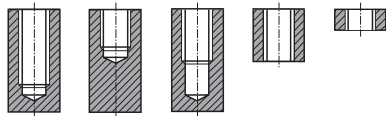
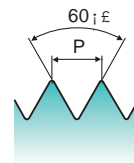
HAND TAPS

INCH

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
A3/A5/A7		HSS-V	UNC/UNF	ANSI	H2-H4	9/4/1.5P	Bright	331

METRIC

EDP No.	MODEL	Tool Material	Standard	Dimensions	Tolerance	Chamfer	Surface Treatment	Page
A6/A9		HSS-V	M	ANSI	D3-D9	4/1.5P	Bright	332

**HAND TAPS TAPER, PLUG & BOTTOMING STYLE
for Multi Purpose**
Hole type

ANSI


HSS-V

UNC
UNF

H2~H4

60°

9.0P/4.0P/1.5P

Bright

Unit : Inch

EDP No.			SIZE	Thread Per Inch		Limit	No. of Flute
Bright Finish Taper	Bright Finish Plug	Bright Finish Bottoming		UNC	UNF		
A3082	A5082	A7082	2	56		H2	3
A3162	A5162	A7162	4	40		H2	3
A3202	A5202	A7202	5	40		H2	3
A3243	A5243	A7243	6	32		H3	3
A3262	A5262	A7262			40	H2	3
A3283	A5283	A7283	8	32		H3	4
A3323	A5323	A7323	10	24		H3	4
A3343	A5343	A7343			32	H3	4
A3403	A5403	A7403	1/4	20		H3	4
A3423	A5423	A7423			28	H3	4
A3443	A5443	A7443	5/16	18		H3	4
A3463	A5463	A7463			24	H3	4
A3483	A5483	A7483	3/8	16		H3	4
A3503	A5503	A7503			24	H3	4
A3523	A5523	A7523	7/16	14		H3	4
A3543	A5543	A7543			20	H3	4
A3563	A5563	A7563	1/2	13		H3	4
A3583	A5583	A7583			20	H3	4
A3603	A5603	A7603	9/16	12		H3	4
A3623	A5623	A7623			18	H3	4
A3643	A5643	A7643	5/8	11		H3	4
A3663	A5663	A7663			18	H3	4
A3703	A5703	A7703	3/4	10		H3	4
A3723	A5723	A7723			16	H3	4
A3744	A5744	A7744	7/8	9		H4	4
A3764	A5764	A7764			14	H4	4
A3784	A5784	A7784	1	8		H4	4
A3804	A5804	A7804			12	H4	4

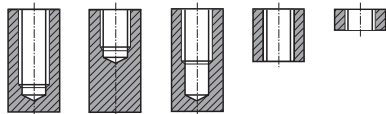
▶ For tapping depth on ANSI Length Taps, refer to MCTI 302 on page 338.

◎ : Excellent ○ : Good

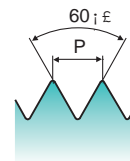
Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎			◎			◎			
Alluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
◎						◎	◎		◎	◎

**HAND TAPS PLUG & BOTTOMING STYLE
for Multi Purpose**

Hole type



ANSI



HSS-V
M
D3~D9
60°
4.0P/1.5P
Bright

Unit : mm

EDP No.		SIZE	Pitch	Limit	No. of Flute
Bright Finish Plug	Bright Finish Bottoming				
A6097	A9098	M1.6	0.35	D3	3
A6137	A9138	M2	0.4	D3	3
A6177	A9178	M2.5	0.45	D3	3
A6207	A9208	M3	0.5	D3	3
A6227	A9228	M3.5	0.6	D4	3
A6247	A9248	M4	0.7	D4	3
A6267	A9268	M4.5	0.75	D4	4
A6287	A9288	M5	0.8	D4	4
A6317	A9318	M6	1	D5	4
A6347	A9348	M7	1	D5	4
A6367	A9368	M8	1.25	D5	4
A6427	A9428	M10	1.5	D6	4
A6507	A9508	M12	1.75	D6	4
A6547	A9548	M14	2	D7	4
A6607	A9608	M16	2	D7	4
A6657	A9658	M18	2.5	D7	4
A6707	A9708	M20	2.5	D7	4
A6787	A9788	M24	3	D8	4
A6947	A9948	M30	3.5	D9	4
A6B37	A9B38	M36	4	D9	4

► For tapping depth on ANSI Length Taps, refer to MCT1 302 on page 338.

◎ : Excellent ○ : Good

Low carbon / Free machining carbon steel	Medium to high carbon steel	Steel castings & forgings / Heat-treatable alloy steels	Alloyed tool steels / Mold steels	Free machining stainless steel	Heat and corrosion-resistant stainless steel / Valve stainless steel	Stainless steel castings / Precipitation hardening stainless steel	Pure aluminium / Aluminium alloys			
◎	◎	○		○	○					
Aluminium alloy castings	Grey cast iron	Nodular cast Iron / Chilled cast Iron / Meehanite Iron / Ductile Iron	71 / &625 INCO / Waspaloy / Hastelloy / Invar / Monel / Incoloy	718 Inconel / A286	Titanium	Pure and alloyed copper	Free machining brass / Alloyed brass	Bronze	Zinc	Magnesium
○		○								

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

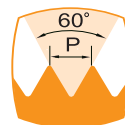
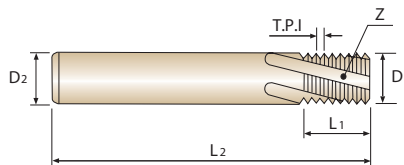
SOLID CARBIDE THREAD MILLS

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

INCH

EDP No.	MODEL	Description	
TE		Solid Carbide Thread mill for Unified Internal Threads - ANSI B 1.1	
TD		Solid Carbide Thread mill for Metric Internal Threads - DIN 13	
TF		Solid Carbide Thread mill for Taper Pipe Threads - ANSI B 1.20.1(NPT) / ANSI B1.20.3(NPTF)	

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



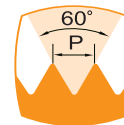
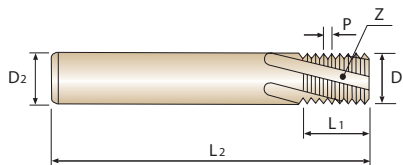
- ▶ Material : Solid Carbide
- ▶ Shank : Plain Straight
- ▶ Spiral Angle : 15°

Unit : inch

EDP No.	SIZE	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAIN		TPI	D1	D2	L1	L2	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 MILL
FOR METRIC INTERNAL THREADS - DIN 13**


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

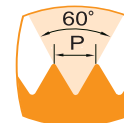
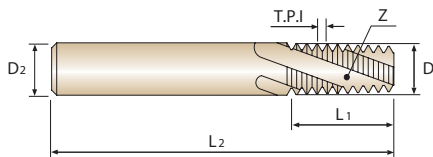
Unit : inch

EDP No.	SIZE	Pitch (mm)	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		P	D ₁	D ₂	L ₁	L ₂	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 MILL FOR TAPER PIPE THREADS
- ANSI B 1.20.1(NPT) / ANSI B1.20.3(NPTF)**



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

Unit : inch

EDP No.	SIZE	Pitch	Large End Cutter Dia.	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		T.P.I	D1	D2	L1	L2	Z
TF020	1/16 & 1/8 NPT	27	.245	.250	.437	2.500	3
TF400	1/4 & 3/8 NPT	18	.305	.312	.625	3.000	4
TF480	1/4 & 3/8 NPT	18	.363	.375	.680	3.500	4
TF560	1/2 & 3/4 NPT	14	.495	.500	.875	3.500	4
TF780	1" - 2" NPT	11.5	.620	.625	1.125	4.000	4
TFF40	2-1/2" - 6" NPT	8	.745	.750	1.500	5.000	4
TG020	1/16 & 1/8 NPTF	27	.245	.250	.437	2.500	3
TG400	1/4 & 3/8 NPTF	18	.305	.312	.625	3.000	4
TG560	1/2 & 3/4 NPTF	14	.495	.500	.875	3.500	4
TG780	1" - 2" NPTF	11.5	.620	.625	1.125	4.000	4
TGF40	2-1/2" - 6" NPTF	8	.745	.750	1.500	5.000	4

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

HAND TAPS

THREAD MILL

TECHNICAL DATA

⊙ : Excellent ○ : Good

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



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

TO CALCULATE SPEED & FEED RATES

Calculate R.P.M of cutter

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

N : R.P.M

SFM : Recommended Cutting Speed

d : Diameter of Cutter

fz : Recommended Feed per Tooth

Z : Number of Teeth

F₁ : Feed at Cutting Edge

F₂ : Feed at Center Line of Cutting

D : Major Diameter of Component

Calculate Feed per Revolution

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

Finally Calculate Feed at Tool Center Line

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

PROGRAMMING OF THREAD MILLING



COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

HAND TAPS

THREAD MILL

TECHNICAL DATA

Program Data

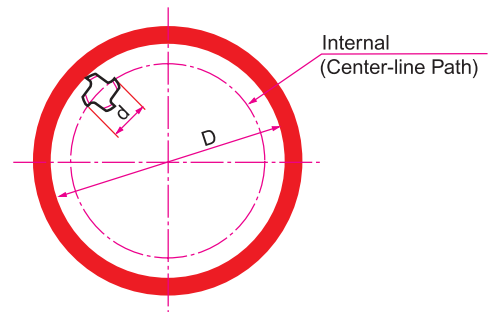
G Codes for Thread Milling

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

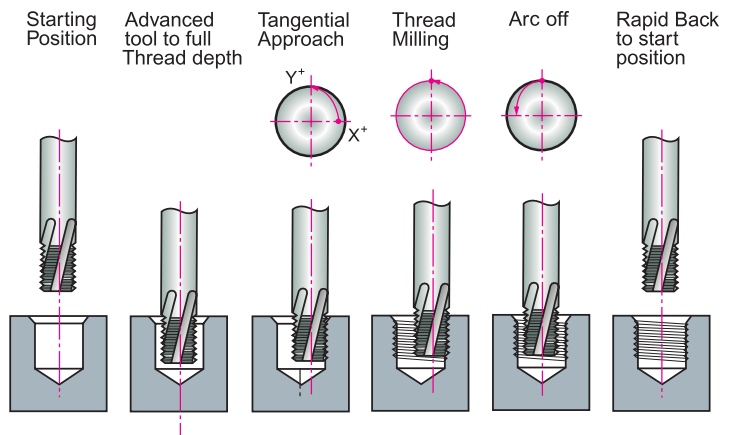
```

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
    
```



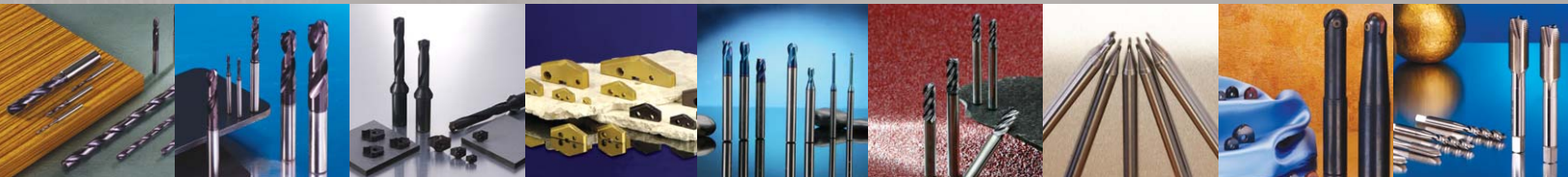
<Explanation of Parameters>

- 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





Global Cutting Tool Leader YG-1



TAPS



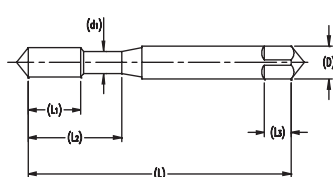
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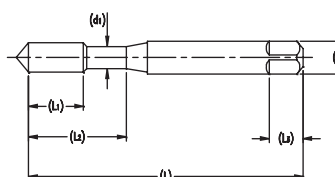
TECHNICAL DATA



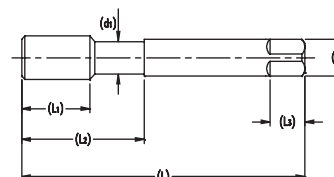
MODI TAP BLANK DIMENSION



Blank Design (1)



Blank Design (2)



Blank Design (3)

Unified Tap Blank

Unit : Inch

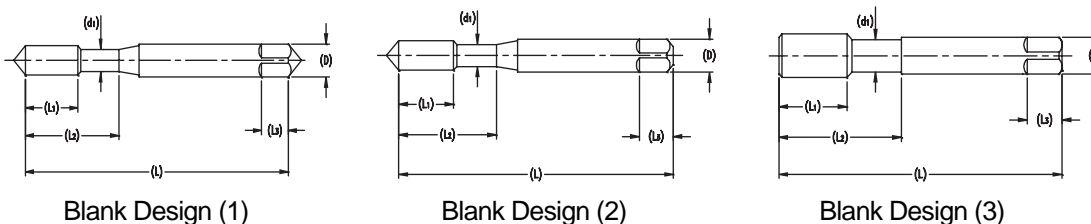
Nominal Size	Overall Length (L)	Thread Length		Length to neck		Shank Diameter (D)	Neck Diameter (d1)	Square Size (L3)	Square Length	Blank Design No.
		SF	SP	SF	SP					
		(L1)		(L2)						
#2	1.75	0.157	0.256	0.689		0.141	0.061	0.110	0.173	1
#3	1.81	0.197	0.295	0.563		0.141	0.069	0.110	0.173	1
#4	1.87	0.236	0.335	0.563		0.141	0.077	0.110	0.173	1
#5	1.94	0.236	0.374	0.626		0.141	0.090	0.110	0.173	1
#6	2.00	0.276	0.413	0.689		0.141	0.094	0.110	0.173	1
#8	2.13	0.276	0.453	0.752		0.168	0.120	0.131	0.236	1
#10-24	2.37	0.354	0.531	0.906		0.194	0.131	0.152	0.236	1
#10-32		0.276					0.146			1
#12-24	2.37	0.354	0.571	0.906		0.220	0.157	0.165	0.268	1
#12-28		0.276					0.166			1
1/4-20	2.52	0.433	0.591	1.000		0.255	0.180	0.191	0.299	2
1/4-28		0.354					0.200			2
5/16-18	2.74	0.472	0.669	1.126		0.318	0.234	0.238	0.362	2
5/16-24		0.394					0.254			2
3/8-16	2.97	0.551	0.748	1.252		0.381	0.287	0.286	0.425	2
3/8-24		0.394					0.316			2
7/16-14	3.16	0.591	0.866	1.850	1.437	0.323	0.311	0.242	0.394	3
7/16-20		0.472								3
1/2-13	3.37	0.630	0.984	2.067	1.657	0.367	0.354	0.275	0.425	3
1/2-20		0.472								3
9/16-12	3.59	0.709	0.984	2.067	1.657	0.429	0.417	0.322	0.488	3
9/16-18		0.512								3
5/8-11	3.81	0.748	1.083	2.205	1.811	0.480	0.469	0.360	0.547	3
5/8-18		0.512								3
3/4-10	4.25	0.827	1.201	2.480	2.000	0.590	0.577	0.442	0.673	3
3/4-10		0.591								3
7/8-9	4.69	0.827	1.339	2.815	2.220	0.697	0.685	0.523	0.736	3
7/8-14		0.709								3
1"-8	5.13	0.984	1.496	3.091	2.500	0.800	0.787	0.600	0.799	3
1"-12		0.709								3

* SF : Spiral Fluted Taps

* SP : Spiral Pointed Taps



HIGH PERFORMANCE ANSI AND COMBO TAP - METRIC



Metric Tap Blank

Unit : Inch

Nominal Size	Overall Length (L)	Thread Length (L1)		Length to neck (L2)		Shank Diameter (D)	Neck Diameter (d1)	Square Size (L3)	Square Length	Blank Design No.
		SF	SP	SF	SP					
M3	1.94	0.197	0.374	0.646		0.141	0.090	0.110	0.173	1
M3.5	2.00	0.276	0.413	0.646		0.141	0.104	0.110	0.173	1
M4	2.13	0.276	0.453	0.768		0.168	0.119	0.131	0.236	1
M4.5	2.37	0.354	0.531	0.933		0.194	0.135	0.152	0.236	1
M5	2.37	0.354	0.531	0.933		0.194	0.152	0.152	0.236	1
M5.5	2.37	0.354	0.571	1.000		0.220	0.189	0.165	0.268	2
M6	2.52	0.433	0.591	1.000		0.255	0.181	0.191	0.299	2
M7	2.74	0.433	0.669	1.126		0.318	0.220	0.238	0.362	2
M8x 1.25	2.74	0.472	0.669	1.126		0.318	0.246	0.238	0.362	2
M8x 1.0		0.433								2
M10x 1.5	2.97	0.512	0.748	1.252		0.381	0.310	0.286	0.425	2
M10x 1.25		0.472								2
M12x 1.75	3.37	0.591	0.984	2.067	1.657	0.367	0.354	0.275	0.425	3
M12x 1.25		0.551								3
M14x 2.0	3.59	0.709	0.984	2.067	1.657	0.429	0.417	0.322	0.488	3
M14x 1.5		0.551								3
M16x 2.0	3.81	0.709	1.083	2.205	1.811	0.480	0.469	0.360	0.547	3
M16x 1.5		0.551								3
M18x 2.5	4.03	0.787	1.083	2.205	1.811	0.542	0.530	0.406	0.610	3
M18x 1.5		0.551								3
M20	4.47	0.787	1.201	2.205	1.811	0.652	0.640	0.489	0.673	3
M22	4.69	0.787	1.339	2.205	1.811	0.697	0.685	0.523	0.736	3

* SF : Spiral Fluted Taps

* SP : Spiral Pointed Taps

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

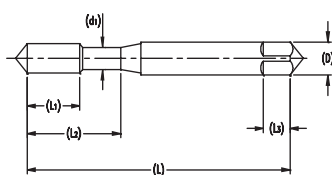
FORMING TAPS

STANDARD TAPS

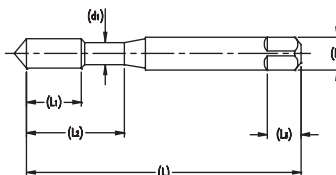
HAND TAPS

THREAD MILL

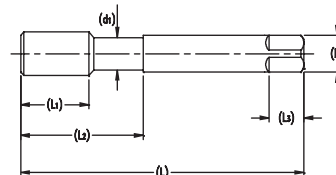
TECHNICAL DATA


HIGH PERFORMANCE TAPS DIN LENGTH / ANSI SHANK - INCH


Blank Design (1)



Blank Design (2)



Blank Design (3)

Unit : Inch

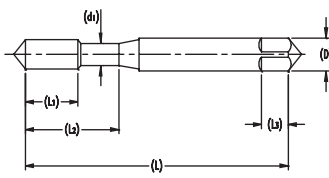
Nominal Size	Overall Length (L)	Thread Length (L1)		Length to neck (L2)		Shank Diameter (D)	Neck Diameter (d1)	Square Size (L3)	Square Length	Blank Design No.
		SF	SP	SF	SP					
#4	2.205	0.236	0.335	0.563		0.141	0.077	0.110	0.173	1
#5	2.205	0.236	0.374	0.626		0.141	0.090	0.110	0.173	1
#6	2.205	0.276	0.413	0.689		0.141	0.094	0.110	0.173	1
#8	2.480	0.276	0.453	0.752		0.168	0.120	0.131	0.236	1
#10-24	2.756	0.354	0.531	0.906		0.194	0.131	0.152	0.236	1
#10-32		0.276					0.146			1
#12-24	3.150	0.354	0.571	0.906		0.220	0.157	0.165	0.268	1
#12-28		0.276					0.166			1
1/4-20	3.150	0.433	0.591	1.000		0.255	0.180	0.191	0.299	2
1/4-28		0.354					0.200			2
5/16-18	3.543	0.472	0.669	1.126		0.318	0.234	0.238	0.362	2
5/16-24		0.394					0.254			2
3/8-16	3.937	0.551	0.748	1.252		0.381	0.287	0.286	0.425	2
3/8-24		0.394					0.316			2
7/16-14	3.937	0.591	0.866	1.850	1.437	0.323	0.311	0.242	0.394	3
7/16-20		0.472								3
1/2-13	4.331	0.630	0.984	2.067	1.657	0.367	0.354	0.275	0.425	3
1/2-20	3.937	0.472								3
9/16-12	4.331	0.709	0.984	2.067	1.657	0.429	0.417	0.322	0.488	3
9/16-18	3.937	0.512								3
5/8-11	4.331	0.748	1.083	2.205	1.811	0.480	0.469	0.360	0.547	3
5/8-18	3.937	0.512								3
3/4-10	4.921	0.827	1.201	2.480	2.000	0.590	0.577	0.442	0.673	3
3/4-10	4.331	0.591								3
7/8-9	5.512	0.827	1.339	2.815	2.220	0.697	0.685	0.523	0.736	3
7/8-14	4.921	0.709								3
1"-8	6.299	0.984	1.496	3.091	2.500	0.800	0.787	0.600	0.799	3
1"-12	5.512	0.709								3

* SF : Spiral Fluted Taps

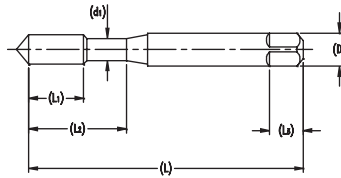
* SP : Spiral Pointed Taps



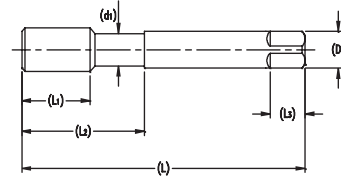
HIGH PERFORMANCE TAPS DIN LENGTH / ANSI SHANK - METRIC



Blank Design (1)



Blank Design (2)



Blank Design (3)

Unit : Inch

Nominal Size	Overall Length (L)	Thread Length (L1)		Length to neck (L2)		Shank Diameter (D)	Neck Diameter (d1)	Square Size (L3)	Square Length	Blank Design No.
		SF	SP	SF	SP					
M3	2.21	0.197	0.374	0.646		0.141	0.090	0.110	0.173	1
M3.5	2.21	0.276	0.413	0.646		0.141	0.104	0.110	0.173	1
M4	2.48	0.276	0.453	0.768		0.168	0.119	0.131	0.236	1
M5	2.76	0.354	0.531	0.933		0.194	0.152	0.152	0.236	1
M6	3.15	0.433	0.591	1.000		0.255	0.181	0.191	0.299	2
M8x 1.25	3.54	0.472	0.669	1.126		0.318	0.246	0.238	0.362	2
M8x 1.0		0.433								2
M10x 1.5	3.94	0.512	0.748	1.252		0.381	0.310	0.286	0.425	2
M10x 1.25		0.472								2
M12x 1.75	4.331	0.591	0.984	2.067	1.657	0.367	0.354	0.275	0.425	3
M12x 1.25	3.937	0.551								3
M14x 2.0	4.331	0.709	0.984	2.067	1.657	0.429	0.417	0.322	0.488	3
M14x 1.5	3.937	0.551								3
M16x 2.0	4.331	0.709	1.083	2.205	1.811	0.480	0.469	0.360	0.547	3
M16x 1.5	3.937	0.551								3
M18x 2.5	4.931	0.787	1.083	2.205	1.811	0.542	0.530	0.406	0.610	3
M18x 1.5	4.331	0.551								3

* SF : Spiral Fluted Taps

* SP : Spiral Pointed Taps

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

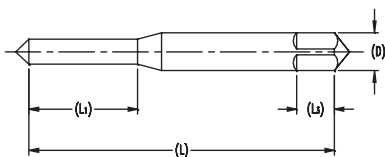
FORMING TAPS

STANDARD TAPS

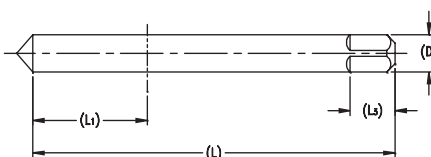
HAND TAPS

THREAD MILL

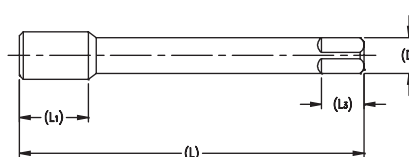
TECHNICAL DATA


YG-1 ANSI TAP BLANK DIMENSION


Blank Design (1)



Blank Design (2)



Blank Design (3)

Unified Tap Blank (Inch)

Unit : Inch

Nominal Size	Overall Length (L)	Thread Length (L1)	Shank Diameter (D)	Square Size	Square Length (L3)	Blank Design No.
#0	1.63	0.315	0.141	0.110	0.173	1
#1	1.69	0.374	0.141	0.110	0.173	1
#2	1.75	0.433	0.141	0.110	0.173	1
#3	1.81	0.492	0.141	0.110	0.173	1
#4	1.87	0.563	0.141	0.110	0.173	1
#5	1.94	0.626	0.141	0.110	0.173	1
#6	2.00	0.689	0.141	0.110	0.173	1
#8	2.13	0.752	0.168	0.131	0.236	1
#10	2.37	0.906	0.194	0.152	0.236	1
#12	2.37	0.906	0.220	0.165	0.268	1
1/4	2.50	1.000	0.255	0.191	0.299	2
5/16	2.72	1.126	0.318	0.238	0.362	2
3/8	2.94	1.252	0.381	0.286	0.425	2
7/16	3.16	1.437	0.323	0.242	0.394	3
1/2	3.37	1.657	0.367	0.275	0.425	3
9/16	3.59	1.657	0.429	0.322	0.488	3
5/8	3.81	1.811	0.480	0.360	0.547	3
11/16	4.03	1.811	0.542	0.406	0.610	3
3/4	4.25	2.000	0.590	0.442	0.673	3
13/16	4.47	2.000	0.652	0.489	0.673	3
7/8	4.69	2.220	0.697	0.523	0.736	3
15/16	4.91	2.220	0.760	0.570	0.736	3
1"	5.13	2.500	0.800	0.600	0.799	3

Metric Tap Blank

Nominal Size	Overall Length (L)	Thread Length (L1)	Shank Diameter (D)	Square Size	Square Length (L3)	Blank Design No.
M1.6	1.63	0.310	0.141	0.110	0.173	1
M1.8	1.69	0.380	0.141	0.110	0.173	1
M2	1.75	0.440	0.141	0.110	0.173	1
M2.5	1.81	0.500	0.141	0.110	0.173	1
M3	1.94	0.630	0.141	0.110	0.173	1
M3.5	2.00	0.690	0.141	0.110	0.173	1
M4	2.13	0.750	0.168	0.131	0.236	1
M4.5	2.38	0.880	0.194	0.152	0.236	1
M5	2.38	0.880	0.194	0.165	0.236	1
M6	2.50	1.000	0.255	0.191	0.299	2
M7	2.72	1.130	0.318	0.238	0.362	2
M8	2.72	1.130	0.318	0.238	0.362	2
M10	2.94	1.250	0.381	0.286	0.425	2
M12	3.38	1.660	0.367	0.275	0.425	3
M14	3.59	1.660	0.429	0.322	0.488	3
M16	3.81	1.810	0.480	0.360	0.547	3
M18	4.03	1.810	0.542	0.406	0.610	3
M20	4.47	2.000	0.652	0.489	0.673	3
M22	4.69	2.220	0.697	0.523	0.736	3
M24	4.91	2.220	0.760	0.570	0.736	3



TAP RECOMMENDATIONS

Unified Thread, Machine Screw Size

Size	Threads per Inch		Recommended Tap for Class of Thread				Pitch Diameter Limits for Class of Thread				
	UNC	UNF	Class 2	Class 3	Class 2B	Class 3B	Min. All Class(Basic)	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	72	GH1	GH1	GH2	GH1	.0629	.0648	.0643	.0655	.0648
			GH1	GH1	GH2	GH1	.0640	.0658	.0653	.0665	.0659
2	56	64	GH1	GH1	GH2	GH1	.0744	.0764	.0759	.0772	.0765
			GH1	GH1	GH2	GH1	.0759	.0778	.0773	.0786	.0779
3	48	56	GH1	GH1	GH2	GH1	.0855	.0877	.0871	.0885	.0877
			GH1	GH1	GH2	GH1	.0874	.0894	.8890	.0902	.0895
4	40	48	GH2	GH1	GH2	GH2	.0958	.0982	.0975	.0991	.0982
			GH1	GH1	GH2	GH1	.0985	.1007	.1001	.1016	.1008
5	40	44	GH2	GH1	GH2	GH2	.1088	.1112	.1105	.1121	.1113
			GH1	GH1	GH2	GH1	.1102	.1125	.1118	.1134	.1126
6	32	40	GH2	GH1	GH3	GH2	.1177	.1204	.1196	.1214	.1204
			GH2	GH1	GH2	GH2	.1218	.1242	.1235	.1252	.1243
8	32	36	GH2	GH1	GH3	GH2	.1437	.1464	.1456	.1475	.1465
			GH2	GH1	GH2	GH2	.1460	.1485	.1478	.1496	.1487
10	24	32	GH3	GH1	GH3	GH3	.1629	.1662	.1653	.1672	.1661
			GH2	GH1	GH3	GH2	.1697	.1724	.1716	.1736	.1726
12	24	28	GH3	GH1	GH3	GH3	.1889	.1922	.1913	.1933	.1922
			GH3	GH1	GH3	GH3	.1928	.1959	.1950	.1970	.1959

Unified Thread, Fractional Size

Size	Threads per Inch		Recommended Tap for Class of Thread				Pitch Diameter Limits for Class of Thread				
	UNC	UNF	Class 2	Class 3	Class 2B	Class 3B	Min. All Class(Basic)	Max Class 2	Max Class 3	Max Class 2B	Max Class 3B
1/4	20	28	GH3	GH2	GH5	GH3	.2175	.2211	.2201	.2223	.2211
			GH3	GH1	GH4	GH3	.2268	.2299	.2290	.2311	.2300
5/16	18	24	GH3	GH2	GH5	GH3	.2764	.2805	.2794	.2817	.2803
			GH3	GH1	GH4	GH3	.2854	.2887	.2878	.2902	.2890
3/8	16	24	GH3	GH2	GH5	GH3	.3344	.3389	.3376	.3401	.3387
			GH3	GH1	GH4	GH3	.3479	.3512	.3503	.3528	.3516
7/16	14	20	GH5	GH3	GH5	GH3	.3911	.3960	.3947	.3972	.3957
			GH3	GH1	GH5	GH3	.4050	.4086	.4076	.4104	.4091
1/2	13	20	GH5	GH3	GH5	GH3	.4500	.4552	.4537	.4565	.4548
			GH3	GH1	GH5	GH3	.4675	.4711	.4701	.4731	.4717
9/16	12	18	GH5	GH3	GH5	GH3	.5084	.5140	.5124	.5152	.5135
			GH3	GH2	GH5	GH3	.5264	.5305	.5294	.5323	.5308
5/8	11	18	GH5	GH3	GH5	GH3	.5660	.5719	.5702	.5732	.5714
			GH3	GH2	GH5	GH3	.5889	.5930	.5919	.5949	.5934
3/4	10	16	GH5	GH3	GH5	GH3	.6850	.6914	.6895	.6927	.6907
			GH3	GH2	GH5	GH3	.7094	.7139	.7126	.7159	.7143
7/8	9	14	GH6	GH4	GH6	GH4	.8028	.8098	.8077	.8110	.8089
			GH4	GH2	GH6	GH4	.8286	.8335	.8322	.8356	.8339
1	8	12	GH6	GH4	GH6	GH4	.9188	.9264	.9242	.9276	.9254
			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.

**THREAD LIMITS****Unified Thread, Machine Screw Size - Ground Thread**

Size	Thread per Inch			Major Diameter(Inches)			Basic Pitch Dia.	Pitch Diameter Limits(Inches)							
	UNC	UNF	UNS	Basic	Min.	Max.		H1 Limit		H2 Limit		H3 Limit		H7 Limit	
								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	—	—	—	—
5	—	48	—	.1120	.1130	.1140	.0985	.0985	.0990	.0990	.0995	—	—	—	—
	40	—	—	.1250	.1265	.1275	.1088	.1088	.1093	.1093	.1098	—	—	—	—
6	—	44	—	.1250	.1260	.1270	.1102	—	—	.1107	.1112	—	—	—	—
	32	—	—	.1380	.1400	.1410	.1177	.1177	.1182	.1182	.1187	.1187	.1192	.1207	.1212
8	—	40	—	.1380	.1395	.1405	.1218	.1218	.1223	.1223	.1228	—	—	—	—
	32	—	—	.1640	.1660	.1670	.1437	.1437	.1442	.1442	.1447	.1447	.1452	.1467	.1472
10	—	36	—	.1640	.1655	.1665	.1460	—	—	.1465	.1470	—	—	—	—
	24	—	—	.1900	.1930	.1940	.1629	.1629	.1634	.1634	.1639	.1639	.1644	.1659	.1664
12	—	32	—	.1900	.1920	.1930	.1697	.1697	.1702	.1702	.1707	.1707	.1712	.1727	.1732
	24	—	—	.2160	.2190	.2200	.1889	—	—	—	—	.1899	.1904	—	—
12	—	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.

Unified Thread, Fractional Size - Ground Thread

Size	Thread per Inch			Major Diameter (Inches)			Pitch Diameter Limits(Inches)												
	UNC	UNF	UNS	Basic	Min.	Max.	Basic Pitch Dia.	H1 Limit		H2 Limit		H3 Limit		H4 Limit		H5 Limit		H6 Limit	
								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	—	—	—	—	.6479	.6484	—	—	—	—	—	—
3/4	10	—	—	.7500	.7525	.7590	.6850	.6850	.6855	.6855	.6860	.6860	.6865	—	—	.6870	.6875	—	—
	—	16	—	.7500	.7550	.7560	.7094	.7094	.7099	.7099	.7104	.7104	.7109	—	—	.7114	.7119	—	—
7/8	9	—	—	.8750	.8835	.8850	.8028	—	—	—	—	—	—	.8043	.8048	—	—	.8053	.8058
	—	14	—	.8750	.8810	.8820	.8286	—	—	.8291	.8296	—	—	.8301	.8306	—	—	.8311	.8316
1"	8	—	—	1.0000	1.0095	1.0110	.9188	—	—	.9193	.9198	—	—	.9203	.9208	—	—	.9213	.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.	25' Plus or Minus
10 to 28 Incl.	30' Plus or Minus


Metric Thread - Ground Thread

Size	Pitch		Major Diameter(Inches)				Pitch Diameter Limits(Inches)									
	Coarse	Fine	Basic	Min.	Max.	Basic Pitch Dia.	D2 Limit		D3 Limit		D4 Limit		D5 Limit		D6 Limit	
							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
M12	—	1	.3937	.3969	.3985	.3681	.3682	.3692	.3687	.3697	.3692	.3702	.3697	.3707	.3702	.3712
	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.	30' Plus or Minus
Over 2.5 to 4.0 Incl.	25' Plus or Minus

Metric Thread - Ground Thread

Size	Pitch		Major Diameter(Inches)			Pitch Diameter Limits(Inches)								
	Coarse	Fine	Basic	Min.	Max.	Basic Pitch Dia.	D6 Limit		D7 Limit		D8 Limit		D9 Limit	
							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	—	—



TAP DRILL SIZES - UNIFIED THREAD

Size	Threads Per Inch		Drills for Cutting Taps				Drill for Forming Taps
	UNC	UNF	Tap Drill	Inch Equiv.	Probable Hole Size (Inch)	Probable Percent of Thread	Drill for 65%
0		80	3/64	.0469	.0484	71	54 or 1.4mm
1	64	72	53	.0595	.0610	59	51 or 1.7mm
2	56	64	50	.0700	.0717	62	51 or 1.75mm
3	48	56	47	.0785	.0804	69	47 or 2.0mm
4	40	48	45	.0820	.0839	65	2.0mm
5	40	44	43	.1015	.1038	65	2.3mm
6	32	40	42	.1040	.1063	61	2.3mm
8	32	36	38	.1065	.1088	65	39
10	24	32	37	.1130	.1156	63	33 or 2.9mm
12	24	28	33	.1360	.1389	72	33 or 2.9mm
1/4	20	24	29	.1590	.1622	69	3.1mm
5/16	18	20	25	.1770	.1805	69	1/8 or 3.2mm
3/8	16	18	21	.1820	.1855	68	25 or 3.8mm
7/16	14	16	16	.2010	.2048	66	24
1/2	13	14	14	.2130	.2168	66	11/64
9/16	12	12	7	.2570	.2608	70	16 or .176
5/8	11	11	3	.2720	.2761	72	9 or 5.0mm
3/4	10	10	28	.3125	.3169	72	7 or 5.1mm
7/8	9	9	28	.3320	.3364	72	5.75mm
1	8	8	24	.3680	.3726	72	A
1-1/8	7	7	24	.3906	.3952	67	7.25mm
1-1/4	7	7	20	.4219	.4266	65	.293
1-3/8	6	6	20	.4531	.4578	65	S or 11/32mm
1-1/2	6	6	18	.4844	.4892	68	9.0mm
			18	.5156	.5204	58	Z or 10.5mm
			17/32	.5312	.5362	75	.463
			37/64	.5781	.5831	58	.476
			21/32	.6562	.6613	68	.521
			11/16	.6875	.6925	71	.536
			49/64	.7656	.7708	72	37/64
			13/16	.8125	.8177	62	.598
			7/8	.8750	.8809	73	45/64
			59/64	.9219	.9279	67	23/32
			63/64	.9844	.9911	72	.823
			1-3/64	1.0469	1.0541	65	27/32
			1-7/64	1.1094	—	—	.963
			1-11/64	1.1719	—	—	
			1-7/32	1.2187	—	—	
			1-19/64	1.2969	—	—	
			1-11/32	1.3437	—	—	
			1-27/64	1.4219	—	—	



TAP DRILL SIZES - METRIC THREAD

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

HAND TAPS

THREAD MILL

TECHNICAL DATA

Size	Pitch	Recommended Metric Drill				Closest Recommended Inch Drill				Drill for Forming Taps
		Tap Drill (mm)	Inch Equiv.	Probable Hole Size (Inch)	Probable Percent of Thread	Tap Drill	Inch Equiv.	Probable Hole Size (Inch)	Probable Percent of Thread	6H Recommended
M1.6	0.35	1.25	.0492	.0507	69	—	—	—	—	1.45
M1.8	0.35	1.45	.0571	.0586	69	—	—	—	—	1.65
M2	0.40	1.6	.0630	.0647	69	52	.0635	.0652	66	1.85
M2.2	0.45	1.75	.0689	.0706	70	—	—	—	—	2.0
M2.5	0.45	2.05	.0807	.0826	69	46	.0810	.0829	67	2.3
M3	0.50	2.5	.0984	.1007	68	40	.0980	.1003	70	#35
M3.5	0.60	2.9	.1142	.1168	68	33	.1130	.1156	72	#30
M4	0.70	3.3	.1299	.1328	69	30	.1285	.1314	73	3.7
M4.5	0.75	3.7	.1457	.1486	74	26	.1470	.1502	70	4.16
M5	0.80	4.2	.1654	.1686	69	19	.1660	.1692	68	#14
M6	1.00	5.0	.1968	.2006	70	9	.1960	.1998	71	5.5
M7	1.00	6.0	.2362	.2400	70	15/64	.2344	.2382	73	6.5
M8	1.25	6.7	.2638	.2679	74	17/64	.2656	.2697	71	7.4
	1.00	7.0	.2756	.2797	69	J	.2770	.2811	66	7.55
M10	1.50	8.5	.3346	.3390	71	Q	.3320	.3364	75	9.3
	1.25	8.7	.3425	.3471	73	11/32	.3438	.3483	71	9.4
M12	1.75	10.2	.4016	.4063	74	Y	.4040	.4087	71	7/16
	1.25	10.8	.4252	.4299	67	27/64	.4219	.4266	72	11.3
M14	2.00	12.0	.4724	.4772	72	15/32	.4688	.4736	76	—
	1.50	12.5	.4921	.4969	71	—	—	—	—	—
M16	2.00	14.0	.5512	.5561	72	35/64	.5469	.5518	76	—
	1.50	14.5	.5709	.5758	71	—	—	—	—	—
M18	2.50	15.5	.6102	.6152	73	39/64	.6094	.6144	74	—
	1.50	16.5	.6496	.6546	70	—	—	—	—	—
M20	2.50	17.5	.6890	.6942	73	11/16	.6875	.6925	74	—
	1.50	18.5	.7283	.7335	70	—	—	—	—	—
M22	2.50	19.5	.7677	.7729	73	49/64	.7656	.7708	75	—
	1.50	20.5	.8071	.8123	70	—	—	—	—	—
M24	3.00	21.0	.8268	.8327	73	53/64	.8281	.8340	72	—
	2.00	22.0	.8661	.8720	71	—	—	—	—	—
M27	3.00	24.0	.9449	.9511	73	15/16	.9375	.9435	78	—
	2.00	25.0	.9843	.9913	70	63/64	.9844	.9914	70	—
M30	3.00	26.5	1.0433	Reaming Recommended to the Drill Size Shown						
	2.00	28.0	1.1024							
M33	3.50	29.5	1.1614							
	2.00	31.0	1.2205							
M36	4.00	32.0	1.2598							
	3.00	33.0	1.2992							
M39	4.00	35.0	1.3780							
	3.00	36.0	1.4173							



STI TAP DRILL RECOMMENDATION

Metric

Size	RECOMMENDATION	
	Drill Size	
	Inch	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 × 1.5	.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	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



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

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAP

TAPER PIPE TAPS

FORMING TAPS

STANDARD TAPS

HAND TAPS

THREAD MILL

TECHNICAL DATA



TROUBLE SHOOTING GUIDE

Specific Problem	Cause	Solution
Dimensional Accuracy		
Oversize Pitch Diameter	Incorrect Tap	<ol style="list-style-type: none"> 1. Use proper limits of taps 2. Use longer chamfered taps
	Chip Packing	<ol style="list-style-type: none"> 1. Use spiral point or spiral fluted taps 2. Reduce number of flutes to provide 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Use minimum hole size 2. Avoid tapered hole 3. Use proper chamfered taps
	Galling	<ol style="list-style-type: none"> 1. Galling solutions 1 through 4 above can be applied to this specific problem
Undersize Pitch Diameter	Incorrect Tap	<ol style="list-style-type: none"> 1. Use oversize taps 2. Apply proper chamfer angle 3. Increase cutting angle
	Damaged Thread	<ol style="list-style-type: none"> 1. Use proper reversing speed to avoid damaging tapped thread on the way out of the hole
	Left-over Chips	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Use maximum drill size

Specific Problem	Cause	Solution
Tool Life		
Breakage	Incorrect Tap Selection	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Do not grind the bottom of the flute 2. Avoid too narrow a land width 3. Remove all worn sections when regrinding the flutes 4. Regrind tool more frequently
Chipping	Incorrect Tap Selection	<ol style="list-style-type: none"> 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
	Operating Conditions	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Apply specially designed tap for tapping heat treated material 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	<ol style="list-style-type: none"> 1. Reduce tapping speed 2. Apply proper cutting lubricants 3. Avoid work hardened hole 4. Use larger hole size
	Tool Condition	<ol style="list-style-type: none"> 1. Grind proper cutting angle 2. Avoid hardness reduction from grinding process
Torn or Rough Thread	Chamfer Too Short	<ol style="list-style-type: none"> 1. Increase chamfer length
	Wrong Cutting Angle	<ol style="list-style-type: none"> 1. Apply proper cutting angle



Specific Problem	Cause	Solution
Surface Finish		
Torn or Rough Thread	Galling	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Use spiral pointed or spiral fluted taps 2. Use larger drill size
Chattering on Tapped Thread	Tool Free Cutting	<ol style="list-style-type: none"> 1. Reduce cutting angle 2. Reduce amount of thread relief
	Tool Condition	<ol style="list-style-type: none"> 1. Do not grind the bottom of the flute 2. Avoid too narrow a land width

**TOLERANCE CHART - METRIC COARSE / FINE**

Metric Coarse Thread	Pitch	Tap Tolerance		Metric Fine Thread	Tap Tolerance	
		4H Tap	6H Tap		4H Tap	6H Tap
M1.6	0.35	D2	D2/D3	M3x0.35	D2	D3
M1.8	0.35	D2	D2/D3	M4x0.50	D2	D3
M2.0	0.40	D2	D3	M6x0.50	D2/D3	D3/D4
M2.2	0.45	D2	D3	M6x0.75	D2/D3	D4
M2.5	0.45	D2	D3	M8x0.75	D2/D3	D4
M3.0	0.50	D2	D3	M8x1.00	D3	D4/D5
M3.5	0.60	D2	D3/D4	M12x1.00	D3	D4/D5
M4.0	0.70	D2/D3	D3/D4	M10x1.25	D3	D4/D5
M4.5	0.75	D2/D3	D3/D4	M14x1.25	D3	D4/D5
M5.0	0.80	D2/D3	D3/D4	M12x1.50	D3/D4	D5/D6
M6.0	1.00	D2/D3	D4/D5	M20x1.50	D3/D4	D5/D6
M7.0	1.00	D2/D3	D4/D5	M24x1.50	D3/D4	D5/D6
M8.0	1.25	D3	D4/D5	M42x1.50	D3/D4	D5/D6
M10.0	1.50	D3	D4/D5	M18x2.00	D3/D4	D6/D7
M12.0	1.75	D3/D4	D5/D6	M24x2.00	D4	D6/D7
M14.0	2.00	D3/D4	D5/D6	M42x2.00	D4	D6/D7
M16.0	2.00	D3/D4	D5/D6	M36x3.00	D4/D5	D7/D8
M18.0	2.50	D4	D6/D7	M42x3.00	D4/D5	D7/D8
M20.0	2.50	D4	D6/D7	M52x3.00	D4/D5	D7/D8
M22.0	2.50	D4	D6/D7			
M24.0	3.00	D4/D5	D7/D8			
M27.0	3.00	D4/D5	D7/D8			
M30.0	3.50	D4/D5	D7/D8			
M33.0	3.50	D4/D5	D8/D9			
M36.0	4.00	D5	D8/D9			
M39.0	4.00	D5	D8/D9			
M42.0	4.50	D5	D8/D9			
M45.0	4.50	D5	D8/D9			
M48.0	5.00	D5/D6	D9/D10			
M52.0	5.00	D5/D6	D9/D10			