

SELECTION GUIDE



HSS-PM
PRIME TAPS

Premium Spiral Point and Spiral Flute Taps for CNC Machines
High and Reliable Performance on Various Ductile Materials

HOLE TYPE		Max. 2.5xD Blind Hole	Max. 3.0xD Through Hole
TOOL MATERIAL		HSS-PM	
CHAMFER LEAD ACC. TO DIN2197		C	E B
FLUTE TYPE		Spiral Flute	Spiral Flute Spiral Point
SPIRAL FLUTE ANGLE		R45	R45 -
M	DIN371/376	TRE30 (p.B65)	TRE34 (p.B66) TRJ15 (p.B71)
	DIN352		
MF	DIN374	TRE31 (p.B67)	TRJ16 (p.B72)
	DIN2181		
UNC	DIN371/376	TRE32 (p.B69)	TRJ17 (p.B74)
	DIN351		
UNF	DIN371/374	TRE33 (p.B70)	TRJ18 (p.B75)
	DIN2181		
BSW	DIN2182/2183		
	DIN351		
G(BSP)	DIN5156/5157		
EG-M	DIN371/376		
EG-UNC	DIN371/376		
EG-UNF	DIN371/374		

SURFACE TREATMENT		X-coating	
MODEL			

Please visit globalyg1.com/mat for material search
 ◎ : Excellent ○ : Good
 Recommended cutting conditions : p.B76

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment	HB	HRC				
P	1	Non-alloy steel	About 0.15% C Annealed	125		○	○	◎	
	2		About 0.45% C Annealed	190	13	◎	◎	◎	
	3		About 0.45% C Quenched & Tempered	250	25	◎	◎	◎	
	4		About 0.75% C Annealed	270	28	◎	◎	◎	
	5		About 0.75% C Quenched & Tempered	300	32	◎	◎	◎	
	6	Low alloy steel	Annealed	180	10	◎	◎	◎	
	7		Quenched & Tempered	275	29	◎	◎	◎	
	8		Quenched & Tempered	300	32	◎	◎	◎	
	9		Quenched & Tempered	350	38	○	○	◎	
	10		High alloyed steel, and tool steel	Annealed	200	15	○	○	○
	11			Quenched & Tempered	325	35	○	○	○
M	12	Stainless steel	Ferritic / Martensitic Annealed	200	15	◎	◎	◎	
	13		Martensitic Quenched & Tempered	240	23	◎	◎	◎	
	14		Austenitic	180	10	◎	◎	◎	
K	15	Grey cast iron	Pearlitic / ferritic	180	10	○	○	◎	
	16		Pearlitic (Martensitic)	260	26	○	○	◎	
	17	Nodular cast iron	Ferritic	160	3	◎	◎	◎	
	18		Pearlitic	250	25	◎	◎	◎	
	19		Ferritic	130					
	20		Pearlitic	230	21				
N	21	Aluminum-wrought alloy	Not Curable	60		○	○	○	
	22		Curable Hardened	100		○	○	○	
	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable	75		◎	◎	◎	
	24		≤ 12% Si, Curable Hardened	90		◎	◎	◎	
	25		> 12% Si, Not Curable	130		○	○	○	
	26		Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)	90		◎	◎	◎
	27		Non Metallic Materials	CuSn, lead-free copper and electrolytic copper	100		◎	◎	◎
	28			Duroplastic, Fiber Reinforced Plastic					
	29			Rubber, Wood, etc.					
	S		31	Heat Resistant Super Alloys	Fe Based Annealed	200	15		
32		Cured	280		30				
33		Annealed	250		25				
34		Cured	350		38				
35		Titanium Alloys	Ni or Co Based Cast	320	34				
36			Pure Titanium	400 Rm					
37			Alpha + Beta Alloys Hardened	1050 Rm					
H	38	Hardened steel	Hardened	550	55				
	39		Hardened	630	60				
	40	Hardened Cast Iron	Cast	400	42				
	41		Hardened	550	55				

YG PRIME TAPS

TRE30 SERIES

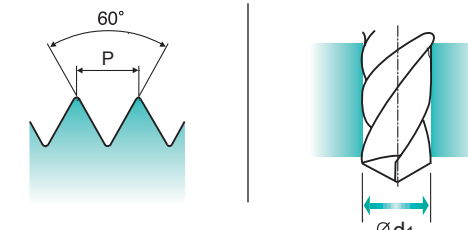
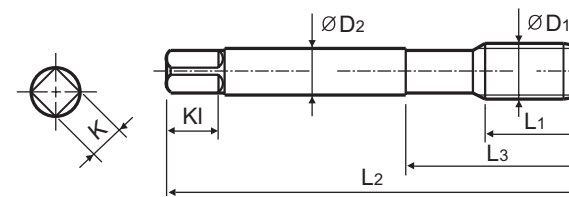
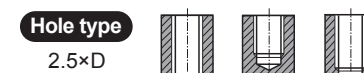
M ISO Metric Coarse Threads DIN13

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

- High performance on various ductile materials
- Specially designed to prevent oversized threads and reduce gauging problems

- Ausgezeichnete Leistung bei verschiedenen Werkstoffen.
- Speziell entwickelt, um zu große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.



Material groups: **MU** HSS PM DIN 371/376 6HX 60° C R45 X Coating p.B76

Recommended ToolHolder: Plain Shank SYNCHRO TAPPING CHUCK TAPPING ER CHUCK TAPPING CHUCK ONE STEP TAPPING CHUCK

Page: D203-210 D215-220 D221-228 D211-213

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	X-coating	L1	L2	L3	ØD2	K	KI	Z	Ød1
M2	x 0.4	TRE30136GS	3.2	45.0	13.0	2.8	2.1	5.0	2	1.6
M2.5	x 0.45	TRE30176GS	3.6	50.0	15.0	2.8	2.1	5.0	2	2.1
M3	x 0.5	TRE30206GS	4.0	56.0	18.0	3.5	2.7	6.0	3	2.5
M3.5	x 0.6	TRE30226GS	4.8	56.0	20.0	4.0	3.0	6.0	3	2.9
M4	x 0.7	TRE30246GS	5.6	63.0	21.0	4.5	3.4	6.0	3	3.3
M5	x 0.8	TRE30286GS	6.4	70.0	25.0	6.0	4.9	8.0	3	4.2
M6	x 1.0	TRE30316GS	8.0	80.0	30.0	6.0	4.9	8.0	3	5.0
M7	x 1.0	TRE30346GS	10.0	80.0	30.0	7.0	5.5	8.0	3	6.0
M8	x 1.25	TRE30366GS	13.0	90.0	35.0	8.0	6.2	9.0	3	6.8
M9	x 1.25	TRE30396GS	13.0	90.0	35.0	9.0	7.0	10.0	3	7.8
M10	x 1.5	TRE30426GS	15.0	100.0	39.0	10.0	8.0	11.0	3	8.5
M12	x 1.75	TRE30506GS	18.0	110.0	44.0	9.0	7.0	10.0	3	10.3
M14	x 2.0	TRE30546GS	20.0	110.0	44.0	11.0	9.0	12.0	3	12.0
M16	x 2.0	TRE30606GS	20.0	110.0	44.0	12.0	9.0	12.0	3	14.0
M18	x 2.5	TRE30656GS	25.0	125.0	50.0	14.0	11.0	14.0	4	15.5
M20	x 2.5	TRE30706GS	25.0	140.0	54.0	16.0	12.0	15.0	4	17.5
M22	x 2.5	TRE30746GS	25.0	140.0	54.0	18.0	14.5	17.0	4	19.5
M24	x 3.0	TRE30786GS	30.0	160.0	60.0	18.0	14.5	17.0	4	21.0

►DIN 371(M2~M10) and DIN 376(M12~M24)

◎ : Excellent ○ : Good

ISO	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron	
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VDI 3323																				
HRC	125	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21	
HB	190	250	270	300	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	○	◎	◎	◎	◎	◎	◎	◎	○	○	◎	◎	◎	○	○	◎	◎	◎		

ISO	N										S					H											
	Aluminum-wrought alloy					Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)		Non Metallic Materials			Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron		Hardened Cast Iron
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41						
VDI 3323																											
HRC	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550						
Recommended	○	○	◎	◎	○	◎	◎	◎																			