



Leading Through Innovation

HSS-PM

PRIME TAP

PRIME GEWINDEBOHRER

- Premium Spiral Point and Spiral Flute Taps for CNC Machines
- High and Reliable Performance on Various Ductile Materials
- Premium Gerade- und Spiralgenutete Gewindebohrer
- Ausgezeichnete und zuverlässige Leistung in verschiedenen Werkstoffen

SELECTION GUIDE



HSS-PM
PRIME TAP

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.B77)	TRE34 (p.B78) TRJ15 (p.B83)
	DIN352		
MF	DIN374	TRE31 (p.B79)	TRJ16 (p.B84)
	DIN2181		
UNC	DIN371/376	TRE32 (p.B81)	TRJ17 (p.B86)
	DIN351		
UNF	DIN371/374	TRE33 (p.B82)	TRJ18 (p.B87)
	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
Recommended cutting conditions : p.B88

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	Malleable cast iron	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		Cutting Alloys, PB>1%	110		◎	◎	◎	
	27		Copper and Copper Alloys (Bronze / Brass)	CuZn, CuSnZn (Brass)	90		◎	◎	◎
	28		CuSn, lead-free copper and electrolytic copper	100		◎	◎	◎	
	29		Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic					
	30		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	Cast	320	34					
	36	Titanium Alloys	Pure Titanium	400 Rm					
	37		Alpha + Beta Alloys Hardened	1050 Rm					
H	38	Hardened steel	Hardened	550	55				
	39		Hardened	630	60				
	40	Chilled Cast Iron	Cast	400	42				
	41	Hardened Cast Iron	Hardened	550	55				



TRE30 SERIES



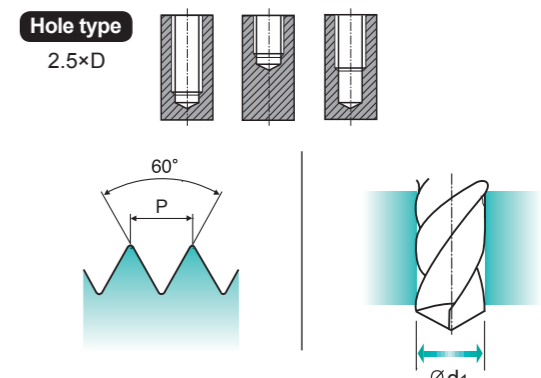
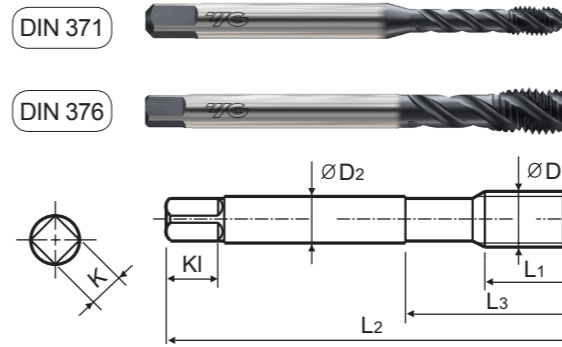
ISO Metric Coarse Threads DIN 13

- Metric 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.
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Material groups: MU HSS PM DIN 371/376 6HX 60° C R45 X Coating p.B88

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

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)

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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
HRC	13	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	21			
HB	125	190	250	270	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	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRC	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
Recommended	○	○	◎	◎	○	◎	◎	◎														

HSS

THREAD MILL

SYNCHRO TAP

PRIME TAP

COMBO TAP

YG TAP STEEL

YG TAP CHIP BREAKER

YG TAP INOX

YG TAP CAST IRON

YG TAP HARDENED STEEL

YG TAP Ti Ni

YG TAP ALU

YG TAP FORMING

YG TAP GENERAL

PIPE TAP

STI TAP

NUT TAP

TECHNICAL DATA

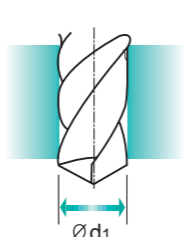
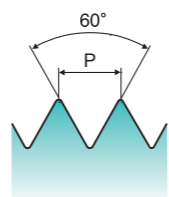
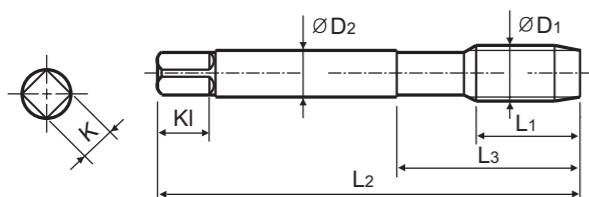
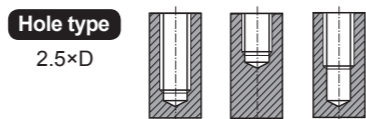
M ISO Metric Coarse Threads DIN 13

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

Machine taps
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Material groups: **MU** HSS PM DIN 371/376 6HX 60° E R45 X Coating p.B88

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

Unit : mm

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	TRE34136GS	3.2	45.0	13.0	2.8	2.1	5.0	2	1.6
M3	x 0.5	TRE34206GS	4.0	56.0	18.0	3.5	2.7	6.0	3	2.5
M4	x 0.7	TRE34246GS	5.6	63.0	21.0	4.5	3.4	6.0	3	3.3
M5	x 0.8	TRE34286GS	6.4	70.0	25.0	6.0	4.9	8.0	3	4.2
M6	x 1.0	TRE34316GS	8.0	80.0	30.0	6.0	4.9	8.0	3	5.0
M8	x 1.25	TRE34366GS	13.0	90.0	35.0	8.0	6.2	9.0	3	6.8
M10	x 1.5	TRE34426GS	15.0	100.0	39.0	10.0	8.0	11.0	3	8.5
M12	x 1.75	TRE34506GS	18.0	110.0	44.0	9.0	7.0	10.0	3	10.3
M14	x 2.0	TRE34546GS	20.0	110.0	44.0	11.0	9.0	12.0	3	12.0
M16	x 2.0	TRE34606GS	20.0	110.0	44.0	12.0	9.0	12.0	3	14.0
M20	x 2.5	TRE34706GS	25.0	140.0	54.0	16.0	12.0	15.0	4	17.5

► DIN 371(M2~M10) and DIN 376(M12~M20)

◎ : 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		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	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	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	◎	◎	◎	◎			○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

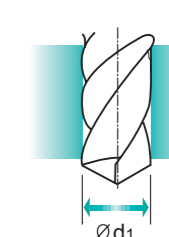
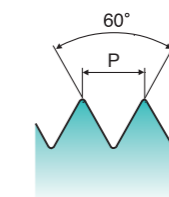
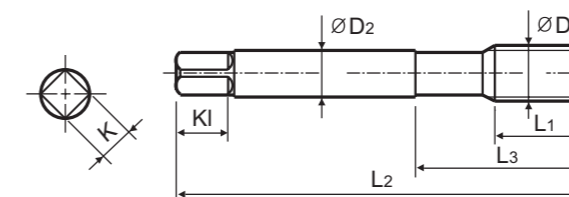
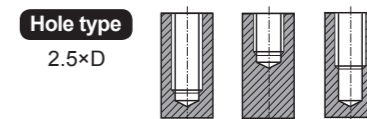
MF ISO Metric Fine Threads DIN 13

- MMetrisches ISO-Feingewinde DIN 13
- ISO MÉTRIQUE PAS FINS DIN13
- ISO Metrico passo fine DIN 13

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

Unit : mm

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
M4	x 0.5	TRE31256GS	5.6	63.0	21.0	2.8	2.1	5.0	3	3.5
M4	x 0.35	TRE31696GS	5.6	63.0	21.0	2.8	2.1	5.0	3	3.7
M5	x 0.5	TRE31296GS	6.4	70.0	25.0	3.5	2.7	6.0	3	4.5
M6	x 0.75	TRE31326GS	8.0	80.0	30.0	4.5	3.4	6.0	3	5.3
M6	x 0.5	TRE31336GS	8.0	80.0	30.0	4.5	3.4	6.0	3	5.5
M8	x 1.0	TRE31376GS	10.0	90.0	36.0	6.0	4.9	8.0	3	7.0
M8	x 0.75	TRE31386GS	10.0	80.0	30.0	6.0	4.9	8.0	3	7.3
M9	x 1.0	TRE31406GS	10.0	90.0	36.0	7.0	5.5	8.0	3	8.0
M9	x 0.75	TRE31416GS	10.0	80.0	30.0	7.0	5.5	8.0	3	8.3
M10	x 1.25	TRE31436GS	13.0	100.0	40.0	7.0	5.5	8.0	3	8.8
M10	x 1.0	TRE31446GS	10.0	90.0	36.0	7.0	5.5	8.0	3	9.0
M10	x 0.75	TRE31456GS	10.0	90.0	36.0	7.0	5.5	8.0	3	9.3
M12	x 1.5	TRE31516GS	15.0	100.0	40.0	9.0	7.0	10.0	3	10.5
M12	x 1.25	TRE31526GS	15.0	100.0	40.0	9.0	7.0	10.0	3	10.8
M12	x 1.0	TRE31536GS	15.0	100.0	40.0	9.0	7.0	10.0	3	11.0
M14	x 1.5	TRE31556GS	15.0	100.0	40.0	11.0	9.0	12.0	3	12.5
M14	x 1.25	TRE31566GS	15.0	100.0	40.0	11.0	9.0	12.0	3	12.8
M14	x 1.0	TRE31576GS	15.0	100.0	40.0	11.0	9.0	12.0	3	13.0
M16	x 1.5	TRE31616GS	15.0	100.0	40.0	12.0	9.0	12.0	3	14.5
M16	x 1.0	TRE31626GS	15.0	100.0	40.0	12.0	9.0	12.0	3	15.0

► NEXT PAGE

◎ : 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		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	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	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	◎	◎	◎	◎			○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

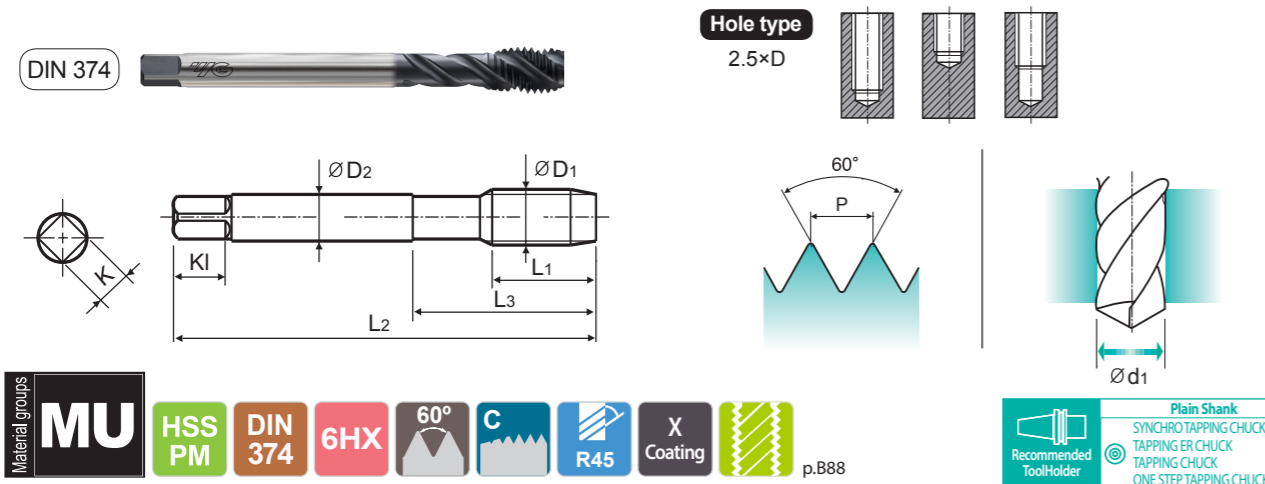
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Unit : mm

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
M18 x 2.0	2.0	TRE31666GS	20.0	125.0	50.0	14.0	11.0	14.0	4	16.0
M18 x 1.5	1.5	TRE31676GS	15.0	110.0	44.0	14.0	11.0	14.0	4	16.5
M18 x 1.0	1.0	TRE31686GS	15.0	110.0	44.0	14.0	11.0	14.0	4	17.0
M20 x 2.0	2.0	TRE31716GS	20.0	140.0	54.0	16.0	12.0	15.0	4	18.0
M20 x 1.5	1.5	TRE31726GS	15.0	125.0	50.0	16.0	12.0	15.0	4	18.5
M20 x 1.0	1.0	TRE31736GS	15.0	125.0	50.0	16.0	12.0	15.0	4	19.0
M22 x 2.0	2.0	TRE31756GS	20.0	140.0	54.0	18.0	14.5	17.0	4	20.0
M22 x 1.5	1.5	TRE31766GS	15.0	125.0	50.0	18.0	14.5	17.0	4	20.5
M22 x 1.0	1.0	TRE31776GS	15.0	125.0	50.0	18.0	14.5	17.0	4	21.0
M24 x 2.0	2.0	TRE31796GS	20.0	140.0	54.0	18.0	14.5	17.0	4	22.0
M24 x 1.5	1.5	TRE31806GS	15.0	140.0	54.0	18.0	14.5	17.0	4	22.5
M24 x 1.0	1.0	TRE31816GS	15.0	140.0	54.0	18.0	14.5	17.0	4	23.0

◎ : 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		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	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			
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	◎	◎	◎	◎													

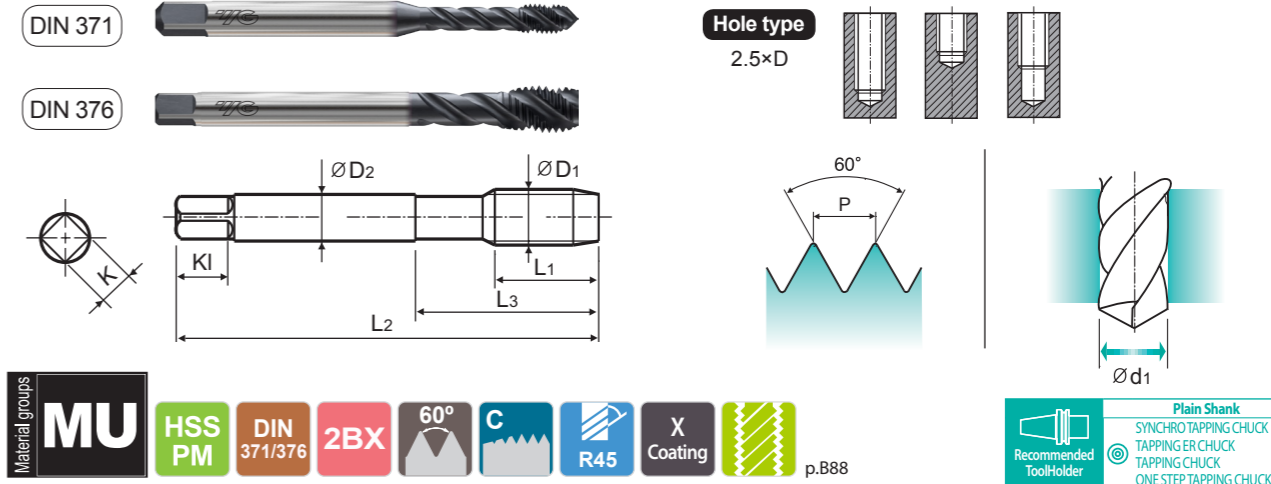
UNC Unified Coarse Threads

UNC **Unified Grobgewinde**
UNC
Unificato passo grosso

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.



Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		X-Coating	L1	L2	L3	ØD2	K	KI	Z	Ød1
#4 - 40 UNC	40	TRE32162GS	5.1	56.0	18.0	3.5	2.7	6.0	2	2.30
#5 - 40 UNC	40	TRE32202GS	5.1	56.0	18.0	3.5	2.7	6.0	3	2.60
#6 - 32 UNC	32	TRE32242GS	6.4	56.0	20.0	4.0	3.0	6.0	3	2.80
#8 - 32 UNC	32	TRE32282GS	6.4	63.0	21.0	4.5	3.4	6.0	3	3.40
#10 - 24 UNC	24	TRE32322GS	8.5	70.0	25.0	6.0	4.9	8.0	3	3.90
#12 - 24 UNC	24	TRE32362GS	8.5	80.0	30.0	6.0	4.9	8.0	3	4.50
1/4 - 20 UNC	20	TRE32402GS	10.2	80.0	30.0	7.0	5.5	8.0	3	5.10
5/16 - 18 UNC	18	TRE32442GS	14.2	90.0	35.0	8.0	6.2	9.0	3	6.60
3/8 - 16 UNC	16	TRE32482GS	15.9	100.0	39.0	9.0	7.0	10.0	3	8.00
7/16 - 14 UNC	14	TRE32522GS	18.2	100.0	40.0	8.0	6.2	9.0	3	9.40
1/2 - 13 UNC	13	TRE32562GS	19.6	110.0	44.0	9.0	7.0	10.0	3	10.80
9/16 - 12 UNC	12	TRE32602GS	21.2	110.0	44.0	11.0	9.0	12.0	3	12.20
5/8 - 11 UNC	11	TRE32642GS	23.1	110.0	44.0	12.0	9.0	12.0	3	13.60
3/4 - 10 UNC	10	TRE32702GS	25.4	125.0	50.0	14.0	11.0	14.0	4	16.50
7/8 - 9 UNC	9	TRE32742GS	28.3	140.0	54.0	18.0	14.5	17.0	4	19.50
1 - 8 UNC	8	TRE32782GS	31.8	160.0	60.0	20.0	16.0	19.0	4	22.20

▶ DIN 371(#4~3/8) and DIN 376(7/16~1)

◎ : 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		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	38	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	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			
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	◎	◎	◎	◎													



TRE33 SERIES

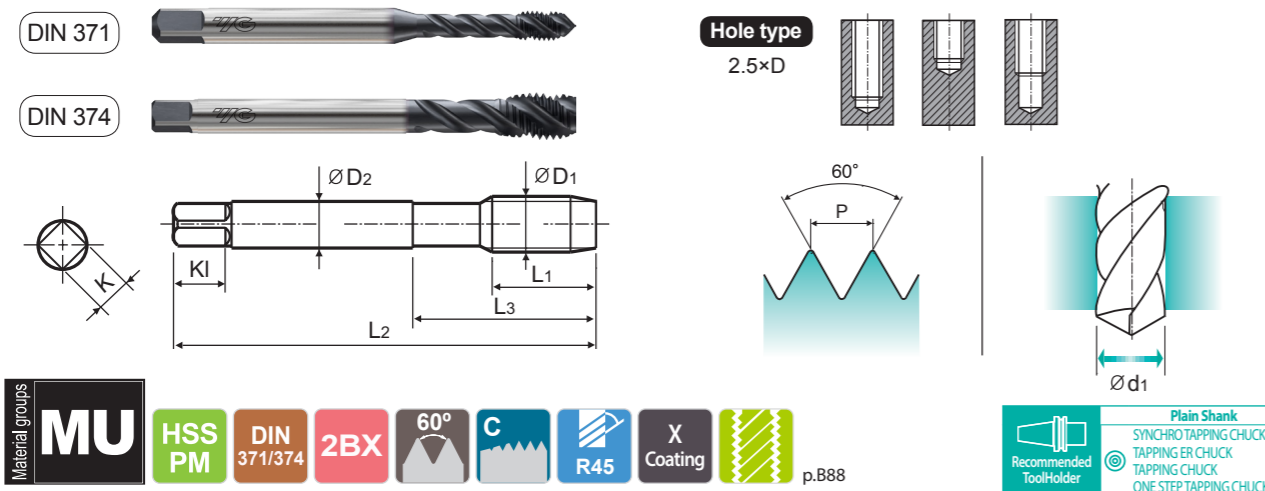
UNF Unified Fine Threads

Unified Feingewinde
 UNF
 Unificato passo fine

Machine taps
Maschinengewindebohrer

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

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- ▶ Speziell entwickelt, um zu große Gewindedurchmesser zu vermeiden und Messprobleme zu reduzieren.



Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		X-Coating	L1	L2	L3	ØD2	K	KI	Z	Ød1
#4 - 48 UNF		TRE33182GS	5.1	56.0	18.0	3.5	2.7	6.0	2	2.40
#5 - 44 UNF		TRE33222GS	5.1	56.0	18.0	3.5	2.7	6.0	3	2.70
#6 - 40 UNF		TRE33262GS	6.4	56.0	20.0	4.0	3.0	6.0	3	2.90
#8 - 36 UNF		TRE33302GS	6.4	63.0	21.0	4.5	3.4	6.0	3	3.50
#10 - 32 UNF		TRE33342GS	8.5	70.0	25.0	6.0	4.9	8.0	3	4.10
#12 - 28 UNF		TRE33382GS	8.5	80.0	30.0	6.0	4.9	8.0	3	4.60
1/4 - 28 UNF		TRE33422GS	10.2	80.0	30.0	7.0	5.5	8.0	3	5.50
5/16 - 24 UNF		TRE33462GS	10.6	90.0	35.0	8.0	6.2	9.0	3	6.90
3/8 - 24 UNF		TRE33502GS	10.6	100.0	39.0	9.0	7.0	10.0	3	8.50
7/16 - 20 UNF		TRE33542GS	12.7	100.0	40.0	8.0	6.2	9.0	3	9.90
1/2 - 20 UNF		TRE33582GS	12.7	100.0	40.0	9.0	7.0	10.0	3	11.50
9/16 - 18 UNF		TRE33622GS	14.2	100.0	40.0	11.0	9.0	12.0	3	12.90
5/8 - 18 UNF		TRE33662GS	14.2	100.0	40.0	12.0	9.0	12.0	3	14.50
3/4 - 16 UNF		TRE33722GS	15.9	110.0	44.0	14.0	11.0	14.0	4	17.50
7/8 - 14 UNF		TRE33762GS	18.2	125.0	50.0	18.0	14.5	17.0	4	20.50
1 - 12 UNF		TRE33802GS	21.2	140.0	54.0	20.0	16.0	19.0	4	23.20

▶ DIN 371(#4~3/8) and DIN 374(7/16~1)

◎ : 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		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	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						
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	15	30	25	38	34						15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													



TRJ15 SERIES

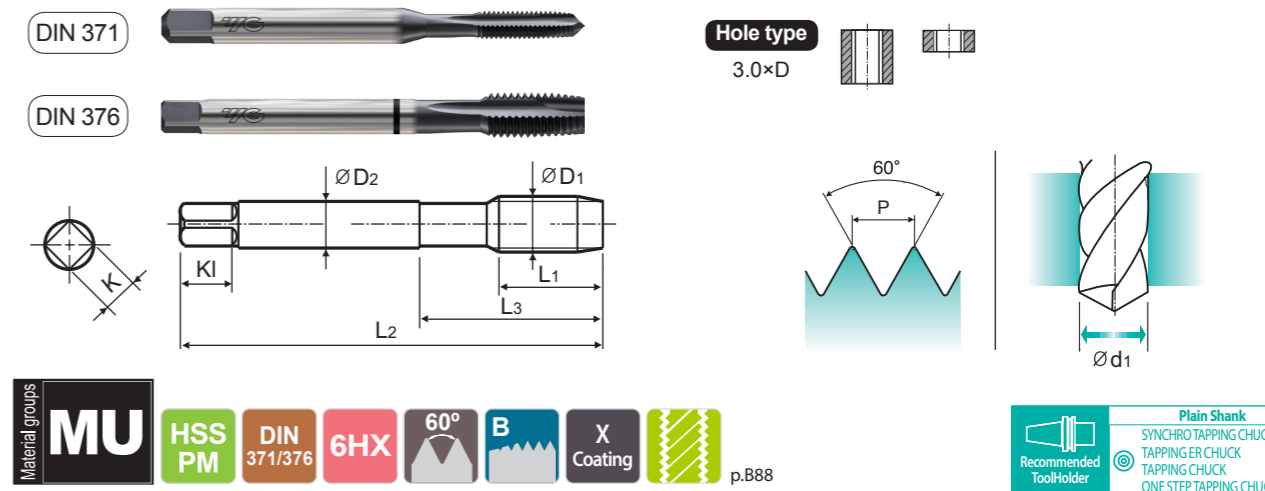
M ISO Metric Coarse Threads DIN 13

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

Machine taps
Maschinengewindebohrer

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Unit : mm

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		TRJ15136GS	8.0	45.0	13.0	2.8	2.1	5.0	2	1.6
M2.5 x 0.45		TRJ15176GS	9.0	50.0	15.0	2.8	2.1	5.0	2	2.1
M3 x 0.5		TRJ15206GS	11.0	56.0	18.0	3.5	2.7	6.0	3	2.5
M3.5 x 0.6		TRJ15226GS	12.0	56.0	20.0	4.0	3.0	6.0	3	2.9
M4 x 0.7		TRJ15246GS	13.0	63.0	21.0	4.5	3.4	6.0	3	3.3
M5 x 0.8		TRJ15286GS	15.0	70.0	25.0	6.0	4.9	8.0	3	4.2
M6 x 1.0		TRJ15316GS	17.0	80.0	30.0	6.0	4.9	8.0	3	5.0
M7 x 1.0		TRJ15346GS	17.0	80.0	30.0	7.0	5.5	8.0	3	6.0
M8 x 1.25		TRJ15366GS	20.0	90.0	35.0	8.0	6.2	9.0	3	6.8
M9 x 1.25		TRJ15396GS	20.0	90.0	35.0	9.0	7.0	10.0	3	7.8
M10 x 1.5		TRJ15426GS	22.0	100.0	39.0	10.0	8.0	11.0	3	8.5
M12 x 1.75		TRJ15506GS	24.0	110.0	44.0	9.0	7.0	10.0	3	10.3
M14 x 2.0		TRJ15546GS	26.0	110.0	44.0	11.0	9.0	12.0	3	12.0
M16 x 2.0		TRJ15606GS	27.0	110.0	44.0	12.0	9.0	12.0	3	14.0
M18 x 2.5		TRJ15656GS	30.0	125.0	50.0	14.0	11.0	14.0	3	15.5
M20 x 2.5		TRJ15706GS	32.0	140.0	54.0	16.0	12.0	15.0	3	17.5
M22 x 2.5		TRJ15746GS	32.0	140.0	54.0	18.0	14.5	17.0	3	19.5
M24 x 3.0		TRJ15786GS	34.0	160.0	60.0	18.0	14.5	17.0	3	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		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	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						
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	15	30	25	38	34						15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	○	◎	◎	◎													

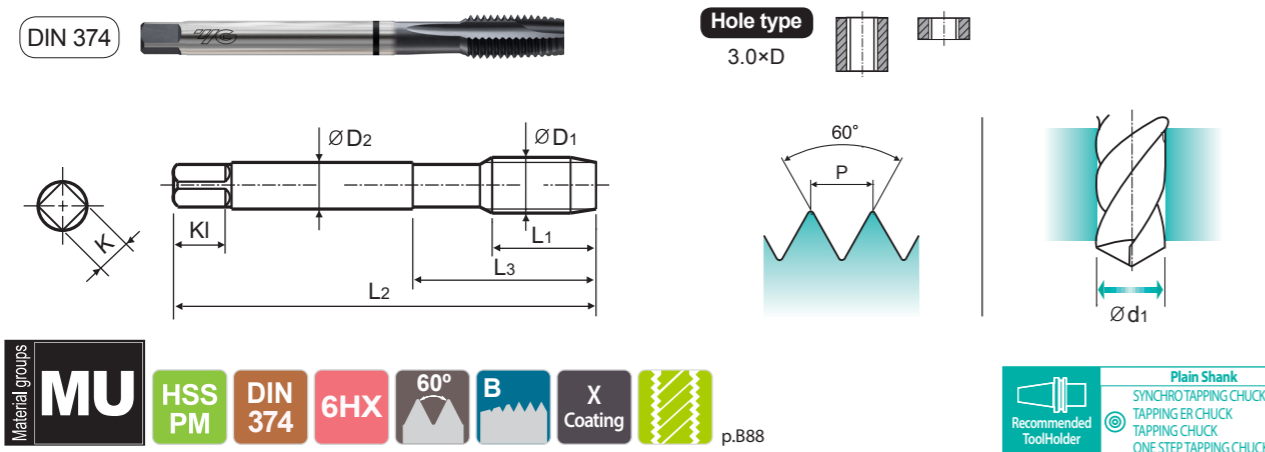
MF ISO Metric Fine Threads DIN 13

- Metrisches ISO-Feingewinde DIN 13
- ISO MÉTRIQUE PAS FINS DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

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Unit : mm

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
M4 x 0.5		TRJ16256GS	10.0	63.0	21.0	2.8	2.1	5.0	3	3.5
M4 x 0.35		TRJ16696GS	10.0	63.0	21.0	2.8	2.1	5.0	3	3.7
M5 x 0.5		TRJ16296GS	11.0	70.0	25.0	3.5	2.7	6.0	3	4.5
M6 x 0.75		TRJ16326GS	13.0	80.0	30.0	4.5	3.4	6.0	3	5.3
M6 x 0.5		TRJ16336GS	13.0	80.0	30.0	4.5	3.4	6.0	3	5.5
M8 x 1.0		TRJ16376GS	17.0	90.0	36.0	6.0	4.9	8.0	3	7.0
M8 x 0.75		TRJ16386GS	14.0	80.0	30.0	6.0	4.9	8.0	3	7.3
M9 x 1.0		TRJ16406GS	20.0	90.0	36.0	7.0	5.5	8.0	3	8.0
M9 x 0.75		TRJ16416GS	17.0	80.0	36.0	7.0	5.5	8.0	3	8.3
M10 x 1.25		TRJ16436GS	22.0	100.0	40.0	7.0	5.5	8.0	3	8.8
M10 x 1.0		TRJ16446GS	18.0	90.0	36.0	7.0	5.5	8.0	3	9.0
M10 x 0.75		TRJ16456GS	18.0	90.0	36.0	7.0	5.5	8.0	3	9.3
M12 x 1.5		TRJ16516GS	22.0	100.0	40.0	9.0	7.0	10.0	3	10.5
M12 x 1.25		TRJ16526GS	22.0	100.0	40.0	9.0	7.0	10.0	3	10.8
M12 x 1.0		TRJ16536GS	18.0	100.0	40.0	9.0	7.0	10.0	3	11.0
M14 x 1.5		TRJ16556GS	22.0	100.0	40.0	11.0	9.0	12.0	3	12.5
M14 x 1.25		TRJ16566GS	22.0	100.0	40.0	11.0	9.0	12.0	3	12.8
M14 x 1.0		TRJ16576GS	18.0	100.0	40.0	11.0	9.0	12.0	3	13.0
M16 x 1.5		TRJ16616GS	22.0	100.0	40.0	12.0	9.0	12.0	3	14.5
M16 x 1.0		TRJ16626GS	18.0	100.0	40.0	12.0	9.0	12.0	3	15.0

▶ NEXT PAGE

◎ : Excellent ○ : Good

ISO Material Description	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	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO Material Description	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	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

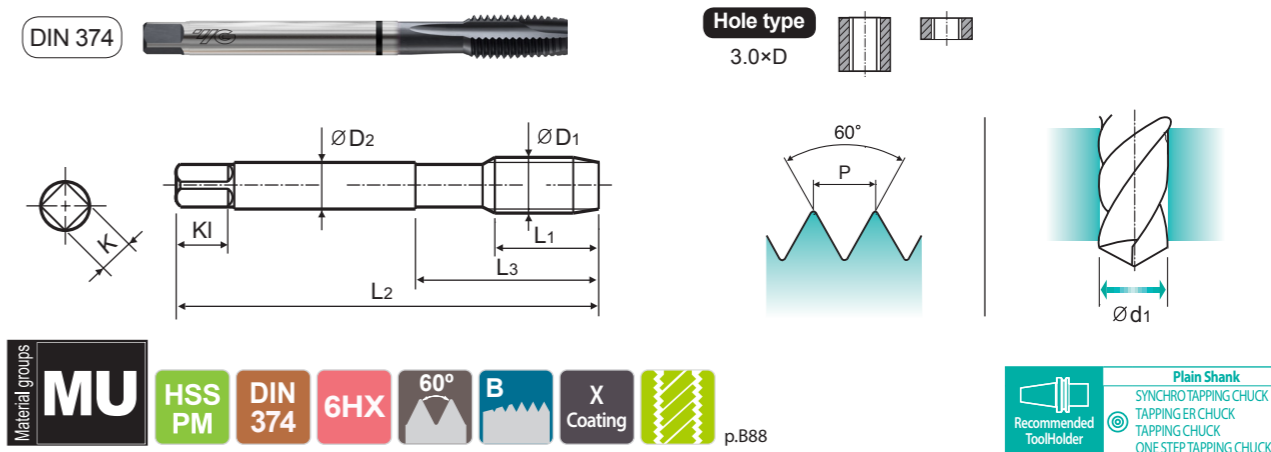
MF ISO Metric Fine Threads DIN 13

- Metrisches ISO-Feingewinde DIN 13
- ISO MÉTRIQUE PAS FINS DIN13
- ISO Metrico passo grosso DIN 13

Machine taps
Maschinengewindebohrer

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Unit : mm

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
M18 x 2.0		TRJ16666GS	26.0	125.0	50.0	14.0	11.0	14.0	3	16.0
M18 x 1.5		TRJ16676GS	25.0	110.0	44.0	14.0	11.0	14.0	3	16.5
M18 x 1.0		TRJ16686GS	20.0	110.0	44.0	14.0	11.0	14.0	3	17.0
M20 x 2.0		TRJ16716GS	27.0	140.0	54.0	16.0	12.0	15.0	3	18.0
M20 x 1.5		TRJ16726GS	25.0	125.0	50.0	16.0	12.0	15.0	3	18.5
M20 x 1.0		TRJ16736GS	20.0	125.0	50.0	16.0	12.0	15.0	3	19.0
M22 x 2.0		TRJ16756GS	27.0	140.0	54.0	18.0	14.5	17.0	3	20.0
M22 x 1.5		TRJ16766GS	25.0	125.0	50.0	18.0	14.5	17.0	3	20.5
M22 x 1.0		TRJ16776GS	20.0	125.0	50.0	18.0	14.5	17.0	3	21.0
M24 x 2.0		TRJ16796GS	27.0	140.0	54.0	18.0	14.5	17.0	3	22.0
M24 x 1.5		TRJ16806GS	27.0	140.0	54.0	18.0	14.5	17.0	3	22.5
M24 x 1.0		TRJ16816GS	20.0	140.0	54.0	18.0	14.5	17.0	3	23.0

◎ : Excellent ○ : Good

ISO Material Description	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	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

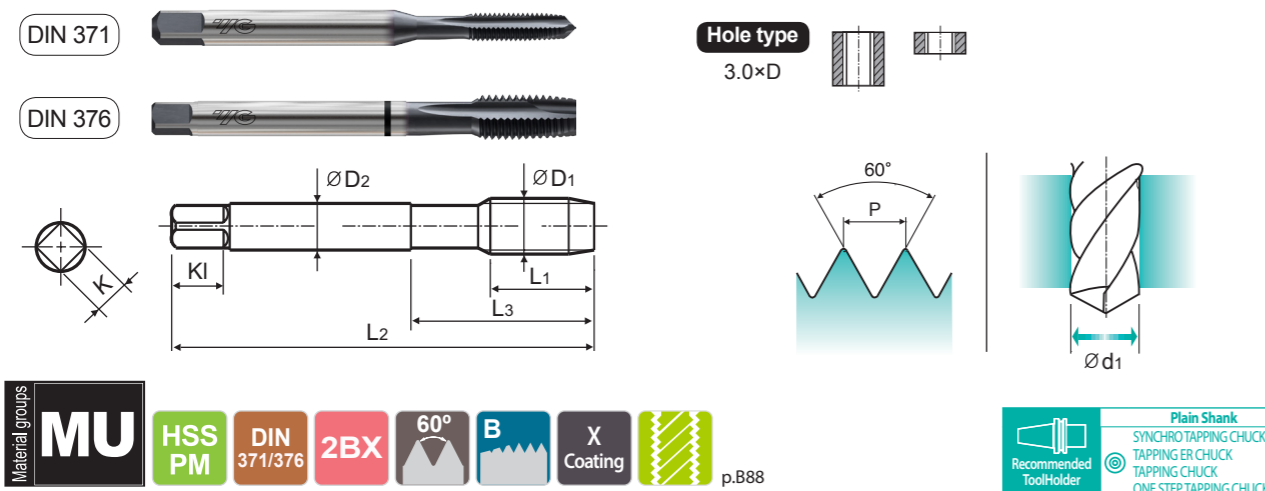
ISO Material Description	N					S					H												
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron		Hardened Cast Iron	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
HRC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

UNC Unified Coarse Threads
 Unified Grobgewinde
 UNC
 Unificato passo fine

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.



Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		X-Coating	L1	L2	L3	ØD2	K	KI	Z	Ød1
#4 - 40 UNC		TRJ17162GS	11.0	56.0	18.0	3.5	2.7	6.0	2	2.30
#5 - 40 UNC		TRJ17202GS	11.0	56.0	18.0	3.5	2.7	6.0	3	2.60
#6 - 32 UNC		TRJ17242GS	12.0	56.0	20.0	4.0	3.0	6.0	3	2.80
#8 - 32 UNC		TRJ17282GS	13.0	63.0	21.0	4.5	3.4	6.0	3	3.40
#10 - 24 UNC		TRJ17322GS	15.0	70.0	25.0	6.0	4.9	8.0	3	3.90
#12 - 24 UNC		TRJ17362GS	16.0	80.0	30.0	6.0	4.9	8.0	3	4.50
1/4 - 20 UNC		TRJ17402GS	17.0	80.0	30.0	7.0	5.5	8.0	3	5.10
5/16 - 18 UNC		TRJ17442GS	20.0	90.0	35.0	8.0	6.2	9.0	3	6.60
3/8 - 16 UNC		TRJ17482GS	22.0	100.0	39.0	9.0	7.0	10.0	3	8.00
7/16 - 14 UNC		TRJ17522GS	22.0	100.0	40.0	8.0	6.2	9.0	3	9.40
1/2 - 13 UNC		TRJ17562GS	25.0	110.0	44.0	9.0	7.0	10.0	3	10.80
9/16 - 12 UNC		TRJ17602GS	26.0	110.0	44.0	11.0	9.0	12.0	3	12.20
5/8 - 11 UNC		TRJ17642GS	27.0	110.0	44.0	12.0	9.0	12.0	3	13.60
3/4 - 10 UNC		TRJ17702GS	30.0	125.0	50.0	14.0	11.0	14.0	3	16.50
7/8 - 9 UNC		TRJ17742GS	32.0	140.0	54.0	18.0	14.5	17.0	3	19.50
1 - 8 UNC		TRJ17782GS	36.0	160.0	60.0	20.0	16.0	19.0	3	22.20

▶ DIN371 (#4~3/8) and DIN376 (7/16~1)

◎ : Excellent ○ : Good

ISO Material Description	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			
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

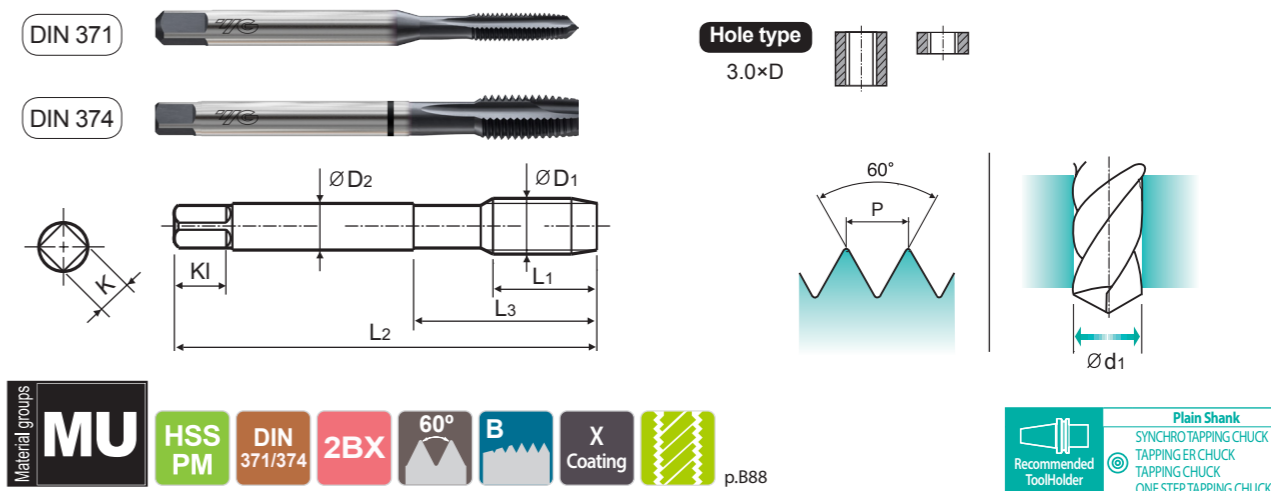
ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials		Heat Resistant Super Alloys				Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	◎	◎	◎	◎													

UNF Unified Fine Threads
 Unified Feingewinde
 UNF
 Unificato passo fine

Machine taps
 Maschinengewindebohrer

- ▶ High performance on various ductile materials
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Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		X-Coating	L1	L2	L3	ØD2	K	KI	Z	Ød1
#4 - 48 UNF		TRJ18182GS	11.0	56.0	18.0	3.5	2.7	6.0	2	2.40
#5 - 44 UNF		TRJ18222GS	11.0	56.0	18.0	3.5	2.7	6.0	3	2.70
#6 - 40 UNF		TRJ18262GS	12.0	56.0	20.0	4.0	3.0	6.0	3	2.90
#8 - 36 UNF		TRJ18302GS	13.0	63.0	21.0	4.5	3.4	6.0	3	3.50
#10 - 32 UNF		TRJ18342GS	15.0	70.0	25.0	6.0	4.9	8.0	3	4.10
#12 - 28 UNF		TRJ18382GS	16.0	80.0	30.0	6.0	4.9	8.0	3	4.60
1/4 - 28 UNF		TRJ18422GS	17.0	80.0	30.0	7.0	5.5	8.0	3	5.50
5/16 - 24 UNF		TRJ18462GS	17.0	90.0	35.0	8.0	6.2	9.0	3	6.90
3/8 - 24 UNF		TRJ18502GS	18.0	100.0	39.0	9.0	7.0	10.0	3	8.50
7/16 - 20 UNF		TRJ18542GS	22.0	100.0	40.0	8.0	6.2	9.0	3	9.90
1/2 - 20 UNF		TRJ18582GS	22.0	100.0	40.0	9.0	7.0	10.0	3	11.50
9/16 - 18 UNF		TRJ18622GS	22.0	100.0	40.0	11.0	9.0	12.0	3	12.90
5/8 - 18 UNF		TRJ18662GS	22.0	100.0	40.0	12.0	9.0	12.0	3	14.50
3/4 - 16 UNF		TRJ18722GS	25.0	110.0	44.0	14.0	11.0	14.0	3	17.50
7/8 - 14 UNF		TRJ18762GS	26.0	125.0	50.0	18.0	14.5	17.0	3	20.50
1" - 12 UNF		TRJ18802GS	28.0	140.0	54.0	20.0	16.0	19.0	3	23.20

▶ DIN371 (#4~3/8) and DIN374 (7/16~1)

◎ : Excellent ○ : Good

ISO Material Description	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			
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

ISO Material Description	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
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	◎	◎	◎	◎	◎	◎													

THREAD
MILLSYNCHRO
TAPPRIME
TAPCOMBO
TAPYG TAP
STEELYG TAP CHIP
BREAKERYG TAP
INOXYG TAP
CAST IRONYG TAP
HARDENED
STEELYG TAP
Ti NiYG TAP
ALUYG TAP
FORMINGYG TAP
GENERAL

PIPE TAP

STI TAP

NUT TAP

TECHNICAL
DATA
TRE30, TRE31, TRE32
TRE33, TRE34
TRJ15, TRJ16
TRJ17, TRJ18

ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min.)		
P	1	Non-alloy steel	125		5-20	15-45	
	2		190	13	10-50	10-55	
	3		250	25	10-50	10-55	
	4		270	28	15-40	15-50	
	5		300	32	15-40	15-50	
	6	Low alloy steel	180	10	8-30	8-30	
	7		275	29	8-30	8-30	
	8		300	32	8-30	8-30	
	9		350	38	8-30	8-30	
	10		High alloyed steel, and tool steel	200	15	8-30	8-30
	11	325		35	8-30	8-30	
M	12	Stainless steel	200	15	5-15	8-20	
	13		240	23	5-15	8-20	
	14		180	10	5-15	8-20	
K	15	Grey cast iron	180	10	15-35	15-35	
	16		260	26	15-35	15-35	
	17	Nodular cast iron	160	3	15-35	15-35	
	18		250	25	15-35	15-35	
N	21	Aluminum- wrought alloy	60		15-35	15-35	
	22		100		15-35	15-35	
	23		75		15-35	15-35	
	24	Aluminum- cast, alloyed	90		15-35	15-35	
	25		130		15-35	15-35	
	26		Copper and Copper Alloys (Bronze / Brass)	110		15-35	15-35
	27			90		15-35	15-35
	28			100		15-35	15-35