



Leading Through Innovation



HSS-PM



YG TAP Ti Ni

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- For Heat Resistant Super Alloys and Titanium Alloys Applied with Cutting Edge Rake Angles and Thread Relief
- Für hitzebeständige Superlegierungen und Titanlegierungen, mit Schneidkanten-Spanwinkeln und Gewindehinterschliff



HSS-PM YG TAP Ti Ni

For Heat Resistant Super Alloys and Titanium Alloys Applied with Cutting Edge Rake Angles and Thread Relief

Please visit globallyg1.com/mat for material search. Recommended cutting conditions : P268

Table with columns: ISO, VDI 3323, Material Description, Composition / Structure / Heat Treatment, HB, HRc, and four columns for hole types (Max. 2.5xD Blind Hole, Max. 3.0xD Through Hole). Rows include categories P, M, K, N, S, H.

Table with columns: HOLE TYPE, TOOL MATERIAL, CHAMFER LEAD ACC. TO DIN2197, FLUTE TYPE, SPIRAL FLUTE ANGLE, and four columns for hole types (Max. 2.5xD Blind Hole, Max. 3.0xD Through Hole). Rows include series M, MF, UNC, UNF, BSW, G(BSP), EG-M, EG-UNC, EG-UNF, SURFACE TREATMENT, and MODEL.

Table with columns: HOLE TYPE, TOOL MATERIAL, CHAMFER LEAD ACC. TO DIN2197, FLUTE TYPE, SPIRAL FLUTE ANGLE, and four columns for hole types (Max. 2.5xD Blind Hole, Max. 3.0xD Through Hole). Rows include series C, B, and R40.

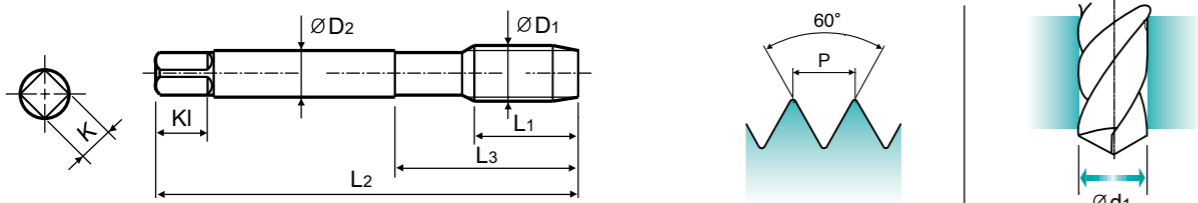
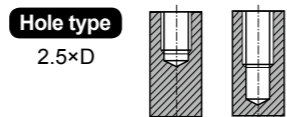


TM903 SERIES

M ISO metric coarse threads DIN 13
Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
ISO Metrico passo grosso DIN 13

Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.



Material groups Ti HSS-PM DIN 371/376 6H 60° C Bright R25 Machine taps Maschinengewindebohrer

Recommended Cutting Page : P.268 Unit : mm

Table with 11 columns: SIZE, Pitch, EDP No., Thread Length, Overall Length, Neck Length, Shank Diameter, Square Size, Square Length, No. of Flute, Tapping Drill Diameter. Rows include sizes M2 to M30.

DIN 371(M2~M10) and DIN 376(M11~M30)

* DIN profile not ISO

◎ : Excellent ○ : Good

Material compatibility table for Ti. Columns: ISO, Material Description, Non-alloy steel, Low alloy steel, High alloyed steel, Stainless steel, Grey cast iron, Nodular cast iron, Malleable cast iron, Aluminum-wrought alloy, Aluminum-cast, alloyed, Copper and Copper Alloys, Non Metallic Materials, Heat Resistant Super Alloys, Titanium Alloys, Hardened steel, Chilled Cast Iron, Hardened Cast Iron.

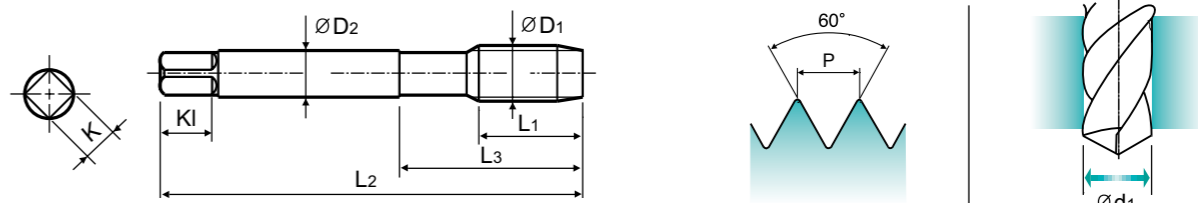
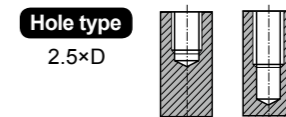


TZ903 SERIES

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Metrisches ISO-Gewinde DIN 13
ISO MÉTRIQUE DIN13
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Material groups Ti HSS-PM DIN 371/376 6H 60° C TiAIN R25 Machine taps Maschinengewindebohrer

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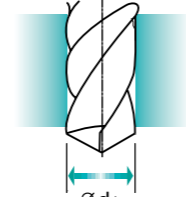
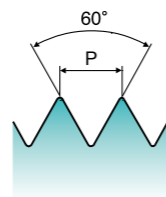
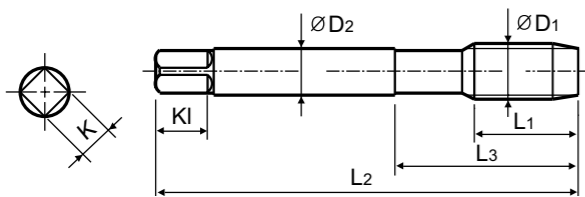
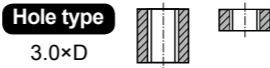
TM293 SERIES

M-Az ISO metric coarse threads DIN 13

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

Interrupted tap to reduce contact area and tapping torque, and to give more chip space.

Gewindebohrer mit ausgesetzten Zähnen um die Kontaktzone mit dem Werkstück und das Drehmoment zu minimieren und dem Span mehr Raum zu geben.



Material groups: Ti, HSS-PM, DIN 371/376, 6H, 60°, B, Bright. Machine taps Maschinengewindebohrer.

Recommended Cutting Page : P.268 Unit : mm

Table with 11 columns: SIZE, Pitch, EDP No., Thread Length, Overall Length, Neck Length, Shank Diameter, Square Size, Square Length, No. of Flute, Tapping Drill Diameter. Lists various tap sizes from M2 to M30.

DIN 371(M2-M10) and DIN 376(M11-M30)
* DIN profile not ISO

◎ : Excellent ○ : Good

Material compatibility table with columns for ISO, Material Description, VDI 3323, HRc, HB, and recommended status for various materials.



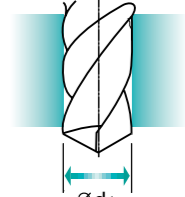
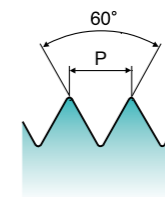
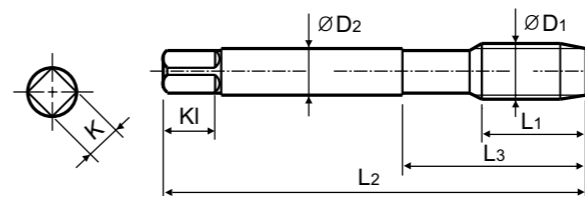
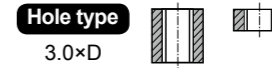
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- Metrisches ISO-Gewinde DIN 13
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Interrupted tap to reduce contact area and tapping torque, and to give more chip space.

Gewindebohrer mit ausgesetzten Zähnen um die Kontaktzone mit dem Werkstück und das Drehmoment zu minimieren und dem Span mehr Raum zu geben.



Material groups: Ti, HSS-PM, DIN 371/376, 6H, 60°, B, TiAlN. Machine taps Maschinengewindebohrer.

Recommended Cutting Page : P.268 Unit : mm

Table with 11 columns: SIZE, Pitch, EDP No., Thread Length, Overall Length, Neck Length, Shank Diameter, Square Size, Square Length, No. of Flute, Tapping Drill Diameter. Lists various tap sizes from M2 to M30.

DIN 371(M2-M10) and DIN 376(M11-M30)
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Material compatibility table with columns for ISO, Material Description, VDI 3323, HRc, HB, and recommended status for various materials.



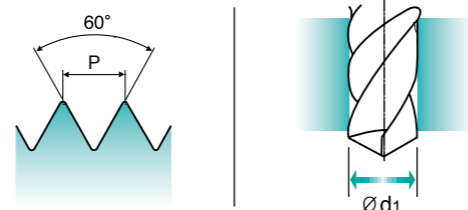
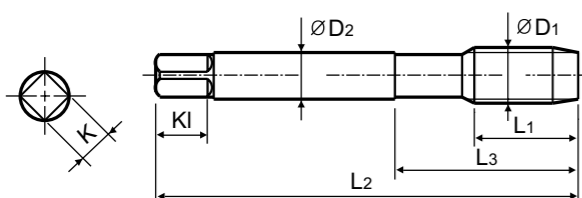
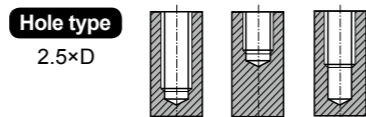
TQ833 SERIES

M ISO metric coarse threads DIN 13

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

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► Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.



Material groups: **Ti Ni** HSS-PM DIN 371/376 6H 60° C Vap R40 Machine taps Maschinengewindebohrer

Recommended Cutting Page : P.268 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	Vap	L1	L2	L3	ØD2	K	KI	Z	Ød1
M2 × 0.4		TQ833136	8	45	13	2.8	2.1	5	3	1.6
M2.2 × 0.45		TQ833156	8	45	13	2.8	2.1	5	3	1.75
M2.5 × 0.45		TQ833176	9	50	15	2.8	2.1	5	3	2.05
M3 × 0.5		TQ833206	6	56	18	3.5	2.7	6	3	2.5
M3.5 × 0.6		TQ833226	7	56	20	4	3	6	3	2.9
M4 × 0.7		TQ833246	7	63	21	4.5	3.4	6	3	3.3
M4.5 × 0.75		TQ833266	8	70	25	6	4.9	8	3	3.7
M5 × 0.8		TQ833286	8	70	25	6	4.9	8	3	4.2
M6 × 1		TQ833316	10	80	30	6	4.9	8	3	5
M7 × 1		TQ833346	10	80	30	7	5.5	8	3	6
M8 × 1.25		TQ833366	13	90	35	8	6.2	9	3	6.8
M10 × 1.5		TQ833426	15	100	39	10	8	11	3	8.5
M12 × 1.75		TQ833506	18	110	44	9	7	10	3	10.2

►DIN 371(M2~M10) and DIN 376(M12)

© : 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	
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)	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											◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



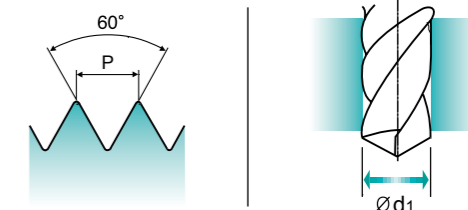
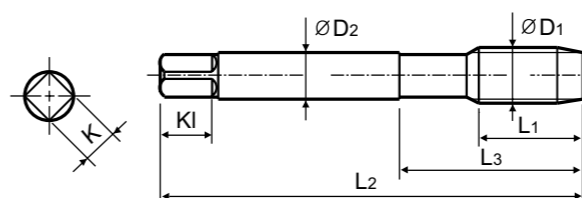
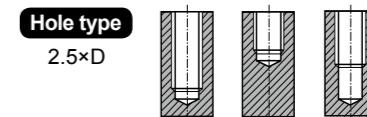
TR833 SERIES

M ISO metric coarse threads DIN 13

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

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Material groups: **Ti Ni** HSS-PM DIN 371/376 6H 60° C Bright R40 Machine taps Maschinengewindebohrer

Recommended Cutting Page : P.268 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	Bright	L1	L2	L3	ØD2	K	KI	Z	Ød1
M2 × 0.4		TR833136	8	45	13	2.8	2.1	5	3	1.6
M2.2 × 0.45		TR833156	8	45	13	2.8	2.1	5	3	1.75
M2.5 × 0.45		TR833176	9	50	15	2.8	2.1	5	3	2.05
M3 × 0.5		TR833206	6	56	18	3.5	2.7	6	3	2.5
M3.5 × 0.6		TR833226	7	56	20	4	3	6	3	2.9
M4 × 0.7		TR833246	7	63	21	4.5	3.4	6	3	3.3
M4.5 × 0.75		TR833266	8	70	25	6	4.9	8	3	3.7
M5 × 0.8		TR833286	8	70	25	6	4.9	8	3	4.2
M6 × 1		TR833316	10	80	30	6	4.9	8	3	5
M7 × 1		TR833346	10	80	30	7	5.5	8	3	6
M8 × 1.25		TR833366	13	90	35	8	6.2	9	3	6.8
M10 × 1.5		TR833426	15	100	39	10	8	11	3	8.5
M12 × 1.75		TR833506	18	110	44	9	7	10	3	10.2

►DIN 371(M2~M10) and DIN 376(M12)

© : 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	
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)	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											◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎



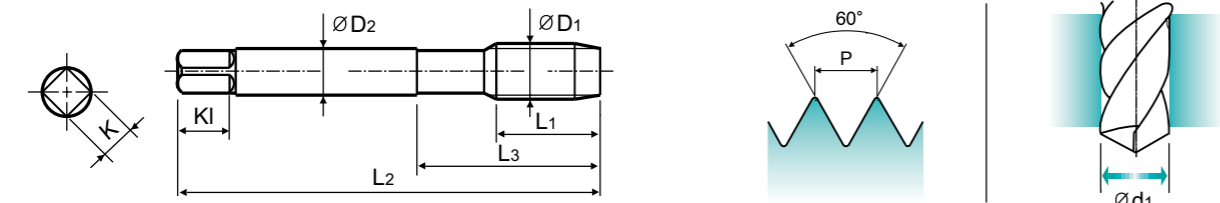
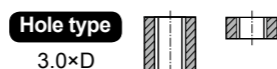
TQ873 SERIES

M ISO metric coarse threads DIN 13

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

► Suitable for through hole in more cutting speed than other taps due to thick web and the best substrate.

► Geeignet für Durchgangslöcher in höherer Schnittgeschwindigkeit als bei anderen Gewindebohrern dank größerer Kerndicke und bestem Werkstoff.



Ti Ni

HSS-PM

DIN 371/376

6H



Vap

Machine taps
Maschinengewindebohrer

Recommended Cutting Page : P.268

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	Vap	L1	L2	L3	ØD2	K	KL	Z	Ød1
M2	× 0.4	TQ873136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TQ873156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TQ873176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TQ873206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TQ873226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TQ873246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TQ873266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TQ873286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TQ873316	17	80	30	6	4.9	8	3	5
M7	× 1	TQ873346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TQ873366	20	90	35	8	6.2	9	3	6.8
M10	× 1.5	TQ873426	22	100	39	10	8	11	3	8.5
M12	× 1.75	TQ873506	24	110	44	9	7	10	3	10.2

►DIN 371(M2~M10) and DIN 376(M12)

◎ : Excellent ○ : Good

ISO Material Description	P						M				K			H							
	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	35	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 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											◎	◎	◎	◎	◎						



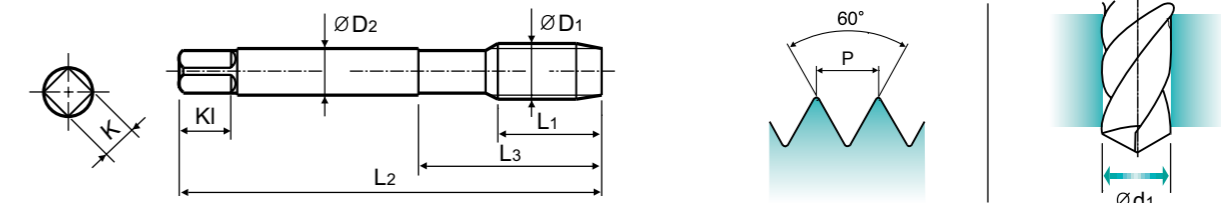
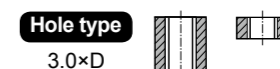
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M ISO metric coarse threads DIN 13

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- ISO Metrico passo grosso DIN 13

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Ti Ni

HSS-PM

DIN 371/376

6H



Bright

Machine taps
Maschinengewindebohrer

Recommended Cutting Page : P.268

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	Bright	L1	L2	L3	ØD2	K	KL	Z	Ød1
M2	× 0.4	TR873136	8	45	13	2.8	2.1	5	3	1.6
M2.2	× 0.45	TR873156	8	45	13	2.8	2.1	5	3	1.75
M2.5	× 0.45	TR873176	9	50	15	2.8	2.1	5	3	2.05
M3	× 0.5	TR873206	11	56	18	3.5	2.7	6	3	2.5
M3.5	× 0.6	TR873226	12	56	20	4	3	6	3	2.9
M4	× 0.7	TR873246	13	63	21	4.5	3.4	6	3	3.3
M4.5	× 0.75	TR873266	14	70	25	6	4.9	8	3	3.7
M5	× 0.8	TR873286	15	70	25	6	4.9	8	3	4.2
M6	× 1	TR873316	17	80	30	6	4.9	8	3	5
M7	× 1	TR873346	17	80	30	7	5.5	8	3	6
M8	× 1.25	TR873366	20	90	35	8	6.2	9	3	6.8
M10	× 1.5	TR873426	22	100	39	10	8	11	3	8.5
M12	× 1.75	TR873506	24	110	44	9	7	10	3	10.2

►DIN 371(M2~M10) and DIN 376(M12)

◎ : Excellent ○ : Good

ISO Material Description	P						M				K			H							
	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	35	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 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 MILLS

SYNCHRO TAPS

COMBO TAPS

YG TAP GENERAL

YG TAP STEEL

YG TAP HARDENED

YG TAP INOX

YG TAP CAST IRON

YG TAP ALU

YG TAP Ti Ni

YG TAP FORMING

NUT TAPS

STI TAPS

PIPE TAPS

TECHNICAL DATA

					TM903	TZ903	TM293	TZ293	TM933	TZ933	TM923	TZ923	TQ833	TR833	TQ873	TR873
ISO	VDI 3323	Material Description	HB	HRc	Vc (m/min)											
P	1	Non-alloy steel	125													
	2		190	13												
	3		250	25												
	4		270	28												
	5		300	32												
	6	Low alloy steel	180	10					10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
	7		275	29	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	
	8		300	32	6-10	6-10	6-10	6-10	6-10	6-10	6-10	6-10	6-10	6-10	6-10	
	9		350	38	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	
	10		High alloyed steel, and tool steel	200	15											
	11	325		35												
M	12	Stainless steel	200	15												
	13		240	23												
	14		180	10												
K	15	Grey cast iron	180	10												
	16		260	26												
	17	Nodular cast iron	160	3												
	18		250	25												
	19		Malleable cast iron	130												
20	230	21														
N	21	Aluminum-wrought alloy	60													
	22		100													
	23	Aluminum-cast, alloyed	75													
	24		90													
	25		130													
	26		Copper and Copper Alloys (Bronze / Brass)	110												
	27	90														
	28	100														
	29	Non Metallic Materials														
	30															
S	31	Heat Resistant Super Alloys	200	15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	
	32		280	30			10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15	
	33		250	25			2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	
	34		350	38			2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	
	35		320	34			2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	
	36	Titanium Alloys	400Rm		10-15	10-15	10-15	10-15					10-15	10-15	10-15	
	37		1050Rm		4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6		
H	38	Hardened steel	550	55								3-5				
	39		630	60												
	40	Chilled Cast Iron	400	42			3-5	3-5			3-5	3-5		3-5		
	41	Hardened Cast Iron	550	55												