

Swiss-MicroTurn

Swiss tools for Swiss-type lathes
Starting from an inner diameter of 0.2 mm

MT-EN-V4.1

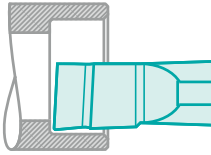
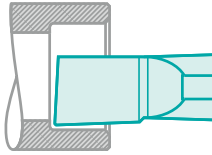
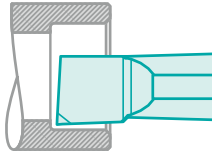
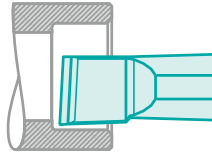
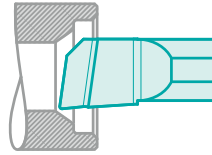
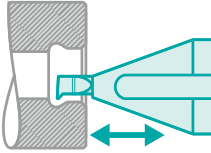
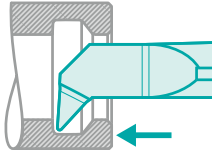
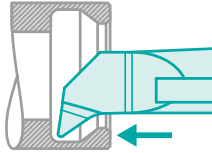
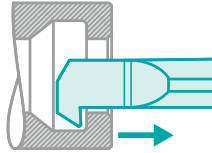
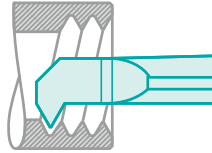
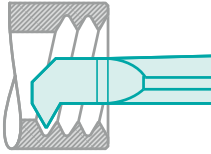
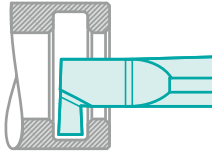
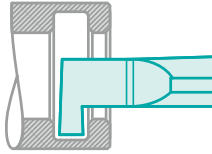
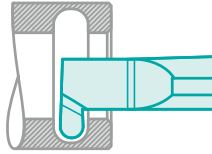
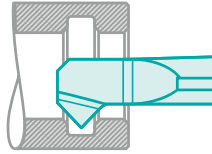
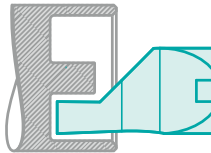
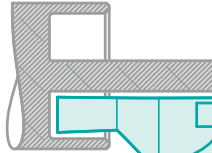

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Swiss-MicroTurn Tools

<p>MTEC 12 Boring tool</p> 	<p>MTEN 14 Boring tool neutral</p> 	<p>MTEF 16 Boring tool Chip Control finishing</p> 	<p>MTEP 18 Boring tool Chip Control</p> 	<p>MTEE 20 Boring tool released</p> 
<p>MTKN 21 Profiling tool neutral</p> 	<p>MTKH 22 Profiling tool 3° / 47°</p> 	<p>MTKO 23 Profiling tool 8° / 32°</p> 	<p>MTKR 24 Backboring tool</p> 	<p>MTGE 26 Threading tool 60°</p> 
<p>MTGW 27 Threading tool 55°</p> 	<p>MTNU 28 Grooving tool</p> 	<p>MTNN 29 Grooving tool neutral</p> 	<p>MTNR 30 Grooving tool with full radius</p> 	<p>MTFA 31 Chamfering tool</p> 
<p>MTNX 32 Face grooving tool</p> 	<p>MTNY 33 Face grooving tool</p> 	<p>MTRO 33 Swiss-MicroTurn blank</p> 		

Swiss-MicroTurn Halter

<p>ROUND SHANK HOLDER 34</p> 	<p>BACK OPERATION HOLDER 42</p> 	<p>SQUARE SHANK HOLDER 45</p> 	<p>SPECIAL SOLUTIONS 58</p> 
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Swiss Tools

History and values

As a "Swiss-made product", Swiss-MicroTurn stands for quality and reliability. The result of the tireless commitment of the IFANGER team is to push the boundaries of innovation while exceeding quality and performance standards.

Based on this belief, IFANGER developed the monoblock tool family "Swiss-MicroTurn". It is regarded as the original among micro turning tools for internal machining. Over decades, these have been continually developed and refined under the Swiss Made label.

"Swiss-type automatic lathe" stands internationally for automatic lathe. The invention is attributed to the watchmaker Jakob Schweizer in 1872. This technology embodies all aspects of the Swiss manufacturing industry.



In 1917, tool pioneer Eduard Ifanger laid the foundations for the success story with the market launch of modular and regrindable turning tools. To this day, the family-run company strives to develop tool concepts with the decisive "technological edge".

Development and production take place entirely in Switzerland under the highest quality standards.



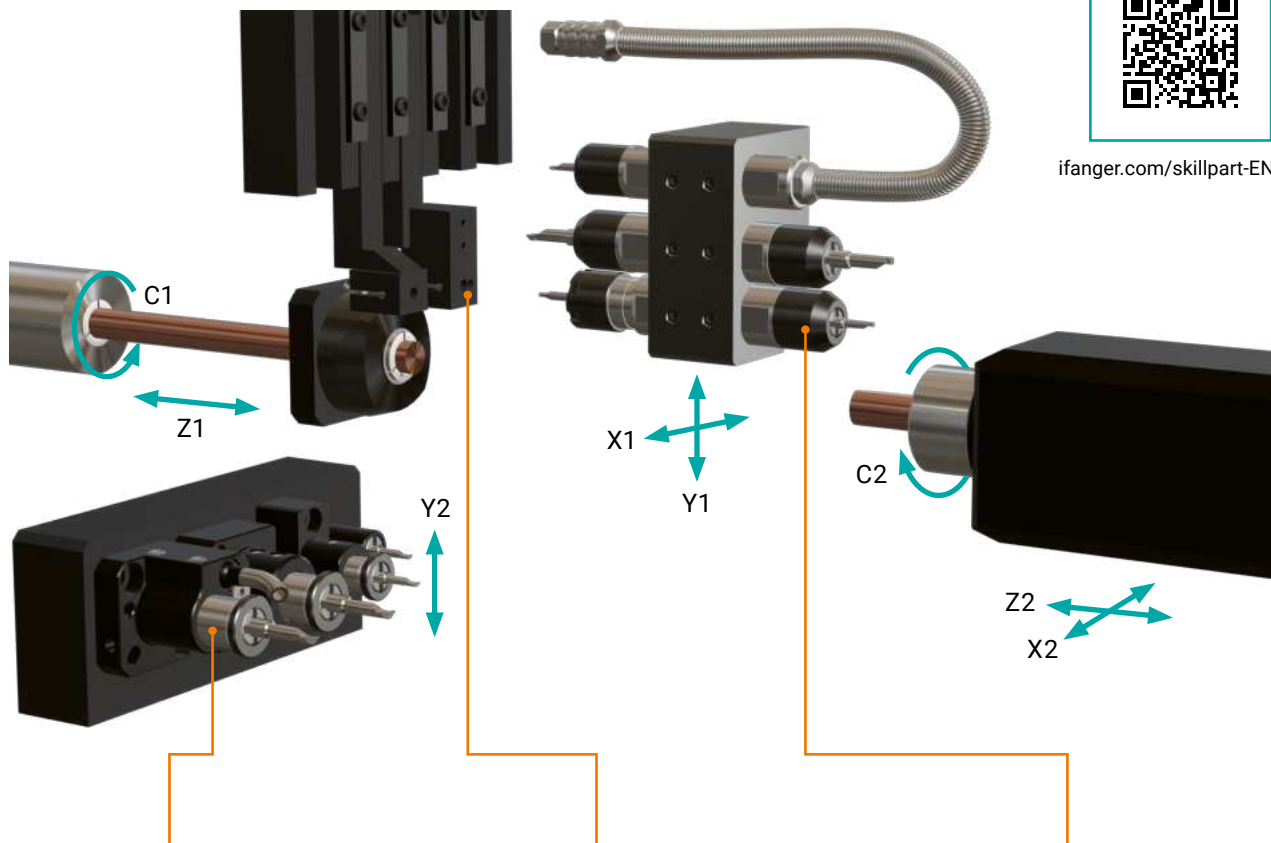
Swiss-MicroTurn System

For Swiss-type lathes

The Swiss-MicroTurn tools have been designed for high performance production without compromise on Swiss Type Lathes and have proven themselves millions of times over. The tool concepts are characterized by their enormous precision, reliability and cost-effectiveness.



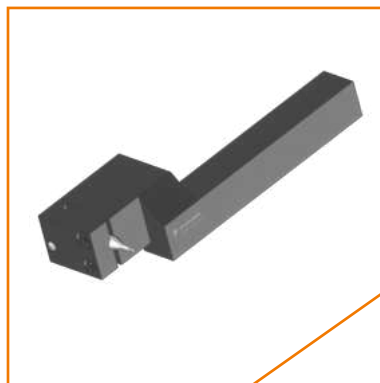
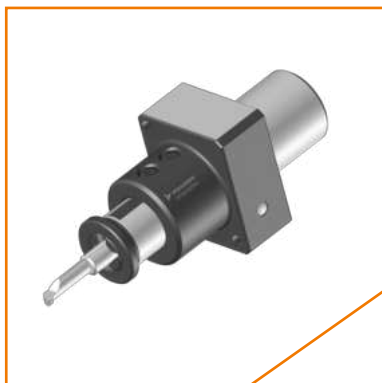
ifanger.com/skillpart-EN



BACK OPERATION HOLDER

SQUARE SHANK HOLDER

ROUND SHANK HOLDER



Swiss-MicroTurn System

Functions and benefits

The Swiss-MicroTurn tool system offers maximum precision, efficiency, flexibility and reliability for machining a wide range of materials. It improves working conditions and end product quality through a large coolant channel, which ensures better cooling, lubrication, chip evacuation, higher machining quality, and tool life. The unique round holders increase flexibility, safety and comfort for the machine operator, especially in demanding working environments such as narrow and oily machine rooms, which significantly increases the efficiency and safety of work processes.



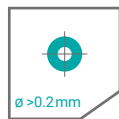
ULTRA-SHARP



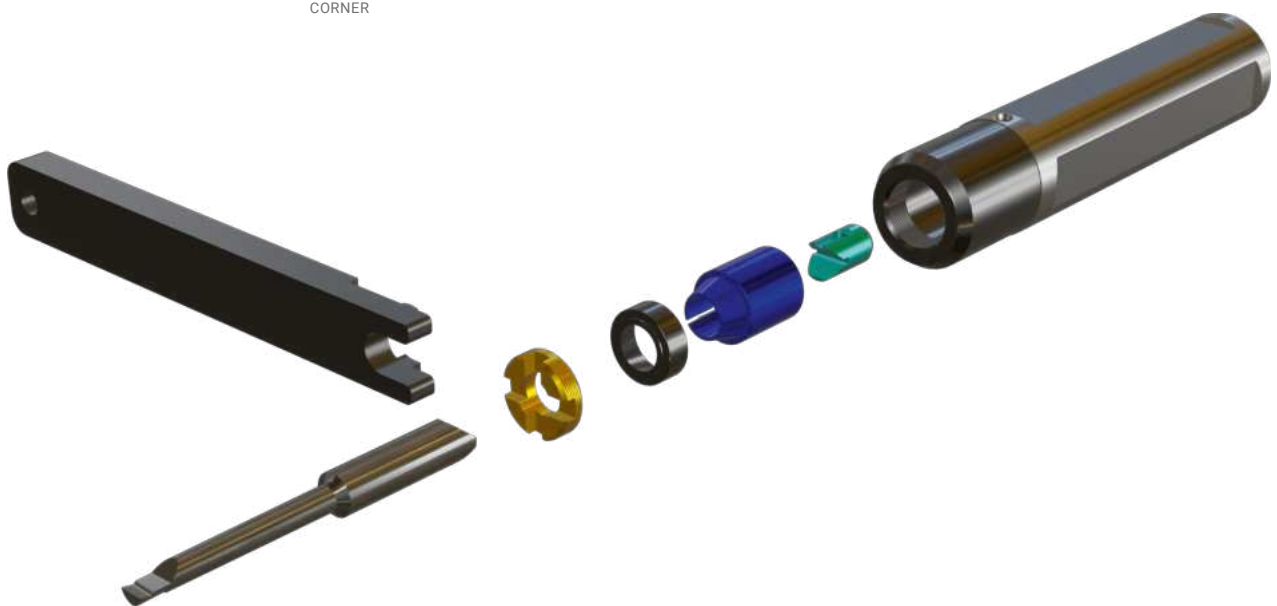
CHIP CONTROL



CHOICES OF CUTTING CORNER



MICRO BORING



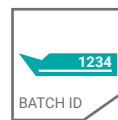
ifanger.com/microturn



MICROGRAIN CARBIDE



HIGH PERFORMANCE COATINGS



TRACEABILITY QUALITY



TOOL LIFETIME



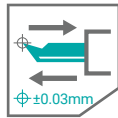
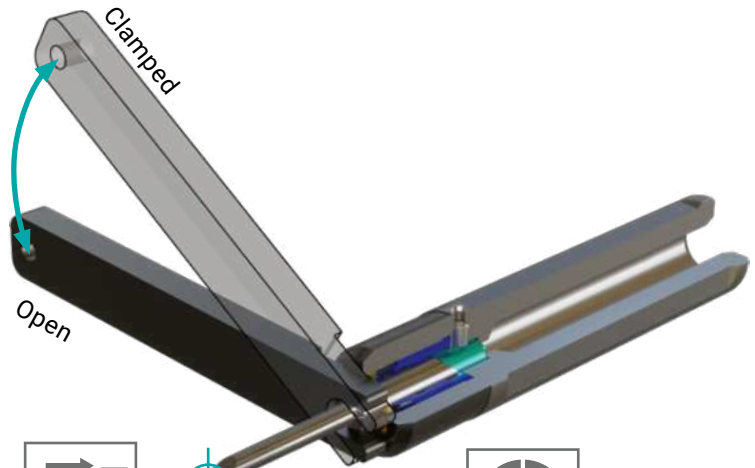
HIGH STOCK AVAILABILITY
300'000+ ITEMS



SAFER TOOL CHANGE



QUICK CHANGE



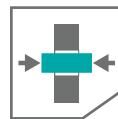
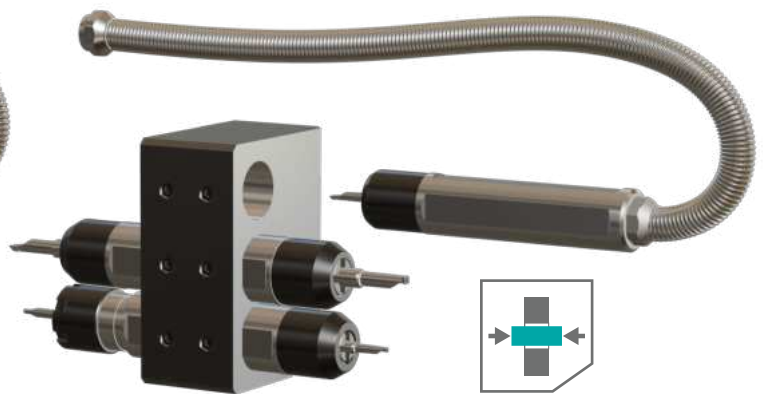
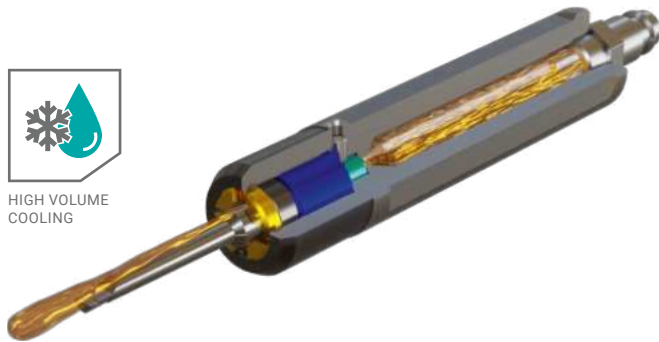
REPEATED POSITIONING ACCURACY



VIBRATION ABSORBING TOOL CLAMPING



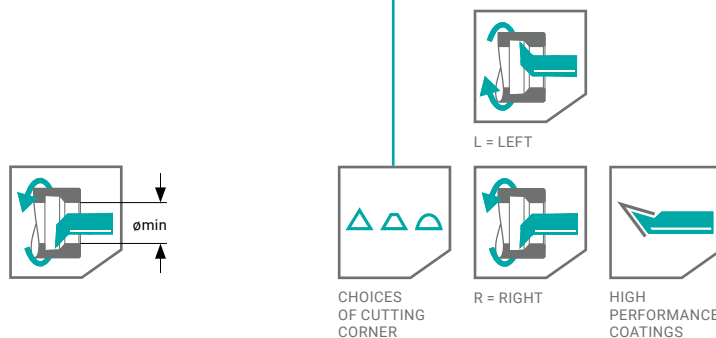
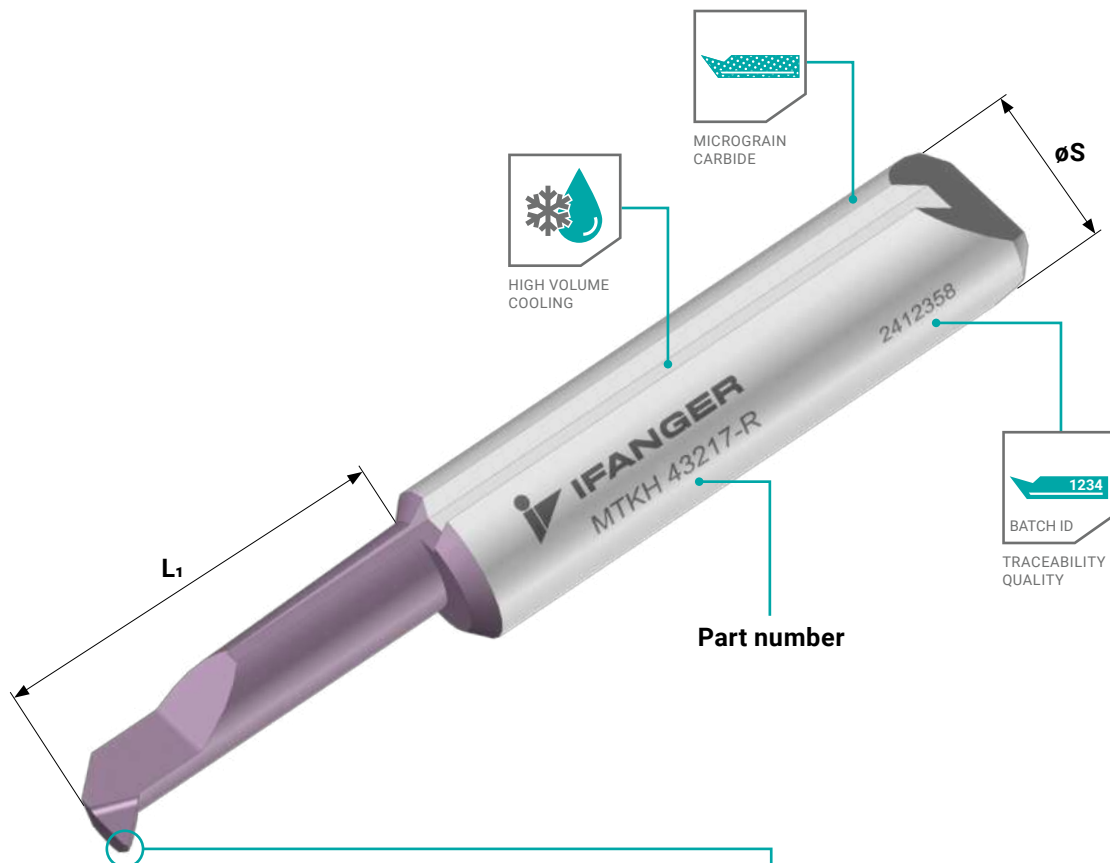
HIGH VOLUME COOLING



HOLDER LEFT OR RIGHT INSERTION

Nomenclature

For Swiss-MicroTurn cutting tools



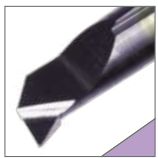
Composition of part number

M	T	K	H	4	3	2	1	7		- R -	TiAlN
Brand		Typ		$\varnothing S$	\varnothing_{min}		L_1		R	Direction of rotation	Coating
Swiss-MicroTurn		Profiling tool 3° / 47°		4 mm	3.2 mm		17 mm		0.08 mm	Right	Titanium-Aluminium-Nitrid

Cutting materials

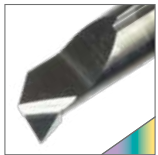
Carbide grades and coatings

Coatings primarily improve the wear resistance of tools and enable higher cutting speeds. The tool cutting edge is protected against wear and abrasive removal of the chip as it runs off, with the aim of keeping the tool cutting for as long as possible. Coatings also contribute to corrosion protection and the reduction of residual compressive stress in the carbide.



TiAlN (Titanium-Aluminum-Nitride)

Titanium-aluminum-nitride coatings are particularly suitable for machining hard and tough materials such as stainless steel and titanium alloys. They are used as an all-round coating for machining steel, non-ferrous metals and plastics. The most effective measure for reducing wear is the TiAlN coating. The TiAlN coating protects the cutting edge primarily through its significantly higher hardness compared to the substrate and leads to a significant reduction in abrasive wear. The titanium-aluminum-nitride coating also offers the advantage of improved dissipation of the heat generated during the machining process. This results in a reduced thermal load on the tool. Better heat dissipation also helps to increase the service life of the tool and improve machining accuracy, as overheating is avoided.



DLC (Diamond Like Carbon)

Diamond-coated cutting tools are suitable for machining difficult-to-cut or highly abrasive materials, such as graphite, ceramics

materials and carbide green bodies, carbon fiber-reinforced plastics and for maximum precision and very smooth surfaces when machining non-ferrous metals. The amorphous carbon coating is harder and smoother than the TiAlN coating, for example.



SPEC (special coatings)

We are also happy to offer you customized coating solutions. Do not hesitate to contact us for a personal consultation.

Examples:

AlCrN aluminum-chromium-nitride coatings for tough alloys such as 300 series stainless steel and steels up to HRC 50.

AlTiSiN aluminum-titanium-silicon nitride coatings for stainless steel and high-temperature alloys and for hard machining from HRC 55.

Carbide K10 Micrograin

Ultra-fine grain (grain size 0.8 micrometers) with 6 % cobalt and 94 % tungsten carbide. K10 is suitable for the machining of high-strength materials and non-ferrous metals and when high cutting ability and dimensional accuracy is required. Standard for all Swiss-MicroTurn steels except threaded steels.

Carbide K20 Micrograin

Ultra-fine grain (grain size 0.8 micrometers) with 10 % cobalt and 90 % tungsten carbide. This carbide is slightly less hard than K10 but significantly tougher. This carbide grade is particularly suitable for threading tools.

The carbides are sourced from European manufacturers who have committed themselves to the principles of the "Responsible Minerals Initiative".

Standard values

Cutting speed (v_c)

The optimum cutting values ($v_c / f_n / a_p$) depend on various factors, including the machine, the cooling system, the tool coatings, the tool holder and the desired quality grade of the workpiece geometry to be machined.

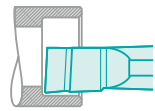
ISO	Material	N/mm ²	Example	Specification	v_c (m/min)	
P	P1	Free-cutting steels	≤800	St 70-2 / E 360	DIN 1.0070	70 – 100
		Case-hardening steels	≤800	16 MnCr 5	DIN 1.7131	70 – 100
		Cast steel	≤800	25 CrMo 4	DIN 1.7218	70 – 100
	P2	Case-hardening steels	≤1000	20 MoCr 3	DIN 1.7320	70 – 100
		Tempering steels	≤1000	42 CrMo 4	DIN 1.7225	70 – 100
		Cold work steels	≤1000	102 Cr 6	DIN 1.2067	70 – 100
	P3	High-alloy steels	≤1400	X 38 CrMoV 5-3	DIN 1.2367	60 – 90
		Cold work steels	≤1400	X 100 CrMoV 8-1-1	DIN 1.2990	60 – 90
		Hot-work steels	≤1400	X 40 CrMoV 5-1	DIN 1.2344	60 – 90
	P4	Stainless steels, ferritic	≤1200	X 17 CrNi 16-2	DIN 1.4057	60 – 80
M	M1	Stainless steels, austenitic	≤900	X 5 CrNi 18-10	DIN 1.4301	30 – 60
	M2	Stainless steels, austenitic, heat-resistant	≤1200	X 2 CrNiMoN 25-7-4	DIN 1.4410	25 – 30
K	K1	Cast iron with lamellar graphite	≤400	EN GJL 300 (GG30)	DIN 1561	40 – 80
	K2	Cast iron with nodular graphite	≤900	EN GJS 700 2 (GGG70)	DIN 1563	40 – 70
	K3	Cast iron with vermicular graphite	≤500	GJV 450		40 – 80
N	N1	Aluminum wrought alloys	≤250	AlMg 1	DIN 3.3315	80 – 150
	N2	Aluminum wrought alloys	≤550	AlZn 5 Mg 3 Cu	DIN 3.4345	80 – 150
	N4	Pure copper, low-alloyed copper	≤500	E-Cu 57		80 – 150
		Brass with lead, short-chipping	≤540	CuZn 39 Pb 3 / CuZn 36 Pb 3		80 – 150
	Brass without lead, long-chipping	≤700	CuZn 42 / CuZn 21 Si 3 P		30 – 60	
S	S1	Titanium alloys	≤1250	Ti 6 Al 4 V	WL 3.7164	40 – 60
	S2	Titanium alloys	≤1400	Ti 4 Al 4 Mo 2 Sn	WL 3.7184	40 – 60
	S3	Nickel alloys	≤1000	NiCu 30 Fe (Alloy 400)	DIN 2.436	20 – 40
	S4	Nickel alloys	≤1600	NiCr 19 Fe 19 Nb 5 Mo 3 (INCONEL)	DIN 2.4668	20 – 40
O	O1	Duroplastics (short-chip)		Bakelit, Pertinax		On request
	O2	Fiber-reinforced plastics (fiber content ≤ 30 %)		GFK, CFK, AFK		On request
	O3	Graphite		C 800		On request

Standard values

Feed rate (f_n)

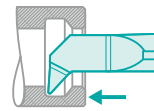
Boring tool

MTEC, MTEN*, MTEE,
MTEF***, MTEP***



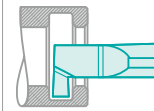
Profiling tool

MTKN*, MTKH, MTKO,
MTKR



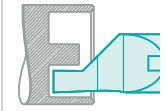
Grooving tool

MTNU, MTNR, MTNN



Face grooving tool

MTNX, MTNY

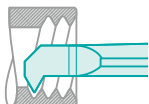


Material		\varnothing min 1.0–2.5 mm	\varnothing min >2.5 mm		\varnothing min >1.0 mm		\varnothing min >2.0 mm		\varnothing min >6.0 mm
ISO		f_n (mm)	f_n (mm)	**	f_n (mm)	**	f_n (mm)	**	f_n (mm)
P	P1	0.02 – 0.04	0.03 – 0.08		0.05 – 0.15		0.02 – 0.06		0.02 – 0.05
		0.02 – 0.04	0.03 – 0.08		0.05 – 0.15		0.02 – 0.06		0.02 – 0.05
		0.02 – 0.04	0.03 – 0.08		0.05 – 0.15		0.02 – 0.06		0.02 – 0.05
	P2	0.01 – 0.03	0.03 – 0.07		0.05 – 0.12		0.02 – 0.06		0.02 – 0.05
		0.01 – 0.03	0.03 – 0.07		0.05 – 0.12		0.02 – 0.06		0.02 – 0.05
		0.01 – 0.03	0.03 – 0.07		0.05 – 0.12		0.02 – 0.06		0.02 – 0.05
	P3	0.005 – 0.02	0.03 – 0.06		0.03 – 0.10		0.015 – 0.04		0.01 – 0.03
		0.005 – 0.02	0.03 – 0.06		0.03 – 0.10		0.015 – 0.04		0.01 – 0.03
0.005 – 0.02		0.03 – 0.06		0.03 – 0.10		0.015 – 0.04		0.01 – 0.03	
P4	0.005 – 0.02	0.02 – 0.06		0.03 – 0.10		0.015 – 0.04		0.005 – 0.02	
	0.005 – 0.02	0.02 – 0.06		0.03 – 0.10		0.015 – 0.04		0.005 – 0.02	
M	M1	0.01 – 0.03	0.02 – 0.05		0.005 – 0.01		0.005 – 0.01		0.005 – 0.01
	M2	0.005 – 0.02	0.02 – 0.06		0.003 – 0.06		0.003 – 0.006		0.003 – 0.006
K	K1	0.01 – 0.03	0.04 – 0.08	MTEN	0.05 – 0.15	MTKN	0.02 – 0.07	MTNN	0.02 – 0.05
	K2	0.01 – 0.03	0.03 – 0.08	MTEN	0.003 – 0.12	MTKN	0.02 – 0.05	MTNN	0.01 – 0.04
	K3	0.01 – 0.03	0.04 – 0.08	MTEN	0.05 – 0.15	MTKN	0.02 – 0.07	MTNN	0.02 – 0.05
N	N1	0.01 – 0.05	0.03 – 0.08		0.05 – 0.15		0.03 – 0.06		0.02 – 0.05
	N2	0.01 – 0.05	0.03 – 0.08		0.05 – 0.15		0.03 – 0.06		0.02 – 0.05
	N4	0.01 – 0.05	0.03 – 0.08		0.05 – 0.15		0.03 – 0.06		0.02 – 0.05
		0.02 – 0.05	0.03 – 0.08	MTEN	0.05 – 0.15	MTKN	0.03 – 0.06	MTNN	0.02 – 0.05
		***	***	MTEF					
	***	***	MTEP						
S	S1	0.01 – 0.03	0.02 – 0.05		0.02 – 0.1		0.02 – 0.05		0.01 – 0.03
	S2	0.01 – 0.03	0.02 – 0.05		0.02 – 0.1		0.02 – 0.05		0.01 – 0.03
	S3	0.005 – 0.02	0.01 – 0.04		0.02 – 0.08		0.01 – 0.04		0.005 – 0.02
	S4	0.005 – 0.02	0.01 – 0.04		0.02 – 0.08		0.01 – 0.04		0.005 – 0.02
O	O1	On request							
	O2	On request							
	O3	On request							

Threading tool

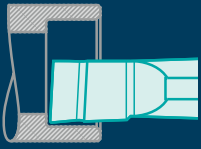
MTGE, MTGW

Take the cutting depth (a_p) and number of cuts (N) from the corresponding tool pages



Notes

- * MTEN, MTKN: For bore diameters <1 mm begin with maximum feed rate of 0.01 mm
- ** Recommended tool
- *** MTEF, MTEP: Take the cutting depth (a_p) and feed rate (f_n) from the diagram on the corresponding tool pages



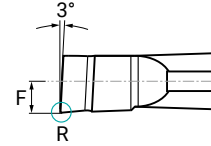
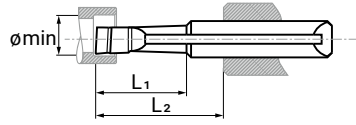
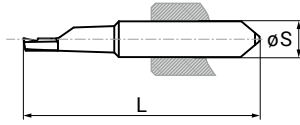
MTEC

Boring tool
Rake angle (γ) = 6–12°



P **M** **N*** **S** **O** *Brass with lead: use MTEN
Brass without lead: use MTEP, MTEF

Standard values (V_c / f_z) Page 10–11
Carbide grades and coatings Page 9



ϕ_{min}	ϕS	L	L ₁	L ₂	F	γ	R			Ref. N°	Rotation		Coating			
							Δ	Δ	Δ		R	L	K10	TiAlN	DLC	SPEC
1.0	4	26	3	10	0.50	6°	0			MTEC 410030	●	●	●	●	○	○
1.0	4	26	3	10	0.50	6°		0.02 × 45°		MTEC 41003	●	●	●	●	○	○
1.0	4	26	5	10	0.50	6°	0			MTEC 410050	●	●	●	●	○	○
1.0	4	26	5	10	0.50	6°		0.02 × 45°		MTEC 41005	●	●	●	●	○	○
1.2	4	31	4	15	0.60	12°	0			MTEC 412040	●	●	●	●	○	○
1.2	4	31	4	15	0.60	12°		0.02 × 45°		MTEC 41204	●	●	●	●	○	○
1.2	4	31	7	15	0.60	12°	0			MTEC 412070	●	●	●	●	○	○
1.2	4	31	7	15	0.60	12°		0.02 × 45°		MTEC 41207	●	●	●	●	○	○
1.5	4	31	5	15	0.75	12°	0			MTEC 415050	●	●	●	●	○	○
1.5	4	31	5	15	0.75	12°		0.02 × 45°		MTEC 41505	●	●	●	●	○	○
1.5	4	31	8	15	0.75	12°	0			MTEC 415080	●	●	●	●	○	○
1.5	4	31	8	15	0.75	12°		0.02 × 45°		MTEC 41508	●	●	●	●	○	○
1.8	4	31	5	15	0.90	12°	0			MTEC 418050	●	●	●	●	○	○
1.8	4	31	5	15	0.90	12°		0.03 × 45°		MTEC 41805	●	●	●	●	○	○
1.8	4	31	9	15	0.90	12°	0			MTEC 418090	●	●	●	●	○	○
1.8	4	31	9	15	0.90	12°		0.03 × 45°		MTEC 41809	●	●	●	●	○	○
1.8	4	31	14	15	0.90	12°	0			MTEC 418140	●	●	●	●	○	○
1.8	4	31	14	15	0.90	12°		0.03 × 45°		MTEC 41814	●	●	●	●	○	○
2.2	4	31	6	15	1.10	12°	0			MTEC 422060	●	●	●	●	○	○
2.2	4	31	6	15	1.10	12°			R0.05	MTEC 42206	●	●	●	●	○	○
2.2	4	31	10	15	1.10	12°	0			MTEC 422100	●	●	●	●	○	○
2.2	4	31	10	15	1.10	12°			R0.05	MTEC 42210	●	●	●	●	○	○
2.2	4	31	14	15	1.10	12°	0			MTEC 422140	●	●	●	●	○	○
2.2	4	31	14	15	1.10	12°			R0.05	MTEC 42214	●	●	●	●	○	○
2.5	4	31	6	15	1.25	12°	0			MTEC 425060	●	●	●	●	○	○
2.5	4	31	6	15	1.25	12°			R0.05	MTEC 42506	●	●	●	●	○	○
2.5	4	31	10	15	1.25	12°	0			MTEC 425100	●	●	●	●	○	○
2.5	4	31	10	15	1.25	12°			R0.05	MTEC 42510	●	●	●	●	○	○
2.5	4	31	14	15	1.25	12°	0			MTEC 425140	●	●	●	●	○	○
2.5	4	31	14	15	1.25	12°			R0.05	MTEC 42514	●	●	●	●	○	○
3.2	4	31	8	15	1.60	12°	0			MTEC 432080	●	●	●	●	○	○
3.2	4	31	8	15	1.60	12°			R0.05	MTEC 432085	●	●	●	●	○	○
3.2	4	31	8	15	1.60	12°			R0.08	MTEC 43208	●	●	●	●	○	○
3.2	4	31	12	15	1.60	12°	0			MTEC 432120	●	●	●	●	○	○
3.2	4	31	12	15	1.60	12°			R0.05	MTEC 432125	●	●	●	●	○	○
3.2	4	31	12	15	1.60	12°			R0.08	MTEC 43212	●	●	●	●	○	○
3.2	4	36	17	20	1.60	12°	0			MTEC 432170	●	●	●	●	○	○

Dimensions in mm

ømin	øS	L	L ₁	L ₂	F	γ	R			Ref. N°	Rotation		Coating			
							△	△	△		R	L	K10	TiAIN	DLC	SPEC
3.2	4	36	17	20	1.60	12°			R0.05	MTEC 432175	●	●	●	●	○	○
3.2	4	36	17	20	1.60	12°			R0.08	MTEC 43217	●	●	●	●	○	○
4.0	4	31	10	15	1.95	12°	0			MTEC 440100	●	●	●	●	○	○
4.0	4	31	10	15	1.95	12°			R0.05	MTEC 440105	●	●	●	●	○	○
4.0	4	31	10	15	1.95	12°			R0.12	MTEC 44010	●	●	●	●	○	○
4.0	4	31	14	15	1.95	12°	0			MTEC 440140	●	●	●	●	○	○
4.0	4	31	14	15	1.95	12°			R0.05	MTEC 440145	●	●	●	●	○	○
4.0	4	31	14	15	1.95	12°			R0.12	MTEC 44014	●	●	●	●	○	○
4.0	4	36	19	20	1.95	12°	0			MTEC 440190	●	●	●	●	○	○
4.0	4	36	19	20	1.95	12°			R0.05	MTEC 440195	●	●	●	●	○	○
4.0	4	36	19	20	1.95	12°			R0.12	MTEC 44019	●	●	●	●	○	○
4.0	6	48	25	29	1.95	12°	0			MTEC 640250	●	●	●	●	○	○
4.0	6	48	25	29	1.95	12°			R0.05	MTEC 640255	●	●	●	●	○	○
4.0	6	48	25	29	1.95	12°			R0.12	MTEC 64025	●	●	●	●	○	○
4.0	6	53	30	34	1.95	12°	0			MTEC 640300	●	●	●	●	○	○
4.0	6	53	30	34	1.95	12°			R0.05	MTEC 640305	●	●	●	●	○	○
4.0	6	53	30	34	1.95	12°			R0.12	MTEC 64030	●	●	●	●	○	○
5.0	6	35	12	16	2.50	12°			R0.05	MTEC 650125	●	●	●	●	○	○
5.0	6	35	12	16	2.50	12°			R0.15	MTEC 65012	●	●	●	●	○	○
5.0	6	43	17	24	2.50	12°			R0.05	MTEC 650175	●	●	●	●	○	○
5.0	6	43	17	24	2.50	12°			R0.15	MTEC 65017	●	●	●	●	○	○
5.0	6	48	25	29	2.50	12°			R0.05	MTEC 650255	●	●	●	●	○	○
5.0	6	48	25	29	2.50	12°			R0.15	MTEC 65025	●	●	●	●	○	○
5.0	6	53	32	34	2.50	12°			R0.05	MTEC 650325	●	●	●	●	○	○
5.0	6	53	32	34	2.50	12°			R0.15	MTEC 65032	●	●	●	●	○	○
5.0	6	61	40	42	2.50	12°			R0.05	MTEC 650405	●	●	●	●	○	○
5.0	6	61	40	42	2.50	12°			R0.15	MTEC 65040	●	●	●	●	○	○
6.0	6	35	12	16	2.95	12°			R0.05	MTEC 660125	●	●	●	●	○	○
6.0	6	35	12	16	2.95	12°			R0.20	MTEC 66012	●	●	●	●	○	○
6.0	6	43	20	24	2.95	12°			R0.05	MTEC 660205	●	●	●	●	○	○
6.0	6	43	20	24	2.95	12°			R0.20	MTEC 66020	●	●	●	●	○	○
6.0	6	53	30	34	2.95	12°			R0.05	MTEC 660305	●	●	●	●	○	○
6.0	6	53	30	34	2.95	12°			R0.20	MTEC 66030	●	●	●	●	○	○
6.0	6	61	40	42	2.95	12°			R0.05	MTEC 660405	●	●	●	●	○	○
6.0	6	61	40	42	2.95	12°			R0.20	MTEC 66040	●	●	●	●	○	○
6.0	6	71	50	52	2.95	12°			R0.05	MTEC 660505	●	●	●	●	○	○
6.0	6	71	50	52	2.95	12°			R0.20	MTEC 66050	●	●	●	●	○	○

Dimensions in mm

Order directly online

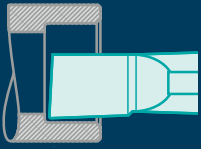
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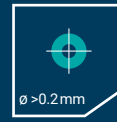


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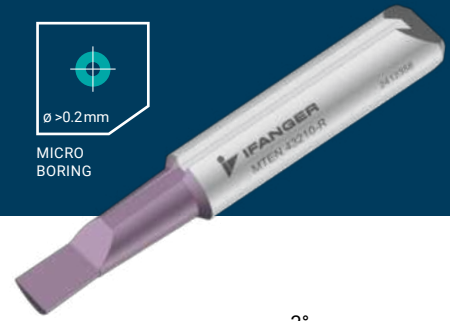


MTEN

Boring tool neutral
Rake angle (γ) = 0°



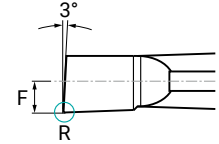
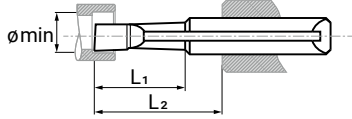
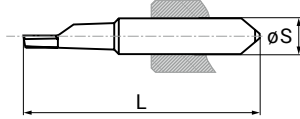
MICRO
BORING



P **M** **K** **N*** **S** **O**

*Brass with lead: use MTEN
Brass without lead: use MTEP, MTEF

Standard values (V_c / f_z) Page 10-11
Carbide grades and coatings Page 9

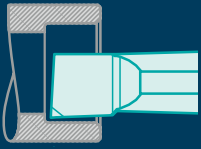


ϕ_{min}	ϕS	L	L ₁	L ₂	F	γ	R			Ref. N°	Rotation		Coating			
							Δ	Δ	Δ		R	L	K10	TiAlN	DLC	SPEC
0.2	4	20	0.3	10	0.10	0°	0			MTEN 402010	●	●	●	●	○	○
0.3	4	26	0.4	10	0.15	0°	0			MTEN 403010	●	●	●	●	○	○
0.4	4	26	0.5	10	0.20	0°	0			MTEN 404010	●	●	●	●	○	○
0.5	4	26	0.6	10	0.25	0°	0			MTEN 405010	●	●	●	●	○	○
0.5	4	26	1.5	10	0.25	0°	0			MTEN 405020	●	●	●	●	○	○
0.7	4	26	0.8	10	0.35	0°	0			MTEN 407010	●	●	●	●	○	○
0.7	4	26	2.0	10	0.35	0°	0			MTEN 407020	●	●	●	●	○	○
0.7	4	26	2.0	10	0.35	0°		0.02 × 45°		MTEN 40702	●	●	●	●	○	○
1.0	4	26	1.2	10	0.50	0°	0			MTEN 410020	●	●	●	●	○	○
1.0	4	26	3.0	10	0.50	0°	0			MTEN 410030	●	●	●	●	○	○
1.0	4	26	3.0	10	0.50	0°		0.02 × 45°		MTEN 41003	●	●	●	●	○	○
1.0	4	26	5.0	10	0.50	0°	0			MTEN 410050	●	●	●	●	○	○
1.0	4	26	5.0	10	0.50	0°		0.02 × 45°		MTEN 41005	●	●	●	●	○	○
1.2	4	26	2.0	10	0.60	0°	0			MTEN 412020	●	●	●	●	○	○
1.2	4	31	4.0	15	0.60	0°	0			MTEN 412040	●	●	●	●	○	○
1.2	4	31	4.0	15	0.60	0°		0.02 × 45°		MTEN 41204	●	●	●	●	○	○
1.2	4	31	7.0	15	0.60	0°	0			MTEN 412070	●	●	●	●	○	○
1.2	4	31	7.0	15	0.60	0°		0.02 × 45°		MTEN 41207	●	●	●	●	○	○
1.5	4	26	3.0	10	0.75	0°	0			MTEN 415030	●	●	●	●	○	○
1.5	4	31	5.0	15	0.75	0°	0			MTEN 415050	●	●	●	●	○	○
1.5	4	31	5.0	15	0.75	0°		0.02 × 45°		MTEN 41505	●	●	●	●	○	○
1.5	4	31	8.0	15	0.75	0°	0			MTEN 415080	●	●	●	●	○	○
1.5	4	31	8.0	15	0.75	0°		0.02 × 45°		MTEN 41508	●	●	●	●	○	○
1.8	4	26	4.0	10	0.90	0°	0			MTEN 418040	●	●	●	●	○	○
1.8	4	31	5.0	15	0.90	0°	0			MTEN 418050	●	●	●	●	○	○
1.8	4	31	5.0	15	0.90	0°		0.03 × 45°		MTEN 41805	●	●	●	●	○	○
1.8	4	31	9.0	15	0.90	0°	0			MTEN 418090	●	●	●	●	○	○
1.8	4	31	9.0	15	0.90	0°		0.03 × 45°		MTEN 41809	●	●	●	●	○	○
1.8	4	31	14.0	15	0.90	0°	0			MTEN 418140	●	●	●	●	○	○
1.8	4	31	14.0	15	0.90	0°		0.03 × 45°		MTEN 41814	●	●	●	●	○	○
2.2	4	31	6.0	15	1.10	0°	0			MTEN 422060	●	●	●	●	○	○
2.2	4	31	6.0	15	1.10	0°			R0.05	MTEN 42206	●	●	●	●	○	○
2.2	4	31	10.0	15	1.10	0°	0			MTEN 422100	●	●	●	●	○	○
2.2	4	31	10.0	15	1.10	0°			R0.05	MTEN 42210	●	●	●	●	○	○
2.2	4	31	14.0	15	1.10	0°	0			MTEN 422140	●	●	●	●	○	○
2.2	4	31	14.0	15	1.10	0°			R0.05	MTEN 42214	●	●	●	●	○	○
2.5	4	31	6.0	15	1.25	0°	0			MTEN 425060	●	●	●	●	○	○

Dimensions in mm

ømin	øS	L	L ₁	L ₂	F	γ	R			Ref. N°	Rotation		Coating			
							△	△	△		R	L	K10	TiAIN	DLC	SPEC
2.5	4	31	6.0	15	1.25	0°			R0.05	MTEN 42506	●	●	●	●	○	○
2.5	4	31	10.0	15	1.25	0°	0			MTEN 425100	●	●	●	●	○	○
2.5	4	31	10.0	15	1.25	0°			R0.05	MTEN 42510	●	●	●	●	○	○
2.5	4	31	14.0	15	1.25	0°	0			MTEN 425140	●	●	●	●	○	○
2.5	4	31	14.0	15	1.25	0°			R0.05	MTEN 42514	●	●	●	●	○	○
3.2	4	31	8.0	15	1.60	0°	0			MTEN 432080	●	●	●	●	○	○
3.2	4	31	8.0	15	1.60	0°			R0.05	MTEN 432085	●	●	●	●	○	○
3.2	4	31	8.0	15	1.60	0°			R0.08	MTEN 43208	●	●	●	●	○	○
3.2	4	31	12.0	15	1.60	0°	0			MTEN 432120	●	●	●	●	○	○
3.2	4	31	12.0	15	1.60	0°			R0.05	MTEN 432125	●	●	●	●	○	○
3.2	4	31	12.0	15	1.60	0°			R0.08	MTEN 43212	●	●	●	●	○	○
3.2	4	36	17.0	20	1.60	0°	0			MTEN 432170	●	●	●	●	○	○
3.2	4	36	17.0	20	1.60	0°			R0.05	MTEN 432175	●	●	●	●	○	○
3.2	4	36	17.0	20	1.60	0°			R0.08	MTEN 43217	●	●	●	●	○	○
4.0	4	31	10.0	15	1.95	0°	0			MTEN 440100	●	●	●	●	○	○
4.0	4	31	10.0	15	1.95	0°			R0.05	MTEN 440105	●	●	●	●	○	○
4.0	4	31	10.0	15	1.95	0°			R0.12	MTEN 44010	●	●	●	●	○	○
4.0	4	31	14.0	15	1.95	0°	0			MTEN 440140	●	●	●	●	○	○
4.0	4	31	14.0	15	1.95	0°			R0.05	MTEN 440145	●	●	●	●	○	○
4.0	4	31	14.0	15	1.95	0°			R0.12	MTEN 44014	●	●	●	●	○	○
4.0	4	36	19.0	20	1.95	0°	0			MTEN 440190	●	●	●	●	○	○
4.0	4	36	19.0	20	1.95	0°			R0.05	MTEN 440195	●	●	●	●	○	○
4.0	4	36	19.0	20	1.95	0°			R0.12	MTEN 44019	●	●	●	●	○	○
4.0	6	48	25.0	29	1.95	0°	0			MTEN 640250	●	●	●	●	○	○
4.0	6	48	25.0	29	1.95	0°			R0.05	MTEN 640255	●	●	●	●	○	○
4.0	6	48	25.0	29	1.95	0°			R0.12	MTEN 64025	●	●	●	●	○	○
4.0	6	53	30.0	34	1.95	0°	0			MTEN 640300	●	●	●	●	○	○
4.0	6	53	30.0	34	1.95	0°			R0.05	MTEN 640305	●	●	●	●	○	○
4.0	6	53	30.0	34	1.95	0°			R0.12	MTEN 64030	●	●	●	●	○	○
5.0	6	35	12.0	16	2.50	0°			R0.05	MTEN 650125	●	●	●	●	○	○
5.0	6	35	12.0	16	2.50	0°			R0.15	MTEN 65012	●	●	●	●	○	○
5.0	6	43	17.0	24	2.50	0°			R0.05	MTEN 650175	●	●	●	●	○	○
5.0	6	43	17.0	24	2.50	0°			R0.15	MTEN 65017	●	●	●	●	○	○
5.0	6	48	25.0	29	2.50	0°			R0.05	MTEN 650255	●	●	●	●	○	○
5.0	6	48	25.0	29	2.50	0°			R0.15	MTEN 65025	●	●	●	●	○	○
5.0	6	53	32.0	34	2.50	0°			R0.05	MTEN 650325	●	●	●	●	○	○
5.0	6	53	32.0	34	2.50	0°			R0.15	MTEN 65032	●	●	●	●	○	○
5.0	6	61	40.0	42	2.50	0°			R0.05	MTEN 650405	●	●	●	●	○	○
5.0	6	61	40.0	42	2.50	0°			R0.15	MTEN 65040	●	●	●	●	○	○
6.0	6	35	12.0	16	2.95	0°			R0.05	MTEN 660125	●	●	●	●	○	○
6.0	6	35	12.0	16	2.95	0°			R0.20	MTEN 66012	●	●	●	●	○	○
6.0	6	43	20.0	24	2.95	0°			R0.05	MTEN 660205	●	●	●	●	○	○
6.0	6	43	20.0	24	2.95	0°			R0.20	MTEN 66020	●	●	●	●	○	○
6.0	6	53	30.0	34	2.95	0°			R0.05	MTEN 660305	●	●	●	●	○	○
6.0	6	53	30.0	34	2.95	0°			R0.20	MTEN 66030	●	●	●	●	○	○
6.0	6	61	40.0	42	2.95	0°			R0.05	MTEN 660405	●	●	●	●	○	○
6.0	6	61	40.0	42	2.95	0°			R0.20	MTEN 66040	●	●	●	●	○	○
6.0	6	71	50.0	52	2.95	0°			R0.05	MTEN 660505	●	●	●	●	○	○
6.0	6	71	50.0	52	2.95	0°			R0.20	MTEN 66050	●	●	●	●	○	○

Dimensions in mm



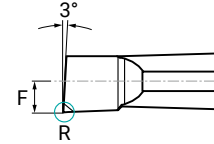
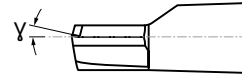
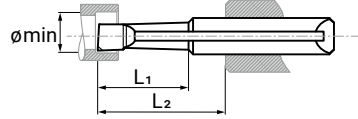
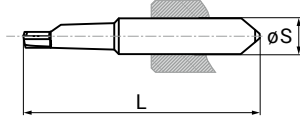
MTEF

Boring tool
 Rake angle (γ) = 12°
 For long-chipping materials



P **M** **N*** **S** *Brass with lead: use MTEN
 Brass without lead: use MTEP, MTEF

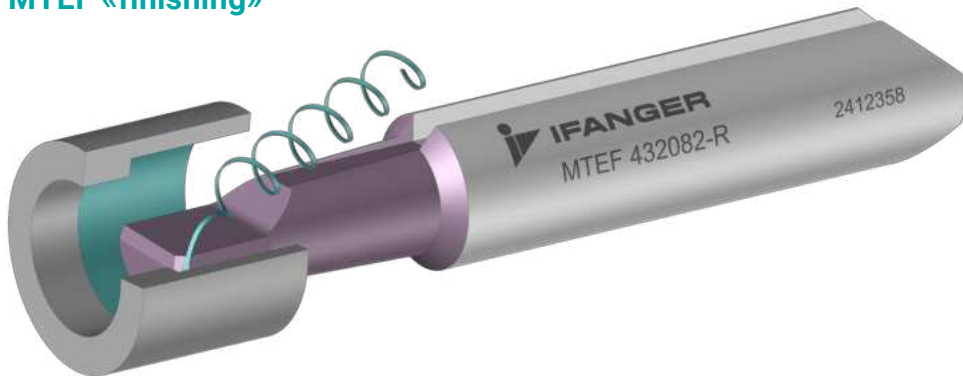
Standard values (V_c / f_z) Page 10-11
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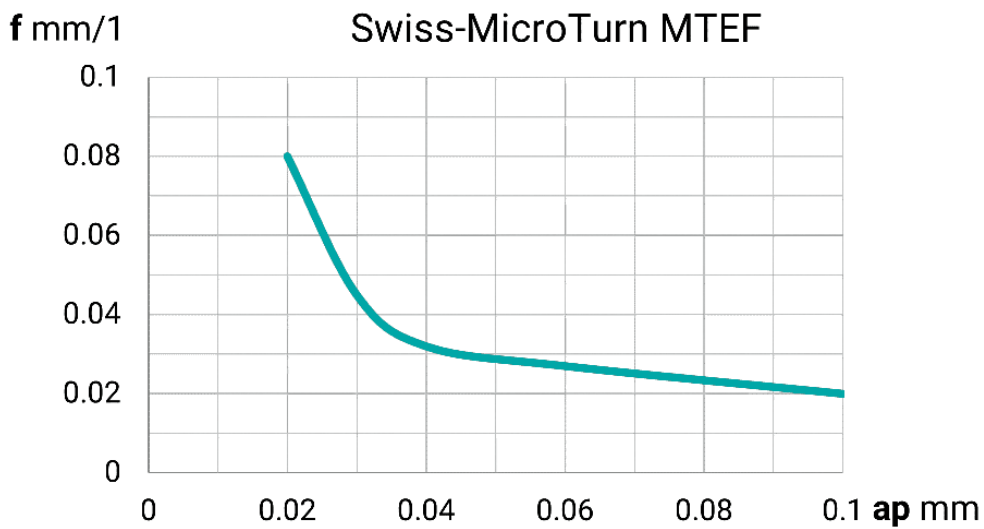
ømin	øS	L	L ₁	L ₂	F	γ	R			Ref. N°	Rotation		Coating				
							Δ	Δ	Δ		R	L	K10	TiAlN	DLC	SPEC	
1.0	4	26	1.2	10	0.50	12°	0				MTEF 410020	●	○	●	●	●	○
1.0	4	26	3	10	0.50	12°	0				MTEF 410030	●	○	●	●	●	○
1.0	4	26	5	10	0.50	12°	0				MTEF 410050	●	○	●	●	●	○
1.2	4	26	2	10	0.60	12°	0				MTEF 412020	●	○	●	●	●	○
1.2	4	31	4	15	0.60	12°	0				MTEF 412040	●	○	●	●	●	○
1.2	4	31	7	15	0.60	12°	0				MTEF 412070	●	○	●	●	●	○
1.5	4	26	3	10	0.75	12°	0				MTEF 415030	●	○	●	●	●	○
1.5	4	31	5	15	0.75	12°	0				MTEF 415050	●	○	●	●	●	○
1.5	4	31	8	15	0.75	12°	0				MTEF 415080	●	○	●	●	●	○
1.8	4	26	4	10	0.90	12°	0				MTEF 418040	●	○	●	●	●	○
1.8	4	31	5	15	0.90	12°	0				MTEF 418050	●	○	●	●	●	○
1.8	4	31	9	15	0.90	12°	0				MTEF 418090	●	○	●	●	●	○
2.2	4	31	6	15	1.10	12°	0				MTEF 422060	●	○	●	●	●	○
2.2	4	31	10	15	1.10	12°	0				MTEF 422100	●	○	●	●	●	○
2.2	4	31	14	15	1.10	12°	0				MTEF 422140	●	○	●	●	●	○
2.5	4	31	6	15	1.25	12°		0.02 × 45°			MTEF 425062	●	○	●	●	●	○
2.5	4	31	10	15	1.25	12°		0.02 × 45°			MTEF 425102	●	○	●	●	●	○
2.5	4	31	14	15	1.25	12°		0.02 × 45°			MTEF 425142	●	○	●	●	●	○
3.2	4	31	8	15	1.60	12°		0.02 × 45°			MTEF 432082	●	○	●	●	●	○
3.2	4	31	12	15	1.60	12°		0.02 × 45°			MTEF 432122	●	○	●	●	●	○
3.2	4	36	17	20	1.60	12°		0.02 × 45°			MTEF 432172	●	○	●	●	●	○
4.0	4	31	10	15	1.95	12°		0.02 × 45°			MTEF 440102	●	○	●	●	●	○
4.0	4	31	14	15	1.95	12°		0.02 × 45°			MTEF 440142	●	○	●	●	●	○
4.0	4	36	19	20	1.95	12°		0.02 × 45°			MTEF 440192	●	○	●	●	●	○
5.0	6	35	12	16	2.50	12°		0.02 × 45°			MTEF 650122	●	○	●	●	●	○
5.0	6	43	17	24	2.50	12°		0.02 × 45°			MTEF 650172	●	○	●	●	●	○
5.0	6	48	25	29	2.50	12°		0.02 × 45°			MTEF 650252	●	○	●	●	●	○
6.0	6	35	12	16	2.95	12°		0.02 × 45°			MTEF 660122	●	○	●	●	●	○
6.0	6	43	20	24	2.95	12°		0.02 × 45°			MTEF 660202	●	○	●	●	●	○
6.0	6	53	30	34	2.95	12°		0.02 × 45°			MTEF 660302	●	○	●	●	●	○

Dimensions in mm

MTEF «finishing»



ifanger.com/chipbreaker



For optimum chip formation, take the values for feed (f_s) and cutting depth (a_p) from the curve.

The maximum cutting depth (a_p) for MTEF is 0.15 mm.

Order directly online

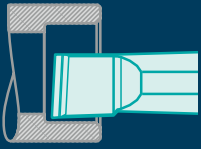
Order the right tool online using the QR code or weblink.

Example order number: MTEF 410020-R-TiAlN

E-Shop items On request



ifanger.com/en/shop



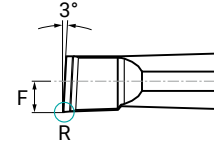
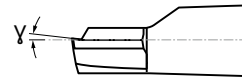
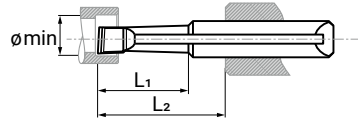
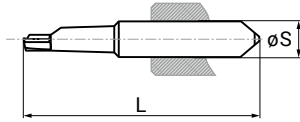
MTEP

Boring tool
 Rake angle (γ) = 12°
 For long-chipping materials



P **M** **N*** **S** *Brass with lead: use MTEN
 Brass without lead: use MTEP, MTEF

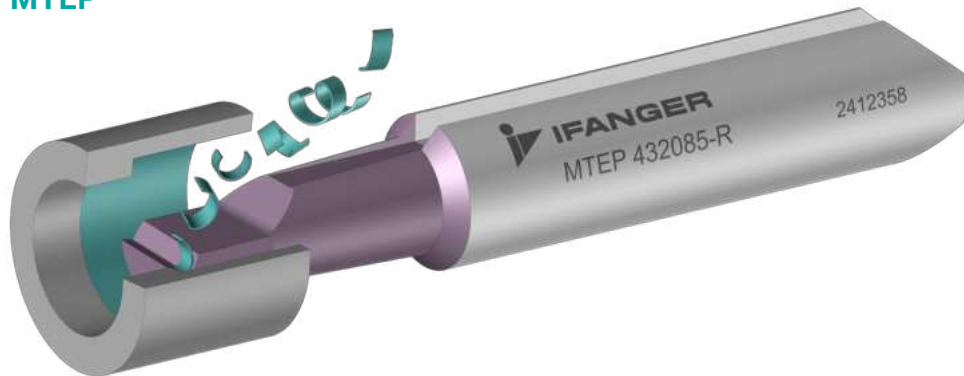
Standard values (V_c / f_{z0}) Page 10-11
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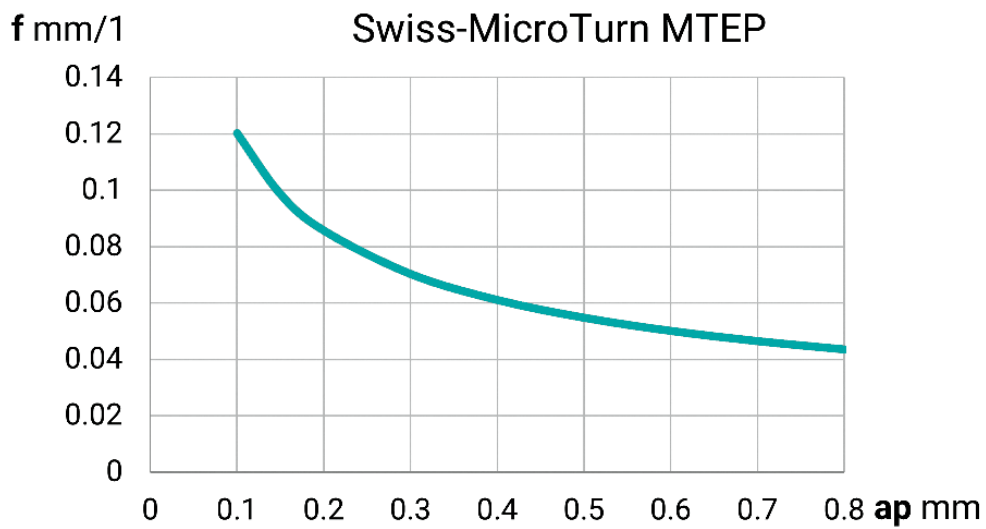
ømin	øS	L	L ₁	L ₂	F	γ	R			Ref. N°	Rotation		Coating			
							Δ	Δ	Δ		R	L	K10	TiAlN	DLC	SPEC
2.5	4	31	6	15	1.25	12°				R0.05	●	○	●	●	●	○
2.5	4	31	10	15	1.25	12°				R0.05	●	○	●	●	●	○
2.5	4	31	14	15	1.25	12°				R0.05	●	○	●	●	●	○
3.2	4	31	8	15	1.60	12°				R0.05	●	○	●	●	●	○
3.2	4	31	12	15	1.60	12°				R0.05	●	○	●	●	●	○
3.2	4	36	17	20	1.60	12°				R0.05	●	○	●	●	●	○
4.0	4	31	10	15	1.95	12°				R0.05	●	○	●	●	●	○
4.0	4	31	14	15	1.95	12°				R0.05	●	○	●	●	●	○
4.0	4	36	19	20	1.95	12°				R0.05	●	○	●	●	●	○
5.0	6	35	12	16	2.50	12°				R0.05	●	○	●	●	●	○
5.0	6	43	17	24	2.50	12°				R0.05	●	○	●	●	●	○
5.0	6	48	25	29	2.50	12°				R0.05	●	○	●	●	●	○
6.0	6	35	12	16	2.95	12°				R0.05	●	○	●	●	●	○
6.0	6	43	20	24	2.95	12°				R0.05	●	○	●	●	●	○
6.0	6	53	30	34	2.95	12°				R0.05	●	○	●	●	●	○

Dimensions in mm

MTEP



ifanger.com/chipbreaker



For optimum chip formation, take the values for feed (f_s) and cutting depth (a_p) from the curve.

The minimal cutting depth (a_p) for MTEP is 0.1 mm.

Order directly online

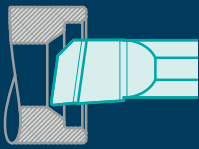
Order the right tool online using the QR code or weblink.

Example order number: MTEP 425065-R-TiAlN

E-Shop items On request



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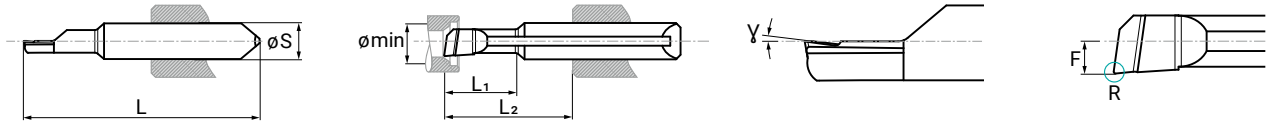
MTEE

Boring tool released
Rake angle (γ) = 8°



P M N S O

Standard values (V_c / f_z) Page 10-11
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ømin	øS	L	L ₁	L ₂	F	γ	R			Ref. N°	Rotation		Coating			
							Δ	Δ	Δ		R	L	K10	TiAlN	DLC	SPEC
1.8	4	31	5.0	15	0.95	8°				R0.05	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.3	4	31	7.0	15	1.20	8°				R0.08	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.5	4	26	4.0	10	1.25	12°				R0.05	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.8	4	31	8.5	15	1.45	8°				R0.10	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.3	4	31	10.5	15	1.70	8°				R0.10	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.8	4	31	12.5	15	1.95	8°				R0.10	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.7	6	43	16.0	24	2.45	8°				R0.15	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.7	6	43	19.5	24	2.95	8°				R0.15	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Dimensions in mm

Use case Ref. N° MTEE 42504



DENTAL TITAN



Order directly online

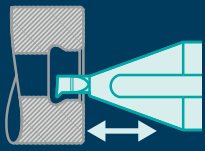
Order the right tool online using the QR code or weblink.

Example order number: MTEE 41805-R-TiAlN

E-Shop items On request

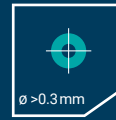


ifanger.com/en/shop



MTKN

Profiling tool neutral 3° / 47°
Rake angle (γ) = 0°

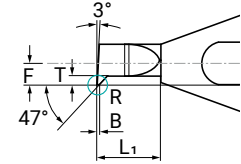
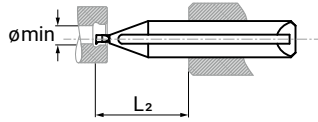
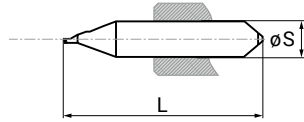


MICRO
BORING



P M K N S O

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ϕmin	ϕS	L	L ₁	L ₂	F	T	γ	B	R			Ref. N°	Rotation		Coating			
									Δ	Δ	Δ		R	L	K10	TiAlN	DLC	SPEC
0.3	4	26	0.6	10	0.15	0.05	0°	0.02	0			MTKN 40301	●	●	●	●	○	○
0.3	4	26	1.0	10	0.15	0.05	0°	0.02	0			MTKN 40302	●	●	●	●	○	○
0.4	4	26	0.8	10	0.20	0.07	0°	0.02	0			MTKN 40401	●	●	●	●	○	○
0.4	4	26	1.3	10	0.20	0.07	0°	0.02	0			MTKN 40402	●	●	●	●	○	○
0.5	4	26	1.0	10	0.25	0.10	0°	0.02	0			MTKN 40501	●	●	●	●	○	○
0.5	4	26	1.6	10	0.25	0.10	0°	0.02	0			MTKN 40502	●	●	●	●	○	○
0.6	4	26	1.2	10	0.30	0.12	0°	0.02	0			MTKN 40601	●	●	●	●	○	○
0.6	4	26	2.0	10	0.30	0.12	0°	0.02	0			MTKN 40602	●	●	●	●	○	○
0.7	4	26	1.2	10	0.35	0.15	0°	0.02	0			MTKN 40701	●	●	●	●	○	○
0.7	4	26	2.2	10	0.35	0.15	0°	0.02	0			MTKN 40702	●	●	●	●	○	○
0.8	4	26	1.4	10	0.40	0.17	0°	0.03	0			MTKN 40801	●	●	●	●	○	○
0.8	4	26	2.5	10	0.40	0.17	0°	0.03	0			MTKN 40802	●	●	●	●	○	○
1.0	4	26	1.5	10	0.50	0.20	0°	0.05	0			MTKN 41002	●	●	●	●	○	○
1.0	4	26	3.1	10	0.50	0.20	0°	0.05	0			MTKN 41003	●	●	●	●	○	○
1.2	4	26	2.0	10	0.60	0.30	0°			R0.03		MTKN 41202	●	●	●	●	○	○
1.2	4	26	3.7	10	0.60	0.30	0°			R0.03		MTKN 41204	●	●	●	●	○	○
1.5	4	26	3.0	10	0.75	0.40	0°			R0.03		MTKN 41503	●	●	●	●	○	○
1.5	4	26	4.6	10	0.75	0.40	0°			R0.03		MTKN 41505	●	●	●	●	○	○
1.8	4	26	4.0	10	0.90	0.50	0°			R0.03		MTKN 41804	●	●	●	●	○	○
1.8	4	26	5.5	10	0.90	0.50	0°			R0.03		MTKN 41806	●	●	●	●	○	○

Dimensions in mm

Order directly online

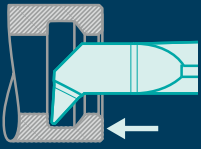
Order the right tool online using the QR code or weblink.

Example order number: MTKN 40301-R-TiAlN

● E-Shop items ○ On request



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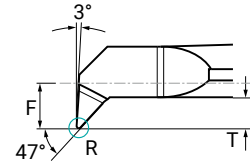
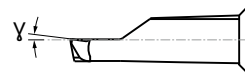
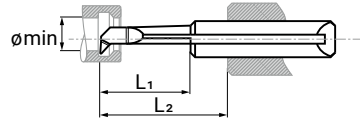
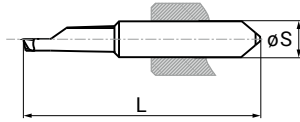
MTKH

Profiling tool 3° / 47°
Rake angle (γ) = 8°



P M N S O

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ϕ min	ϕ S	L	L ₁	L ₂	F	T	γ	R			Ref. N°	Rotation		Coating			
								Δ	Δ	Δ		R	L	K10	TiAlN	DLC	SPEC
2.0	4	31	4	15	1.00	0.50	8°			R0.05	MTKH 42004	●	●	●	●	○	○
2.5	4	31	6	15	1.25	0.50	8°			R0.05	MTKH 42506	●	●	●	●	○	○
2.5	4	31	10	15	1.25	0.50	8°			R0.05	MTKH 42510	●	●	●	●	○	○
3.2	4	31	8	15	1.60	0.60	8°			R0.08	MTKH 43208	●	●	●	●	○	○
3.2	4	31	12	15	1.60	0.60	8°			R0.08	MTKH 43212	●	●	●	●	○	○
3.2	4	36	17	20	1.60	0.60	8°			R0.08	MTKH 43217	●	●	●	●	○	○
4.0	4	31	10	15	1.95	0.80	8°			R0.12	MTKH 44010	●	●	●	●	○	○
4.0	4	31	14	15	1.95	0.80	8°			R0.12	MTKH 44014	●	●	●	●	○	○
4.0	4	36	19	20	1.95	0.80	8°			R0.12	MTKH 44019	●	●	●	●	○	○
4.0	6	48	25	29	1.95	0.80	8°			R0.12	MTKH 64025	●	●	●	●	○	○
4.0	6	53	30	34	1.95	0.80	8°			R0.12	MTKH 64030	●	●	●	●	○	○
5.0	6	35	12	16	2.50	1.20	8°			R0.15	MTKH 65012	●	●	●	●	○	○
5.0	6	43	17	24	2.50	1.20	8°			R0.15	MTKH 65017	●	●	●	●	○	○
5.0	6	48	25	29	2.50	1.20	8°			R0.15	MTKH 65025	●	●	●	●	○	○
5.0	6	53	32	34	2.50	1.20	8°			R0.15	MTKH 65032	●	●	●	●	○	○
5.0	6	61	40	42	2.50	1.20	8°			R0.15	MTKH 65040	●	●	●	●	○	○
6.0	6	35	12	16	2.95	1.45	8°			R0.20	MTKH 66012	●	●	●	●	○	○
6.0	6	43	20	24	2.95	1.45	8°			R0.20	MTKH 66020	●	●	●	●	○	○
6.0	6	53	30	34	2.95	1.45	8°			R0.20	MTKH 66030	●	●	●	●	○	○
6.0	6	61	40	42	2.95	1.45	8°			R0.20	MTKH 66040	●	●	●	●	○	○
6.0	6	71	50	52	2.95	1.45	8°			R0.20	MTKH 66050	●	●	●	●	○	○

Dimensions in mm

Order directly online

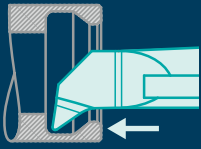
Order the right tool online using the QR code or weblink.

Example order number: MTKH 42004-R-TiAlN

● E-Shop items ○ On request



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MTKO

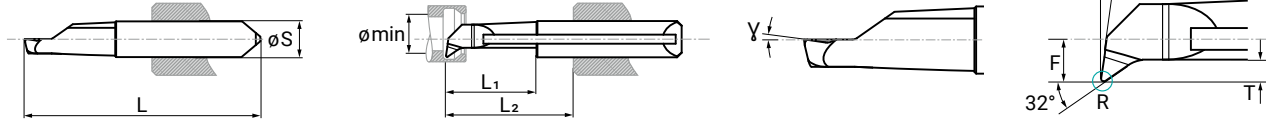
Profiling tool 8° / 32°

Rake angle (γ) = 8°



P M N S O

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Carbide grades and coatings Page 9



ϕ_{min}	ϕ_S	L	L ₁	L ₂	F	T	γ	R			Ref. N°	Rotation		Coating			
								Δ	Δ	Δ		R	L	K10	TiAlN	DLC	SPEC
2.0	4	31	4	15	1.0	0.50	8°			R0.05	MTKO 42004	●	●	●	●	○	○
2.5	4	31	6	15	1.3	0.60	8°			R0.05	MTKO 42506	●	●	●	●	○	○
2.5	4	31	10	15	1.3	0.60	8°			R0.05	MTKO 42510	●	●	●	●	○	○
3.2	4	31	8	15	1.6	0.80	8°			R0.08	MTKO 43208	●	●	●	●	○	○
3.2	4	31	12	15	1.6	0.80	8°			R0.08	MTKO 43212	●	●	●	●	○	○
3.2	4	36	17	20	1.6	0.80	8°			R0.08	MTKO 43217	●	●	●	●	○	○
4.0	4	31	10	15	2.0	0.80	8°			R0.12	MTKO 44010	●	●	●	●	○	○
4.0	4	31	14	15	2.0	0.80	8°			R0.12	MTKO 44014	●	●	●	●	○	○
4.0	4	36	19	20	2.0	0.80	8°			R0.12	MTKO 44019	●	●	●	●	○	○
5.0	6	48	25	29	2.0	0.80	8°			R0.12	MTKO 64025	●	●	●	●	○	○
5.0	6	53	30	34	2.0	0.80	8°			R0.12	MTKO 64030	●	●	●	●	○	○
5.0	6	35	12	16	2.5	1.20	8°			R0.15	MTKO 65012	●	●	●	●	○	○
5.0	6	43	17	24	2.5	1.20	8°			R0.15	MTKO 65017	●	●	●	●	○	○
5.0	6	48	25	29	2.5	1.20	8°			R0.15	MTKO 65025	●	●	●	●	○	○
5.0	6	53	32	34	2.5	1.20	8°			R0.15	MTKO 65032	●	●	●	●	○	○
5.0	6	61	40	42	2.5	1.20	8°			R0.15	MTKO 65040	●	●	●	●	○	○
6.0	6	35	12	16	3.0	1.45	8°			R0.20	MTKO 66012	●	●	●	●	○	○
6.0	6	43	20	24	3.0	1.45	8°			R0.20	MTKO 66020	●	●	●	●	○	○
6.0	6	53	30	34	3.0	1.45	8°			R0.20	MTKO 66030	●	●	●	●	○	○
6.0	6	61	40	42	3.0	1.45	8°			R0.20	MTKO 66040	●	●	●	●	○	○
6.0	6	71	50	52	3.0	1.45	8°			R0.20	MTKO 66050	●	●	●	●	○	○

Dimensions in mm

Order directly online

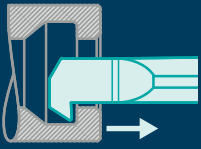
Order the right tool online using the QR code or weblink.

Example order number: MTKO 42004-R-TiAlN

● E-Shop items ○ On request

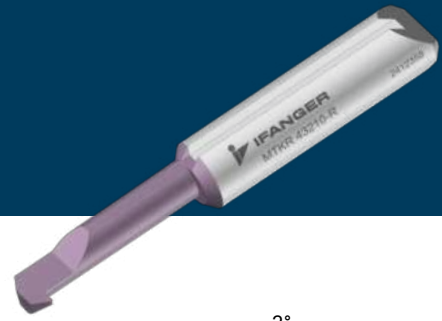


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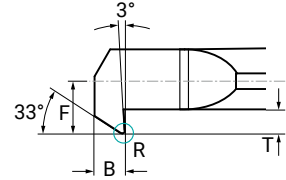
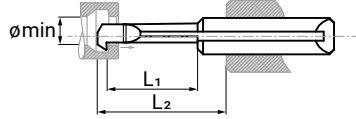
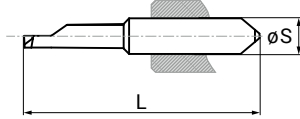
MTKR

Backboring tool
Rake angle (γ) = 0°



P M K N S O

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ømin	øS	L	L ₁	L ₂	T	F	γ	B	R			Ref. N°	Rotation		Coating			
									Δ	Δ	Δ		R	L	K10	TiAlN	DLC	SPEC
2.0	4	31	6	15	0.5	1.0	0°	0.6			R0.05	MTKR 42006	●	○	●	●	○	○
2.5	4	31	10	15	0.6	1.2	0°	0.6			R0.05	MTKR 42510	●	○	●	●	○	○
3.2	4	31	12	15	0.8	1.5	0°	1.0			R0.08	MTKR 43212	●	○	●	●	○	○
4.0	4	36	17	20	1.0	1.9	0°	1.2			R0.12	MTKR 44017	●	○	●	●	○	○
5.0	6	48	22	25	1.2	2.4	0°	1.5			R0.15	MTKR 65022	●	○	●	●	○	○
6.0	6	53	25	32	1.5	2.9	0°	1.8			R0.20	MTKR 66025	●	○	●	●	○	○

Dimensions in mm

Order directly online

Order the right tool online using the QR code or weblink.

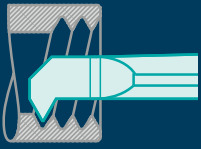
Example order number: MTKR 42006-R-TiAlN

● E-Shop items ○ On request



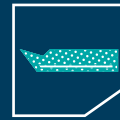
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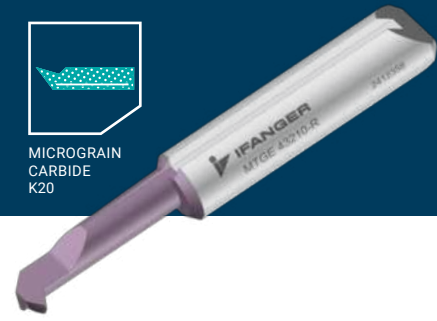


MTGE

Threading tool 60°

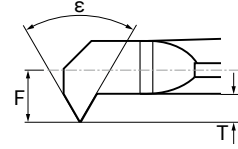
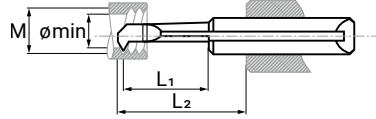
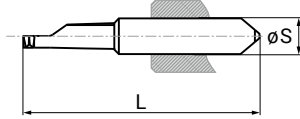


MICROGRAIN
CARBIDE
K20



P M K N S O

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ømin	øS	L	L ₁	L ₂	F	ε	M	P	T	Ref. N°	Rotation		Coating			
											R	L	K20	TiAlN	DLC	SPEC
1.2	4	26	2.3	10	0.6	60°	M1.6	0.20-0.40	0.30	MTGE 41203	●	●	●	●	○	○
1.6	4	26	3.7	10	0.8	60°	M2	0.20-0.50	0.40	MTGE 41604	●	●	●	●	○	○
2.2	4	31	5.1	15	1.1	60°	M3	0.20-0.50	0.60	MTGE 42206	●	●	●	●	○	○
3.2	4	31	7.5	15	1.6	60°	M4	0.50-0.80	1.00	MTGE 43208	●	●	●	●	○	○
4.0	4	31	9.4	15	2.0	60°	M5	0.75-1.00	0.95	MTGE 44010	●	●	●	●	○	○
4.0	4	31	13.4	15	2.0	60°	M5	0.75-1.00	0.95	MTGE 44014	●	●	●	●	○	○
5.0	6	35	11.1	16	2.5	60°	M6	0.75-1.25	1.50	MTGE 65012	●	●	●	●	○	○
5.0	6	43	16.1	24	2.5	60°	M6	0.75-1.25	1.50	MTGE 65017	●	●	●	●	○	○
6.0	6	35	11.0	16	3.0	60°	M8	1.00-1.75	1.50	MTGE 66012	●	●	●	●	○	○
6.0	6	43	19.0	24	3.0	60°	M8	1.00-1.75	1.50	MTGE 66020	●	●	●	●	○	○
6.0	6	53	29.0	34	3.0	60°	M8	1.00-1.75	1.50	MTGE 66030	●	●	●	●	○	○

Dimensions in mm

The number of cuts depends heavily on the material to be machined, the tension of the workpiece and the desired quality class of the thread to be cut.

The last cut should be made with an infeed (a_p) of at least 0.04 mm.

The number of cuts (N) depends on the ISO material class																	
ISO	P1	P2	P3	P4	M1	M2	K1	K2	K3	N1	N2	N4	S1	S2	S3	S4	Q1-Q3
N	6-8	6-8	7-9	7-9	7-9	8-10	7-9	8-10	7-9	6-8	6-8	6-8	7-9	7-9	7-9	7-9	On request

Order directly online

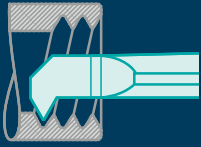
Order the right tool online using the QR code or weblink.

Example order number: MTGE 41203-R-TiAlN

● E-Shop items ○ On request



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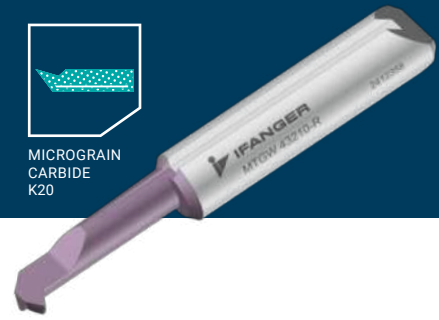
MTGW

Threading tool 55°

For pipe thread / whitworth thread

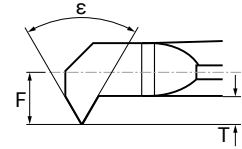
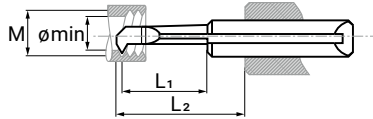
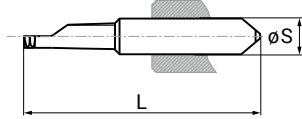


MICROGRAIN
CARBIDE
K20



P M K N S O

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ømin	øS	L	L ₁	L ₂	F	ε	M	P	T	Ref. N°	Rotation		Coating			
											R	L	K20	TiAlN	DLC	SPEC
4.0	4	31	9.4	15	1.95	55°	W 7/32"	20-28	1.00	MTGW 44010	●	○	●	●	○	○
5.0	6	35	11.1	16	2.50	55°	W 5/16"	18-26	1.50	MTGW 65012	●	○	●	●	○	○
6.0	6	43	19.0	24	2.95	55°	W 3/8"	16-22	1.50	MTGW 66020	●	○	●	●	○	○

Dimensions in mm

The number of cuts depends heavily on the material to be machined, the tension of the workpiece and the desired quality class of the thread to be cut.

The last cut should be made with an infeed (a_p) of at least 0.04 mm.

The number of cuts (N) depends on the ISO material class																	
ISO	P1	P2	P3	P4	M1	M2	K1	K2	K3	N1	N2	N4	S1	S2	S3	S4	Q1-Q3
N	9-12	8-10	9-12	9-12	9-12	12-15	11-14	12-15	11-14	8-10	6-8	9-12	10-14	10-14	10-14	10-14	On request

Order directly online

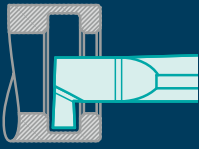
Order the right tool online using the QR code or weblink.

Example order number: MTGW 44010-R-K20

E-Shop items On request



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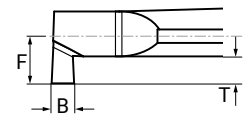
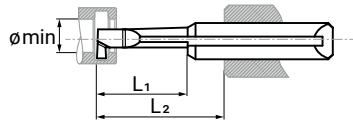
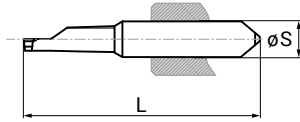
MTNU

Grooving tool
Rake angle (γ) = 12°



P M S O

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ϕmin	ϕS	L	L_1	L_2	F	T	B	γ	Ref. N°	Rotation		Coating			
										R	L	K10	TiAIN	DLC	SPEC
2.0	4	31	6	15	1.00	0.5	0.6	12°	MTNU 42006	●	●	●	●	○	○
2.5	4	31	8	15	1.25	0.6	0.8	12°	MTNU 42508	●	●	●	●	○	○
3.2	4	31	8	15	1.60	0.8	1.0	12°	MTNU 43208	●	●	●	●	○	○
3.2	4	31	12	15	1.60	0.8	1.0	12°	MTNU 43212	●	●	●	●	○	○
3.2	4	36	17	20	1.60	0.8	1.0	12°	MTNU 43217	●	●	●	●	○	○
4.0	4	31	10	15	1.95	0.8	1.0	12°	MTNU 44010	●	●	●	●	○	○
4.0	4	31	14	15	1.95	0.8	1.0	12°	MTNU 44014	●	●	●	●	○	○
4.0	4	36	19	20	1.95	0.8	1.0	12°	MTNU 44019	●	●	●	●	○	○
4.0	6	48	25	29	1.95	0.8	1.0	12°	MTNU 64025	●	●	●	●	○	○
4.0	6	53	30	34	1.95	0.8	1.0	12°	MTNU 64030	●	●	●	●	○	○
5.0	6	35	12	16	2.50	1.5	1.2	12°	MTNU 65012	●	●	●	●	○	○
5.0	6	43	17	24	2.50	1.5	1.2	12°	MTNU 65017	●	●	●	●	○	○
5.0	6	48	25	29	2.50	1.5	1.2	12°	MTNU 65025	●	●	●	●	○	○
5.0	6	53	32	34	2.50	1.5	1.2	12°	MTNU 65032	●	●	●	●	○	○
5.0	6	61	40	42	2.50	1.5	1.2	12°	MTNU 65040	●	●	●	●	○	○
6.0	6	35	12	16	2.95	2.0	1.5	12°	MTNU 66012	●	●	●	●	○	○
6.0	6	43	20	24	2.95	2.0	2.0	12°	MTNU 66020	●	●	●	●	○	○
6.0	6	53	30	34	2.95	2.0	2.0	12°	MTNU 66030	●	●	●	●	○	○
6.0	6	61	40	42	2.95	2.0	2.0	12°	MTNU 66040	●	●	●	●	○	○

Dimensions in mm

Order directly online

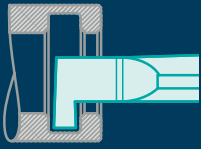
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Example order number: MTNU 42006-R-TiAIN

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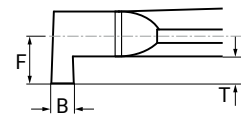
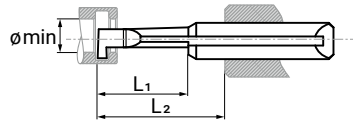
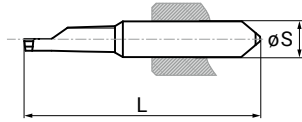
MTNN

Grooving tool neutral
Rake angle (γ) = 0°



P M K N S O

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$\varnothing min$	$\varnothing S$	L	L_1	L_2	F	T	B	γ	Ref. N°	Rotation		Coating			
										R	L	K10	TiAlN	DLC	SPEC
0.3	4	26	0.6	10	0.15	0.05	0.10	0°	MTNN 40301	●	●	●	●	○	○
0.4	4	26	0.8	10	0.20	0.07	0.10	0°	MTNN 40401	●	●	●	●	○	○
0.5	4	26	1.0	10	0.25	0.10	0.15	0°	MTNN 40501	●	●	●	●	○	○
0.7	4	26	1.2	10	0.35	0.15	0.20	0°	MTNN 40701	●	●	●	●	○	○
0.8	4	26	1.4	10	0.30	0.17	0.25	0°	MTNN 40801	●	●	●	●	○	○
1.0	4	26	1.5	10	0.50	0.20	0.30	0°	MTNN 41002	●	●	●	●	○	○
1.2	4	26	2.0	10	0.60	0.30	0.40	0°	MTNN 41202	●	●	●	●	○	○
1.5	4	26	3.0	10	0.75	0.40	0.40	0°	MTNN 41503	●	●	●	●	○	○
1.8	4	26	4.0	10	0.90	0.50	0.50	0°	MTNN 41804	●	●	●	●	○	○
2.0	4	31	6.0	15	1.00	0.50	0.60	0°	MTNN 42006	●	●	●	●	○	○
2.5	4	31	8.0	15	1.25	0.60	0.80	0°	MTNN 42508	●	●	●	●	○	○
3.2	4	31	8.0	15	1.60	0.80	1.00	0°	MTNN 43208	●	●	●	●	○	○
3.2	4	31	12.0	15	1.60	0.80	1.00	0°	MTNN 43212	●	●	●	●	○	○
3.2	4	36	17.0	20	1.60	0.80	1.00	0°	MTNN 43217	●	●	●	●	○	○
4.0	4	31	10.0	15	1.95	0.80	1.00	0°	MTNN 44010	●	●	●	●	○	○
4.0	4	31	14.0	15	1.95	0.80	1.00	0°	MTNN 44014	●	●	●	●	○	○
4.0	4	36	19.0	20	1.95	0.80	1.00	0°	MTNN 44019	●	●	●	●	○	○
4.0	6	48	25.0	29	1.95	0.80	1.00	0°	MTNN 64025	●	●	●	●	○	○
4.0	6	53	30.0	34	1.95	0.80	1.00	0°	MTNN 64030	●	●	●	●	○	○
5.0	6	35	12.0	16	2.50	1.50	1.20	0°	MTNN 65012	●	●	●	●	○	○
5.0	6	43	17.0	24	2.50	1.50	1.20	0°	MTNN 65017	●	●	●	●	○	○
5.0	6	48	25.0	29	2.50	1.50	1.20	0°	MTNN 65025	●	●	●	●	○	○
5.0	6	53	32.0	34	2.50	1.50	1.20	0°	MTNN 65032	●	●	●	●	○	○
5.0	6	61	40.0	42	2.50	1.50	1.20	0°	MTNN 65040	●	●	●	●	○	○
6.0	6	35	12.0	16	2.95	2.00	1.50	0°	MTNN 66012	●	●	●	●	○	○
6.0	6	43	20.0	24	2.95	2.00	2.00	0°	MTNN 66020	●	●	●	●	○	○
6.0	6	53	30.0	34	2.95	2.00	2.00	0°	MTNN 66030	●	●	●	●	○	○
6.0	6	61	40.0	42	2.95	2.00	2.00	0°	MTNN 66040	●	●	●	●	○	○

Dimensions in mm

Order directly online

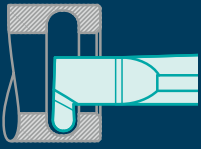
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Example order number: MTNN 40301-R-TiAlN

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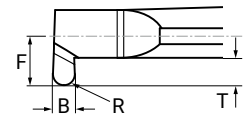
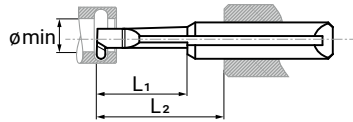
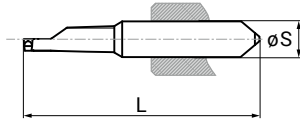
MTNR

Grooving tool with full radius
Rake angle (γ) = 6°



P M N S O

Standard values (V_c / f_w) Page 10–11
Carbide grades and coatings Page 9



ømin	øS	L	L ₁	L ₂	F	T	γ	B	R	Ref. N°	Rotation		Coating			
											R	L	K10	TiAlN	DLC	SPEC
2.5	4	31	6	15	1.25	0.6	6°	0.8	0.40	MTNR 425064	●	●	●	●	○	○
3.2	4	31	8	15	1.60	0.8	6°	1.0	0.50	MTNR 432085	●	●	●	●	○	○
3.2	4	31	12	15	1.60	0.8	6°	1.0	0.50	MTNR 432125	●	●	●	●	○	○
4.0	4	31	10	15	1.95	0.8	6°	1.0	0.50	MTNR 440105	●	●	●	●	○	○
4.0	4	31	14	15	1.95	0.8	6°	1.0	0.50	MTNR 440145	●	●	●	●	○	○
4.0	4	36	19	20	1.95	0.8	6°	1.0	0.50	MTNR 440195	●	●	●	●	○	○
5.0	6	35	12	16	2.50	1.5	6°	1.0	0.50	MTNR 650125	●	●	●	●	○	○
5.0	6	35	12	16	2.50	1.5	6°	1.5	0.75	MTNR 650127	●	●	●	●	○	○
5.0	6	35	12	16	2.50	1.5	6°	2.0	1.00	MTNR 650129	●	●	●	●	○	○
5.0	6	43	17	24	2.50	1.5	6°	1.0	0.50	MTNR 650175	●	●	●	●	○	○
5.0	6	43	17	24	2.50	1.5	6°	1.5	0.75	MTNR 650177	●	●	●	●	○	○
5.0	6	43	17	24	2.50	1.5	6°	2.0	1.00	MTNR 650179	●	●	●	●	○	○
6.0	6	43	20	24	2.95	2.0	6°	1.0	0.50	MTNR 660205	●	●	●	●	○	○
6.0	6	43	20	24	2.95	2.0	6°	1.5	0.75	MTNR 660207	●	●	●	●	○	○
6.0	6	43	20	24	2.95	2.0	6°	2.0	1.00	MTNR 660209	●	●	●	●	○	○

Dimensions in mm

Order directly online

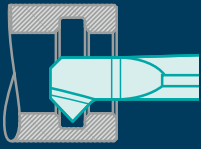
Order the right tool online using the QR code or weblink.

Example order number: MTNR 425064-R-TiAlN

● E-Shop items ○ On request

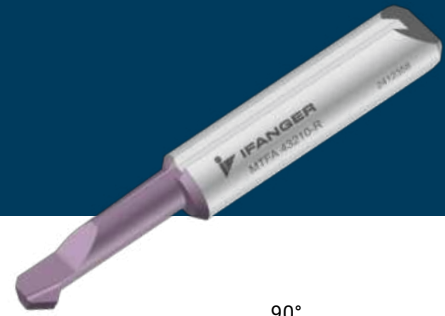


ifanger.com/en/shop



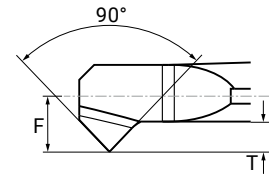
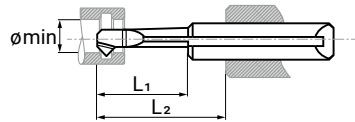
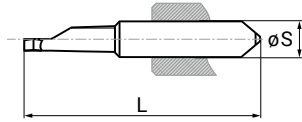
MTFA

Chamfering tool
Rake angle (γ) = 8°



P M K N S O

Standard values (V_c / f_v) Page 10–11
Carbide grades and coatings Page 9



ømin	øS	L	L ₁	L ₂	F	T	γ	Ref. N°	Rotation		Coating			
									R	L	K10	TiAIN	DLC	SPEC
2.0	4	31	5.4	15	1.00	0.50	8°	MTFA 42006	●	●	●	●	○	○
2.5	4	31	7.3	15	1.25	0.60	8°	MTFA 42508	●	●	●	●	○	○
3.2	4	31	11.0	15	1.60	0.80	8°	MTFA 43212	●	●	●	●	○	○
4.0	4	31	13.0	15	1.95	0.80	8°	MTFA 44014	●	●	●	●	○	○
4.0	4	36	18.0	20	1.95	0.80	8°	MTFA 44019	●	●	●	●	○	○
5.0	6	43	15.4	24	2.50	1.45	8°	MTFA 65017	●	●	●	●	○	○
6.0	6	43	18.4	24	2.95	1.45	8°	MTFA 66020	●	●	●	●	○	○
6.0	6	53	28.4	34	2.95	1.45	8°	MTFA 66030	●	●	●	●	○	○

Dimensions in mm

Use MTKN, MTKH, MTKO or MTKR tools for profile turning.

Order directly online

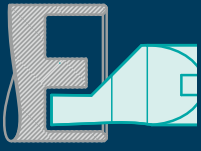
Order the right tool online using the QR code or weblink.

Example order number: MTFA 42006-R-TiAIN

E-Shop items On request



ifanger.com/en/shop



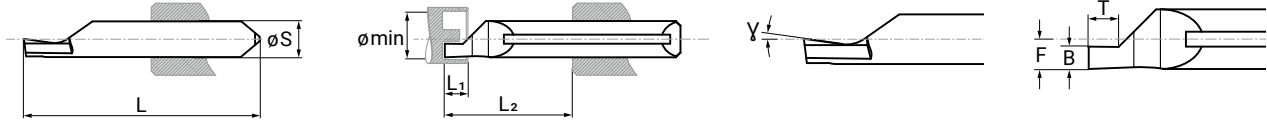
MTNX

Face grooving tool
 Rake angle (γ) = 6–8°
 For axial grooves



P M K N S O

Standard values (V_c / f_z) Page 10–11
 Carbide grades and coatings Page 9



ømin	øS	L	L ₁	L ₂	F	T	B	γ	Ref. N°	Rotation		Coating			
										R	L	K10	TiAlN	DLC	SPEC
4.0	4	26	3	10	1.95	1.2	0.7	6°	MTNX 40710	●	●	●	●	○	○
6.0	4	26	5	10	1.95	1.5	1.0	8°	MTNX 41015	●	●	●	●	○	○
6.0	4	26	7	10	1.95	2.0	1.5	8°	MTNX 41520	●	●	●	●	○	○
8.0	6	35	8	16	2.95	2.5	1.5	8°	MTNX 61525	●	●	●	●	○	○
8.0	6	35	10	16	2.95	3.0	2.0	8°	MTNX 62030	●	●	●	●	○	○

Dimensions in mm

Order directly online

Order the right tool online using the QR code or weblink.

Example order number: MTNX 40710-R-TiAlN

● E-Shop items ○ On request



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MTNY

Face grooving tool

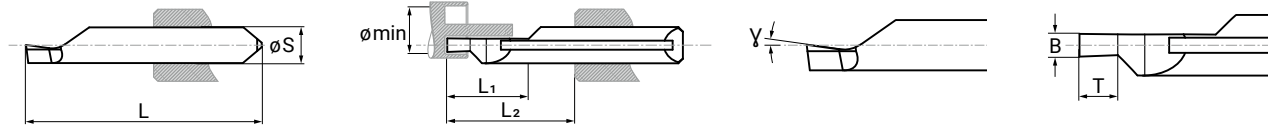
Rake angle (γ) = 6–8°

For axial grooves with collar



P M K N S O

Standard values (V_c / f_a) Page 10–11
Carbide grades and coatings Page 9



ϕ_{min}	ϕ_S	L	L ₁	L ₂	T	B	γ	Ref. N°	Rotation		Coating			
									R	L	K10	TiAlN	DLC	SPEC
4.0	4	26	6	10	1.20	0.70	6°	MTNY 40710	●	●	●	●	○	○
6.0	4	31	8	15	1.50	1.00	8°	MTNY 41015	●	●	●	●	○	○
6.0	4	31	12	15	2.00	1.50	8°	MTNY 41520	●	●	●	●	○	○
8.0	6	35	14	16	2.50	1.50	8°	MTNY 61525	●	●	●	●	○	○
8.0	6	43	20	24	3.00	2.00	8°	MTNY 62030	●	●	●	●	○	○

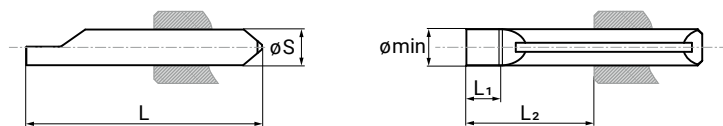
Dimensions in mm

MTRO

Swiss-MicroTurn blank

Rake angle (γ) = 0°

For in-house production of the cutting-edge geometry



ϕ_S	L	L ₁	L ₂	γ	Ref. N°	Rotation		Coating			
						R	L	K10	TiAlN	DLC	SPEC
4	26	4	10	0°	MTRO 40010			●			
4	31	4	15	0°	MTRO 40015			●			
6	34	6	23	0°	MTRO 60023			●			

Dimensions in mm

Order directly online

Order the right tool online using the QR code or weblink.

Example order number: MTNY 40710-R-K10

● E-Shop items ○ On request



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MTHA

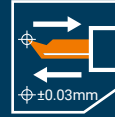
Holders with round shank and clamping surface (F)



HIGH VOLUME COOLING



QUICK CHANGE

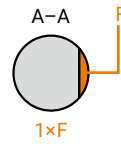
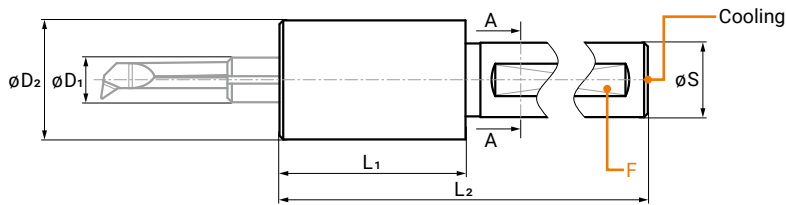


REPEATED POSITIONING ACCURACY
 $\pm 0.03\text{mm}$

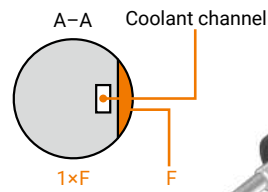
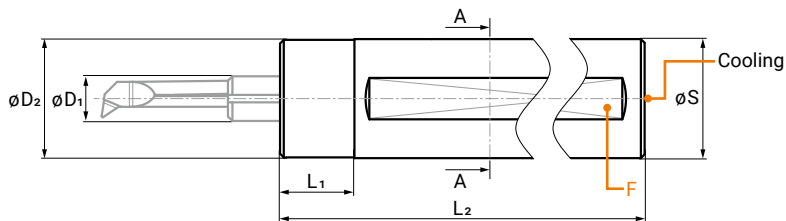


VIBRATION ABSORBING TOOL CLAMPING

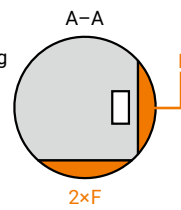
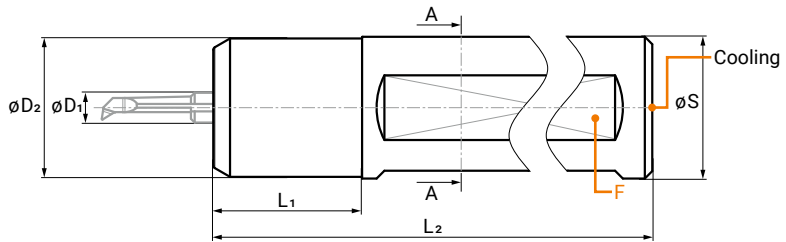
N° 1



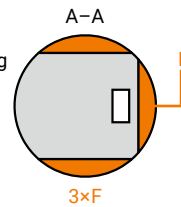
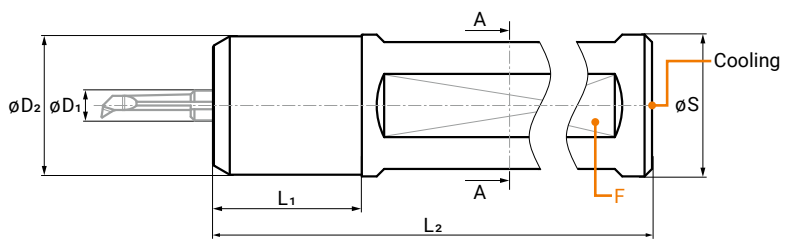
N° 2



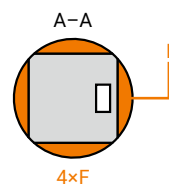
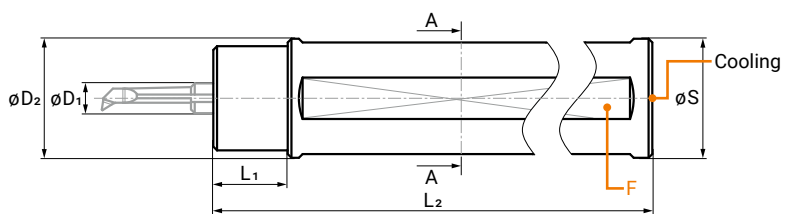
N° 3



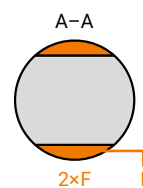
N° 4



N° 5



N° 6



N°	øS	øD ₁	øD ₂	L ₁	L ₂	F	Cooling	Ref. N°
1	7	4	14.0	25	49	1×	–	MTHA 07049/4
1	8	4	14.0	21	60	1×	–	MTHA 08060/4
1	10	4	14.0	21	60	1×	–	MTHA 10060/4
1	10	6	16.0	25	60	1×	–	MTHA 10060/6
1	12	4	14.0	10	50	1×	–	MTHA 12050/4
1	12	4	14.0	10	90	1×	G1/8"	MTHA 12090/4
1	12	6	16.0	25	60	1×	–	MTHA 12060/6
6	5/8"	4	5/8"		50	2×	–	MTHA 15050/4
2	16	4	14.0	10	50	1×	G1/8"	MTHA 16050/4
5	16	4	14.0	10	52	4×	G1/8"	MTHA 16052/4
2	16	4	14.0	10	90	1×	G1/8"	MTHA 16090/4
2	16	6	15.8	10	60	1×	G1/8"	MTHA 16060/6
2	16	6	15.8	10	90	1×	G1/8"	MTHA 16090/6
3	3/4"	4	18.6	20	70	2×	G1/8"	MTHA 19070/4
3	3/4"	6	18.6	20	70	2×	G1/8"	MTHA 19070/6
4	3/4"	4	18.6	20	90	3×	G1/8"	MTHA 19090/4
4	3/4"	6	18.6	20	90	3×	G1/8"	MTHA 19090/6
3	3/4"	4	18.6	20	145	2×	G1/8"	MTHA 19145/4
3	3/4"	6	18.6	20	145	2×	G1/8"	MTHA 19145/6
3	20	4	19.6	20	70	2×	G1/8"	MTHA 20070/4
3	20	6	19.6	20	70	2×	G1/8"	MTHA 20070/6
3	20	4	19.6	20	160	2×	G1/8"	MTHA 20160/4
3	20	6	19.6	20	160	2×	G1/8"	MTHA 20160/6
5	22	4	21.6	20	90	4×	G1/8"	MTHA 22090/4
5	22	6	21.6	20	90	4×	G1/8"	MTHA 22090/6
3	22	4	21.6	20	130	2×	G1/8"	MTHA 22130/4
3	22	6	21.6	20	130	2×	G1/8"	MTHA 22130/6
2	25	4	24.6	20	80	1×	G1/8"	MTHA 25080/4
2	25	6	24.6	20	80	1×	G1/8"	MTHA 25080/6
2	25	4	24.6	20	100	1×	G1/8"	MTHA 25100/4
2	25	6	24.6	20	100	1×	G1/8"	MTHA 25100/6
5	25	4	24.6	20	170	4×	G1/8"	MTHA 25170/4
5	25	6	24.6	20	170	4×	G1/8"	MTHA 25170/6
3	1"	4	25.0	20	70	2×	G1/8"	MTHA 26070/4
3	1"	6	25.0	20	70	2×	G1/8"	MTHA 26070/6
3	1"	4	25.0	20	145	2×	G1/8"	MTHA 26145/4
3	1"	6	25.0	20	145	2×	G1/8"	MTHA 26145/6
3	28	4	27.6	20	100	2×	M12×1.5	MTHA 28100/4
3	28	6	27.6	23	100	2×	M12×1.5	MTHA 28100/6
4	32	4	31.6	20	80	3×	G1/8"	MTHA 32080/4
4	32	6	31.6	23	80	3×	G1/8"	MTHA 32080/6
5	32	4	22.0	25	135	4×	G1/8"	MTHA 32135/4
5	32	6	22.0	25	135	4×	G1/8"	MTHA 32135/6

Dimensions in mm
Spare parts, see page 54

Order directly online

Order the right tool online using the QR code or weblink.
The MTSC wrench is included with every holder.

Example order number: MTHA 07049/4



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MTHA

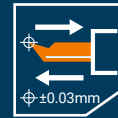
Holder with round shank
without clamping surface



HIGH VOLUME
COOLING



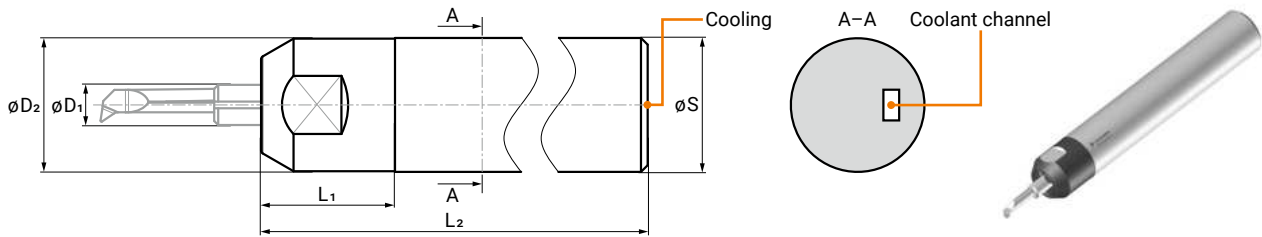
QUICK CHANGE



REPEATED
POSITIONING
ACCURACY
 $\pm 0.03\text{mm}$



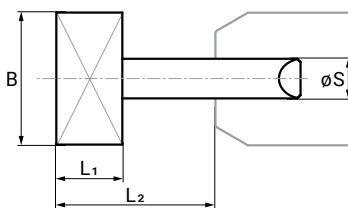
VIBRATION
ABSORBING
TOOL CLAMPING



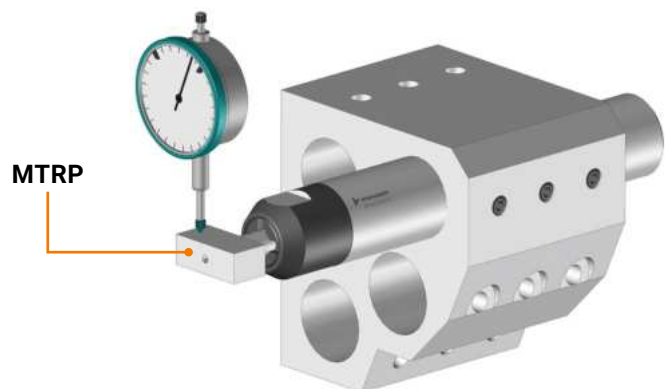
ϕS	ϕD_1	ϕD_2	L_1	L_2	Cooling	Ref. N°
20	4	19.6	20	161	G1/8"	MTHA 20161/4
20	6	19.6	20	162	G1/8"	MTHA 20161/6
25	4	24.6	20	171	G1/8"	MTHA 25171/4
25	6	24.6	20	171	G1/8"	MTHA 25171/6

MTRP

Adjusting tool



ϕS	B	L_1	L_2	Ref. N°
4	20	10	17	MTRP 00004
6	20	10	18	MTRP 00006



Order directly online

Order the right tool online using the QR code or weblink.
The MTSC wrench is included with every holder.

Example order number: MTHA 20161/4



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MTHA/SK

Holders with round shank and lateral coolant connection



HIGH VOLUME COOLING



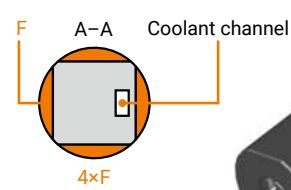
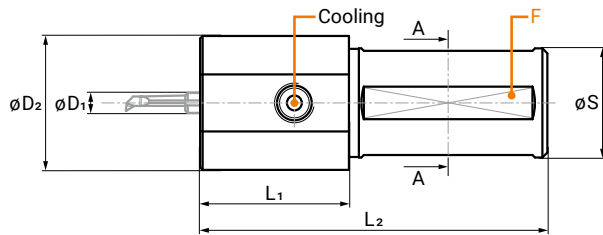
QUICK CHANGE



REPEATED POSITIONING ACCURACY



VIBRATION ABSORBING TOOL CLAMPING



ϕS	ϕD_1	ϕD_2	L_1	L_2	Cooling	Ref. N°
3/4"	4	27	30	70	M8x1	MTHA 19070/4SK
3/4"	6	27	30	70	M8x1	MTHA 19070/6SK
22	4	27	30	70	M8x1	MTHA 22070/4SK
22	6	27	30	70	M8x1	MTHA 22070/6SK

Dimensions in mm
Spare parts, see page 54



HIGH VOLUME COOLING



Order directly online

Order the right tool online using the QR code or weblink.
The MTSC wrench is included with every holder.

Example order number: MTHA 19070/4SK

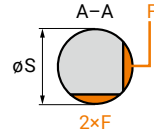
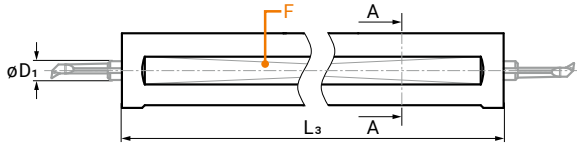


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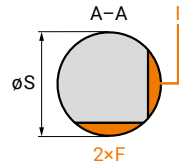
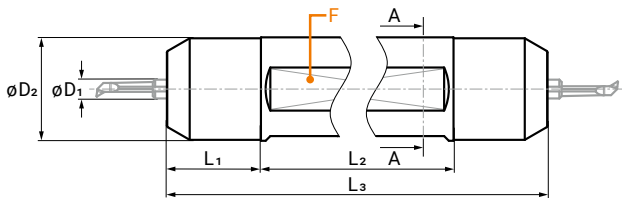
MTHC

Double holders with round shank
for Swiss-MicroTurn tools

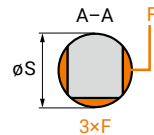
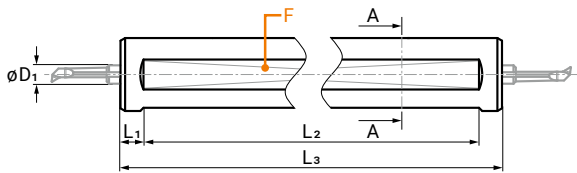
N° 1



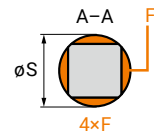
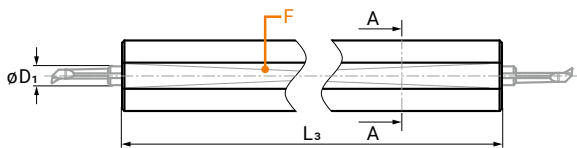
N° 2



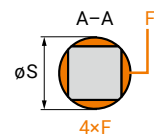
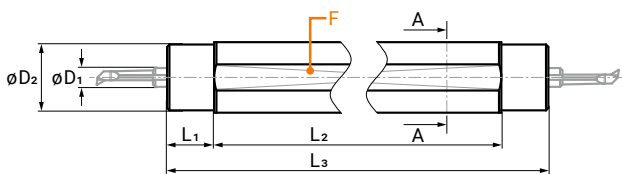
N° 3



N° 4



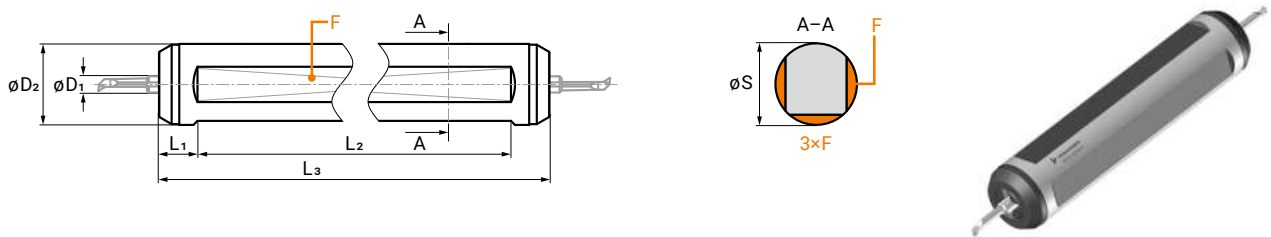
N° 5



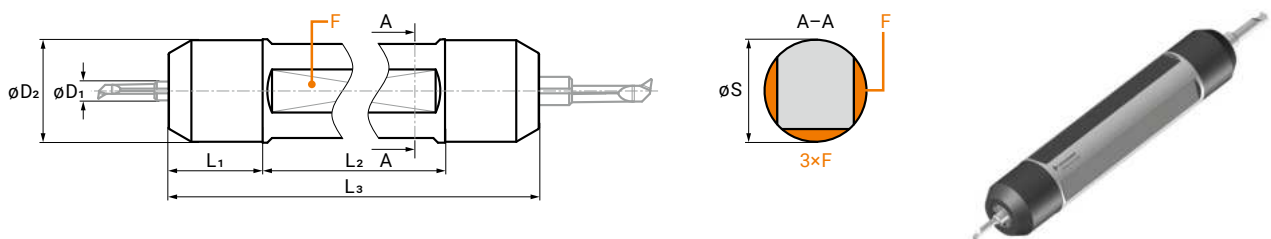
N°	øS	øD ₁	øD ₂	øD ₃	L ₁	L ₂	L ₃	F	Ref. N°
1	5/8"	4	-	4	-	-	48	2x	MTHC 15048/4
3	5/8"	4	-	4	5	45	55	3x	MTHC 15055/4
3	5/8"	4	-	4	5	55	65	3x	MTHC 15065/4
4	16	4	-	4	-	-	70	4x	MTHC 16070/4
5	16	4	14.0	4	10	90	110	4x	MTHC 16110/4
6	20	4	19.6	4	5	80	90	3x	MTHC 20090/4
2	22	4	21.6	4	20	74	114	2x	MTHC 22114/4
7	22	4	21.6	6	20	74	114	3x	MTHC 22114/46
2	22	6	21.6	6	20	74	114	2x	MTHC 22114/6
2	22	4	21.6	4	20	95	135	2x	MTHC 22135/4
2	22	6	21.6	6	20	95	135	2x	MTHC 22135/6
2	22	4	21.6	4	20	105	145	2x	MTHC 22145/4
2	22	6	21.6	6	20	105	145	2x	MTHC 22145/6

Dimensions in mm
Spare parts, see page 54

N° 6



N° 7



Order directly online

Order the right tool online using the QR code or weblink.
The MTSC wrench is included with every holder.

Example order number: MTHC 15048/4

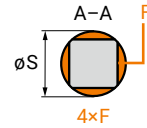
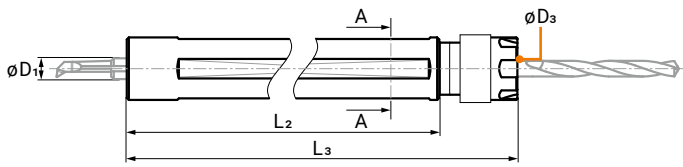


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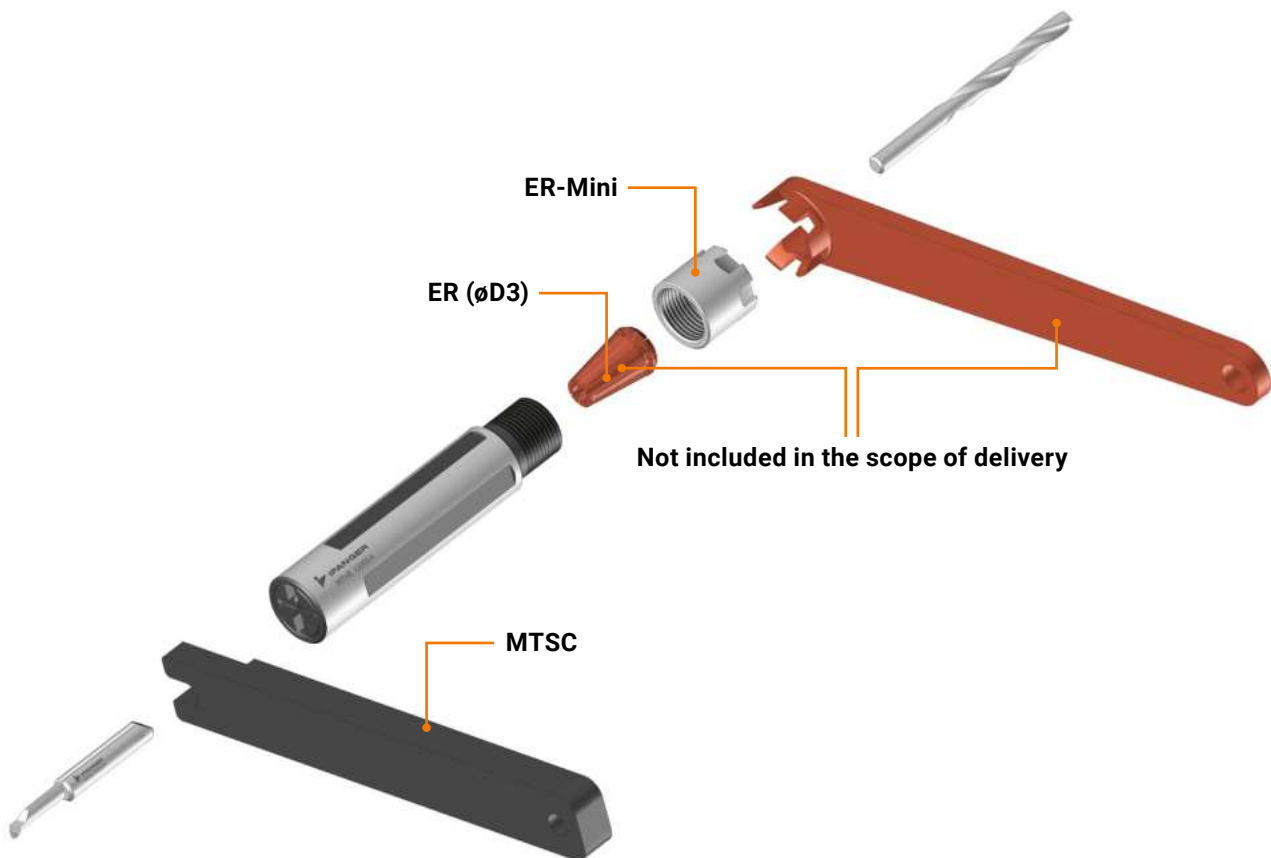
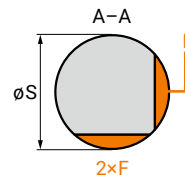
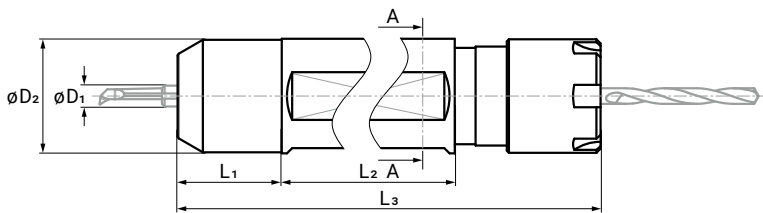
MTHE

Double holders with round shank
for Swiss-MicroTurn and collet chuck ER

N° 1



N° 2



N°	øS	øD ₁	øD ₂	øD ₃	L ₁	L ₂	L ₃	F	Ref. N°
1	12	4	-	ER8	-	-	55	4x	MTHE 12055/4
1	5/8"	4	-	ER8	-	-	55	4x	MTHE 15055/4
1	16	4	16.0	ER11	-	55	75	4x	MTHE 16071/4
2	16	4	14.0	ER11	10	85	115	2x	MTHE 16110/4
2	3/4"	4	18.6	ER11	23	70	114	2x	MTHE 19108/4
2	3/4"	6	18.6	ER11	23	70	114	2x	MTHE 19108/6
2	3/4"	4	18.6	ER11	23	100	144	2x	MTHE 19138/4
2	3/4"	6	18.6	ER11	23	100	144	2x	MTHE 19138/6
2	20	4	19.6	ER11	20	32	76	2x	MTHE 20071/4
2	22	4	21.6	ER16	20	78	126	2x	MTHE 22114/4
2	22	6	21.6	ER16	20	78	126	2x	MTHE 22114/6
2	22	4	21.6	ER16	20	109	157	2x	MTHE 22145/4
2	22	6	21.6	ER16	20	109	157	2x	MTHE 22145/6

Dimensions in mm
Spare parts, see page 54

Order directly online

Order the right tool online using the QR code or weblink.
The MTSC wrench is included with every holder.

Example order number: MTHE 12055/4



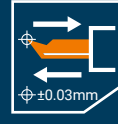
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MTHB

Holders for back operation
 Steplessly adjustable length



QUICK CHANGE

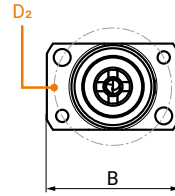
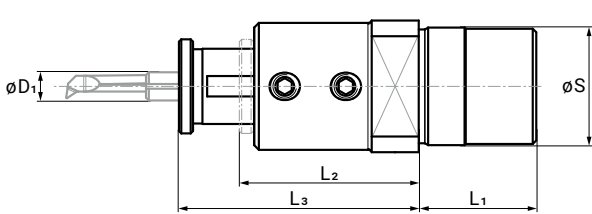


REPEATED
POSITIONING
ACCURACY

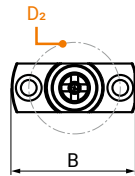
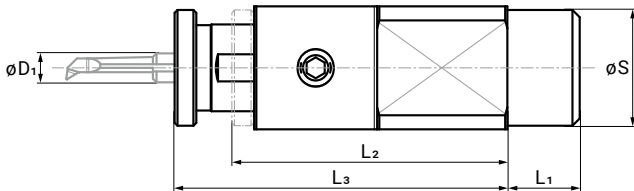


VIBRATION
ABSORBING
TOOL CLAMPING

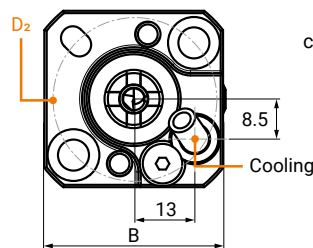
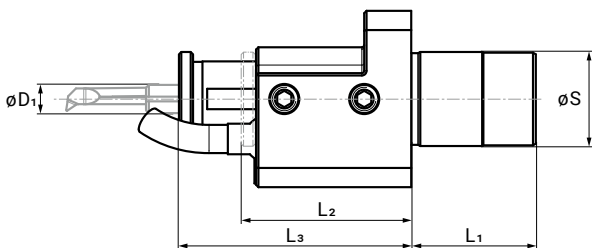
N° 1



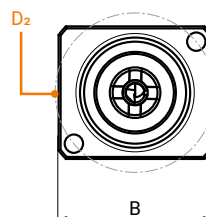
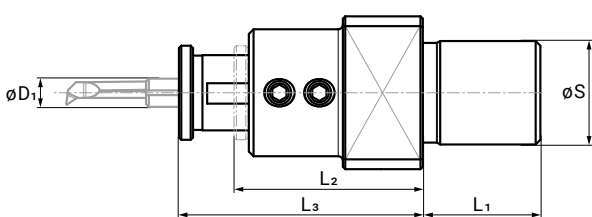
N° 2



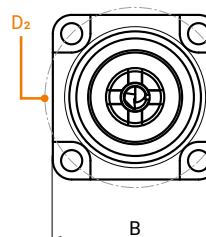
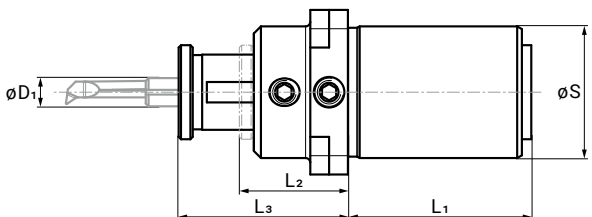
N° 3



N° 4

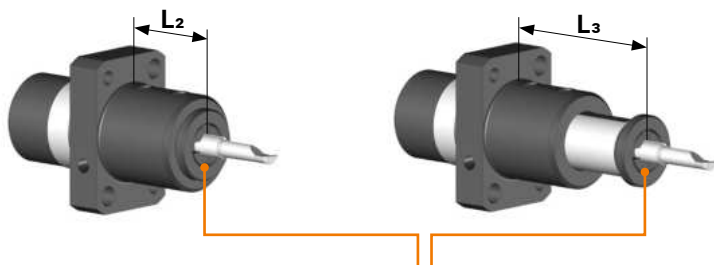


N° 5

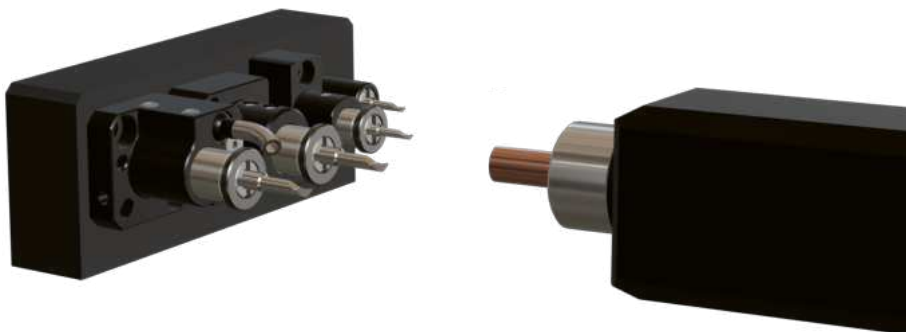


N°	øS	øD ₁	øD ₂	L ₁	L ₂	L ₃	B	Cooling	Ref. N°
1	16	4	31.0	21.0	26	42	24.0	-	MTHB 16065/4
2	16	4	32.0	10.0	38	54	17.0	-	MTHB 16074/4
3	20	4	35.0	26.5	26	49	37.5	ø6	MTHB 20061/4
3	20	6	35.0	26.5	26	49	37.5	ø6	MTHB 20061/6
1	22	4	40.0	25.0	38	58	28.0	-	MTHB 22078/4
1	22	6	40.0	25.0	38	58	28.0	-	MTHB 22078/6
4	22	4	39.0	25.0	40	62	32.5	-	MTHB 22079/4
4	22	6	39.0	25.0	40	62	32.5	-	MTHB 22079/6
1	22	4	38.0	30.0	34	56	38.0	-	MTHB 22080/4
1	22	6	38.0	30.0	34	56	38.0	-	MTHB 22080/6
1	25	4	38.1	25.0	38	83	28.0	-	MTHB 25062/4
1	25	6	38.1	25.0	38	83	28.0	-	MTHB 25062/6
5	28	4	38.1	30.0	35	59	35.0	-	MTHB 28057/4
5	28	6	38.1	30.0	35	59	35.0	-	MTHB 28057/6
4	32	4	40.0	25.0	39	59	39.0	-	MTHB 32081/4
4	32	6	40.0	25.0	39	59	39.0	-	MTHB 32081/6
1	32	4	52.0	30.0	46	64	41.0	-	MTHB 32093/4
1	32	6	52.0	30.0	46	64	41.0	-	MTHB 32093/6
1	33	4	40.0	37.0	39	59	36.0	-	MTHB 33091/4
1	33	6	40.0	37.0	39	59	36.0	-	MTHB 33091/6
1	34	4	42.0	25.0	39	59	38.0	-	MTHB 34081/4
1	34	6	42.0	25.0	39	59	38.0	-	MTHB 34081/6

Dimensions in mm
Spare parts, see page 54



Steplessly adjustable length



Order directly online

Order the right tool online using the QR code or weblink.
The MTSC wrench is included with every holder.

Example order number: MTHB 16065/4



ifanger.com/en/shop

MTQC

Quick Change, BIMU – IFANGER

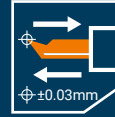
Quick change head for Swiss-MicroTurn tools



HIGH VOLUME COOLING



QUICK CHANGE



REPEATED POSITIONING ACCURACY



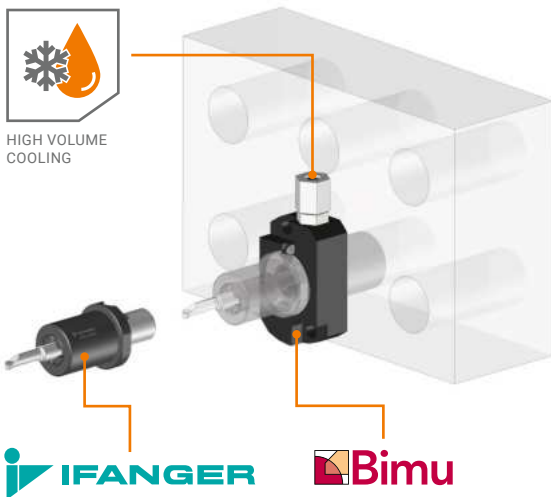
VIBRATION ABSORBING TOOL CLAMPING

Presetting the tool outside the machine

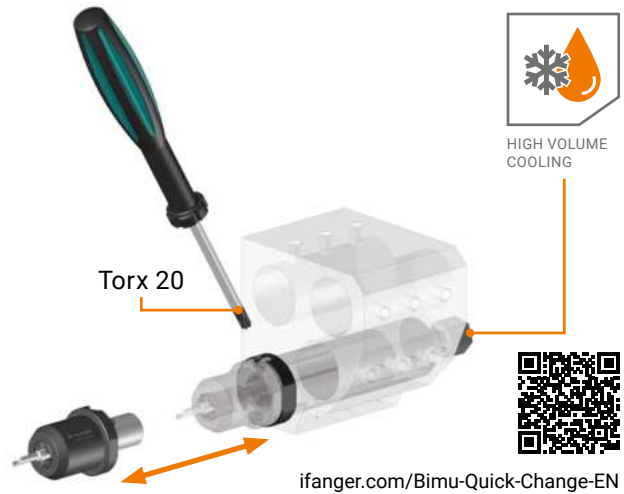
With the MTQC quick-change clamping heads Swiss-MicroTurn tools can be clamped and measured outside the lathe. This technology enables even non-specialists to quickly and reliably insert tools into the machine.

- Maximum process reliability
- Very high machine availability
- Machine operators have the freedom to look after more systems
- Extremely fast and safe use of the change head

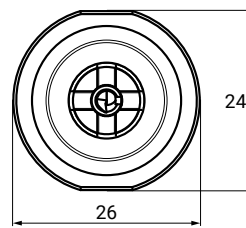
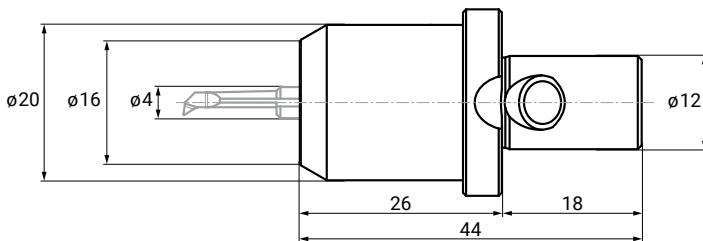
Back operation



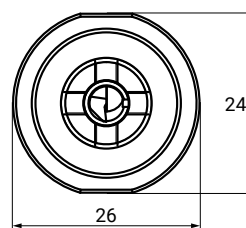
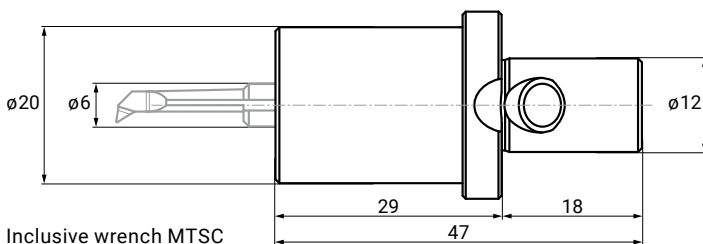
Front operation



Ref. N°: MTQC 12026/4

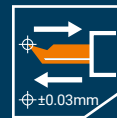


Ref. N°: MTQC 12029/6





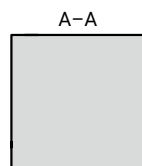
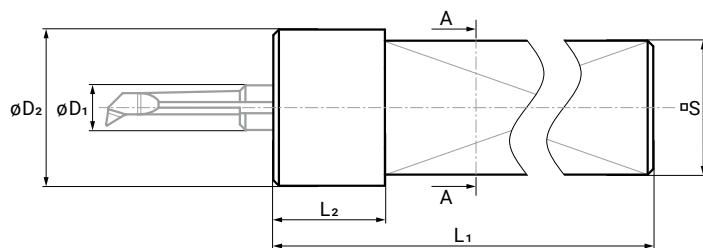
QUICK CHANGE



REPEATED
POSITIONING
ACCURACY



VIBRATION
ABSORBING
TOOL CLAMPING



$\square S$	$\varnothing D_1$	$\varnothing D_2$	L_1	L_2	Ref. N°
12×12	4	14.0	85	10	MTHV 12085/4
12×12	6	16.0	95	24	MTHV 12100/6
16×16	4	14.0	100	3	MTHV 16100/4
16×16	6	15.8	100	10	MTHV 16100/6

Dimensions in mm
Spare parts, see page 54

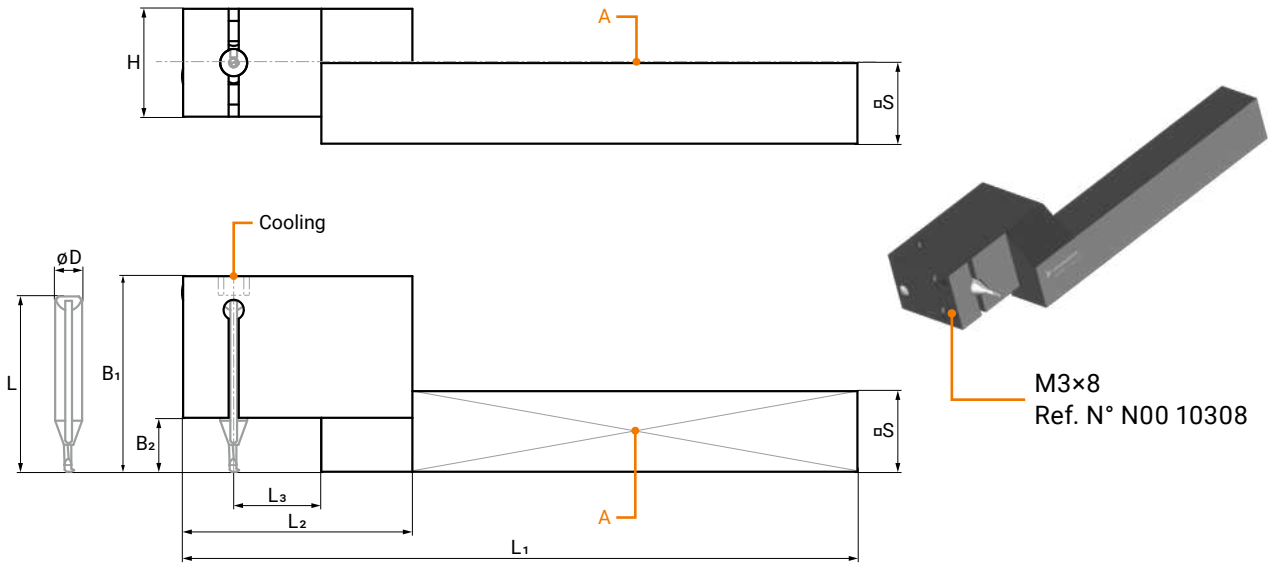
Order directly online

Order the right tool online using the QR code or weblink.
The MTSC wrench is included with every holder.

Example order number: MTHV 12085/4



ifanger.com/en/shop



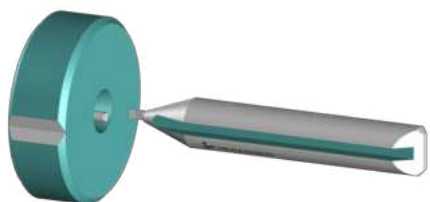
The stop surface (A) of the holder corresponds to the centre height of the tool.



□S	∅D	L	L ₁	L ₂	L ₃	B ₁	B ₂	H	Cooling	Ref. N°
7	4	31	100	34	13	35	15	16	Ref. N° MTAA-0000	MTAR 07100/431
8	4	26	100	34	13	29	8	16	Ref. N° MTAA-0000	MTAR 08100/426 *
8	4	31	100	34	13	35	15	16	Ref. N° MTAA-0000	MTAR 08100/431
10	4	26	100	34	13	29	8	16	Ref. N° MTAA-0000	MTAR 10100/426 *
10	4	31	100	34	13	35	15	16	Ref. N° MTAA-0000	MTAR 10100/431
10	4	36	100	34	13	40	20	16	Ref. N° MTAA-0000	MTAR 10100/436
10	6	35	100	34	13	38	14	16	Ref. N° MTAA-0000	MTAR 10100/635
10	6	43	100	34	13	45	21	16	Ref. N° MTAA-0000	MTAR 10100/643
10	6	48	100	34	13	50	26	16	Ref. N° MTAA-0000	MTAR 10100/648
12	4	26	100	34	13	29	8	16	Ref. N° MTAA-0000	MTAR 12100/426 *
12	4	31	100	34	13	35	15	16	Ref. N° MTAA-0000	MTAR 12100/431
12	4	36	100	34	13	40	20	16	Ref. N° MTAA-0000	MTAR 12100/436
12	6	35	100	34	13	38	14	16	Ref. N° MTAA-0000	MTAR 12100/635
12	6	43	100	34	13	45	21	16	Ref. N° MTAA-0000	MTAR 12100/643
12	6	48	100	34	13	50	26	16	Ref. N° MTAA-0000	MTAR 12100/648
12	6	53	100	34	13	55	33	16	Ref. N° MTAA-0000	MTAR 12100/653
16	4	31	130	34	13	35	15	16	Ref. N° MTAA-0000	MTAR 16130/431
16	4	36	130	34	13	40	20	16	Ref. N° MTAA-0000	MTAR 16130/436
16	6	35	130	34	13	38	14	16	Ref. N° MTAA-0000	MTAR 16130/635
16	6	43	130	34	13	45	21	16	Ref. N° MTAA-0000	MTAR 16130/643
16	6	48	130	34	13	50	26	16	Ref. N° MTAA-0000	MTAR 16130/648
16	6	53	130	38	17	55	33	16	Ref. N° MTAA-0000	MTAR 16130/653
16	6	61	130	38	17	64	42	16	Ref. N° MTAA-0000	MTAR 16130/661
16	6	71	130	38	17	74	52	16	Ref. N° MTAA-0000	MTAR 16130/671

Dimensions in mm
* Incl. MTAP-00426

Positioning tool MTAP-00426



Order directly online

Order the right tool online using the QR code or weblink.

Example order number: MTAR 07100/431

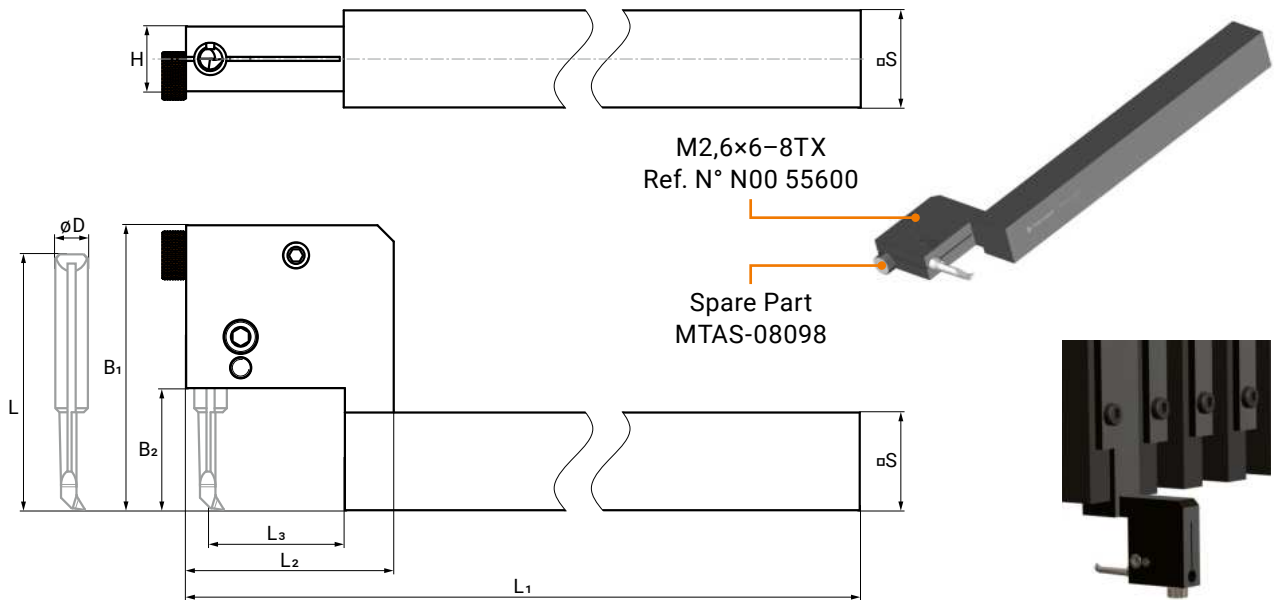


[ifanger.com/en/shop](https://www.ifanger.com/en/shop)

MTAN

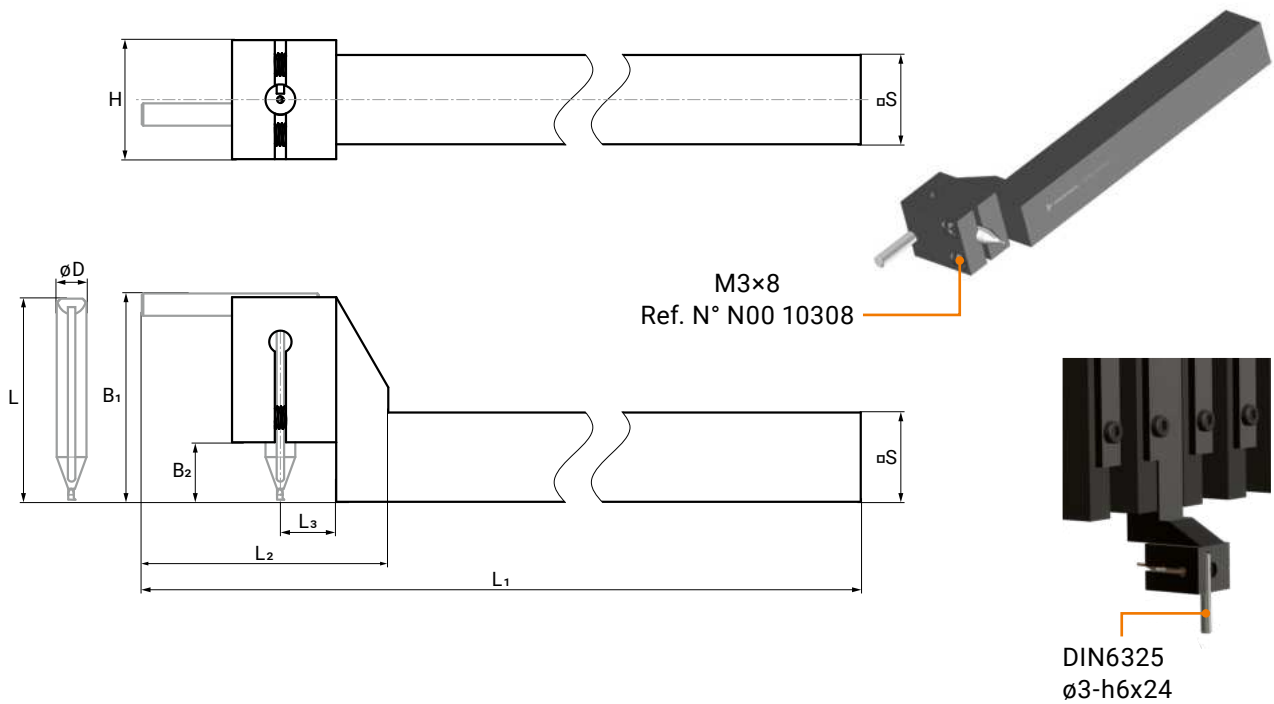
Cranked holders, neutral
Tool insertion from the rear, for tight spaces

N° 1



With MODUL-Line interface, see web store, Ref. N° 42411 and N°42412

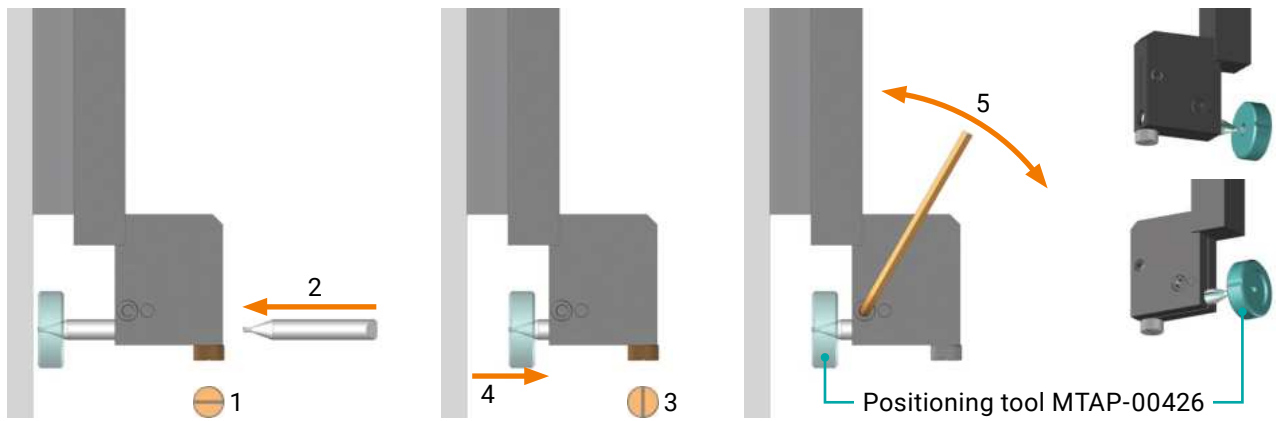
N° 2



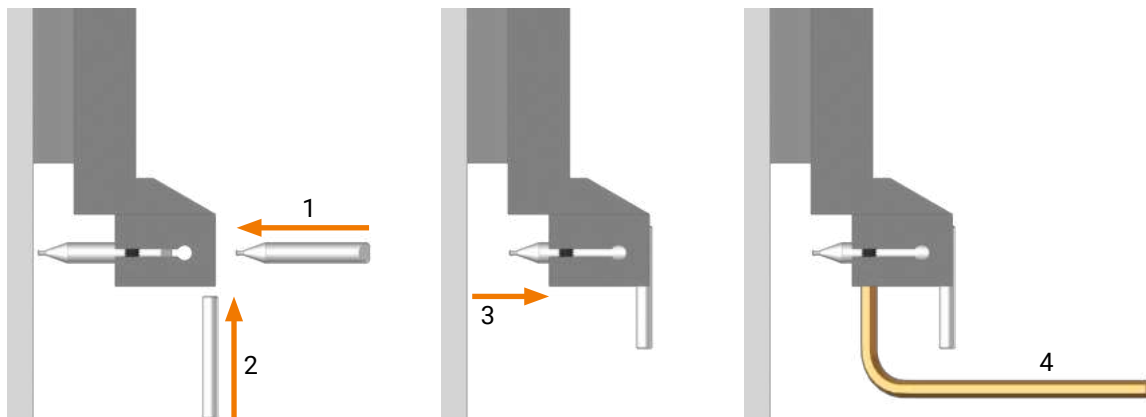
N°	□S	∅D	L	L ₁	L ₂	L ₃	B ₁	B ₂	H	Ref. N°
1	8	4	26	98	18.5	9.5	28.5	8	8	MTAN 08098/426 *
1	8	4	31	98	18.5	9.5	33.5	8	8	MTAN 08098/431
1	10	4	26	98	25.5	13.0	29.0	8	8	MTAN 10098/426 *
1	10	4	31	98	25.5	13.0	33.5	8	8	MTAN 10098/431
1	12	4	26	128	25.5	13.0	29.0	8	8	MTAN 12128/426 *
1	12	4	31	128	25.5	13.0	35.0	15	8	MTAN 12128/431
2	10	4	26	100	21.0	7.5	27.5	8	16	MTAN 10097/426 *
2	12	4	26	100	21.0	7.5	27.5	8	16	MTAN 12097/426 *

Dimensions in mm
* Incl. MTAP-00426

MTAN instructions for N° 1



MTAN instructions for N° 2



Order directly online

Order the right tool online using the QR code or weblink.

Example order number: MTAN 08098/426

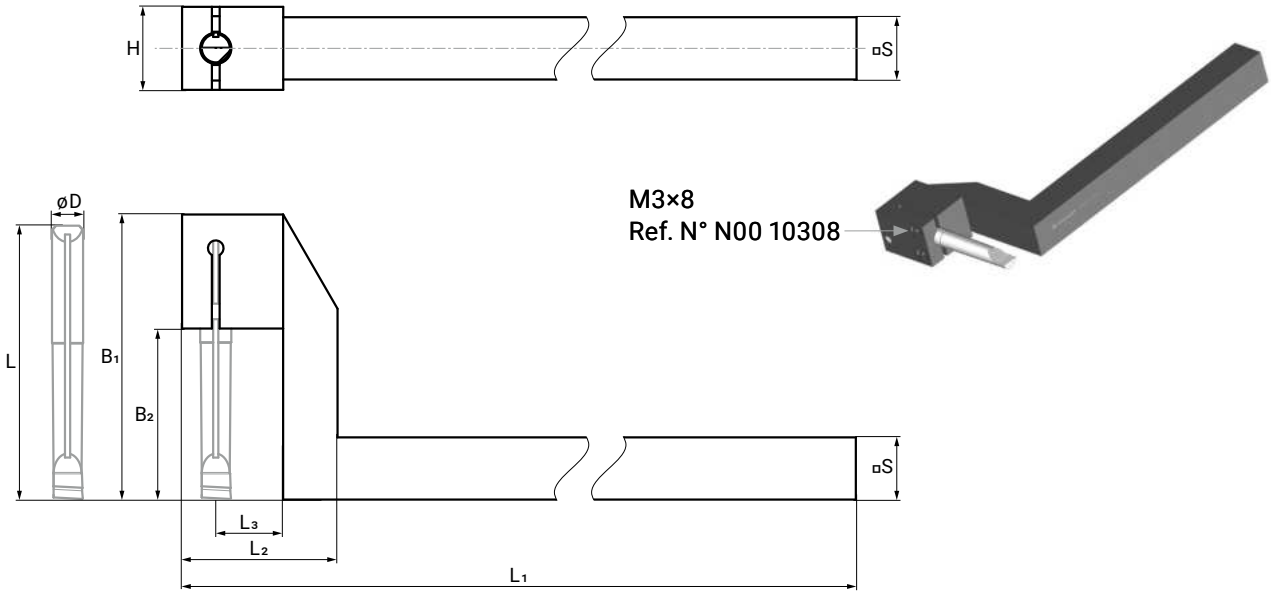


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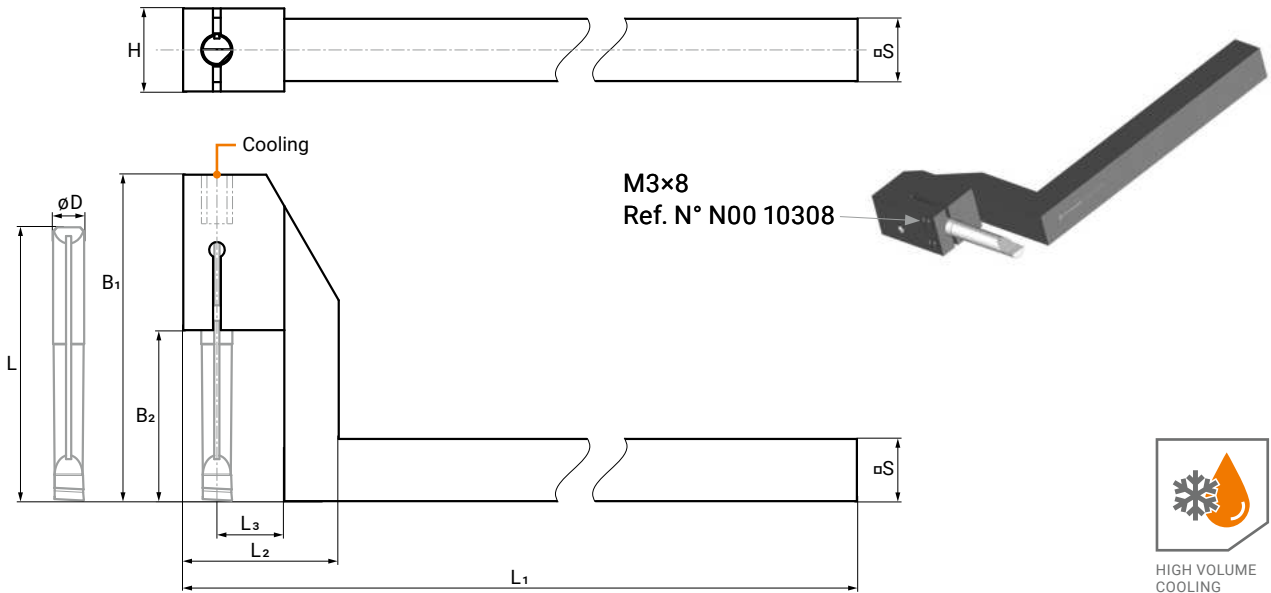
MTAN

Cranked holders, neutral

N° 1



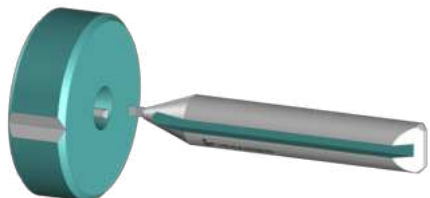
N° 2



N°	□S	∅D	L	L ₁	L ₂	L ₃	B ₁	B ₂	H	Cooling	Ref. N°
1	8	4	26	100	21	7.5	29	8	16	-	MTAN 08100/426 *
1	8	4	31	100	21	7.5	35	15	16	-	MTAN 08100/431
1	10	4	26	100	21	7.5	29	8	16	-	MTAN 10100/426 *
1	10	4	31	100	30	13.0	35	15	16	-	MTAN 10100/431
1	10	4	36	100	30	13.0	40	20	16	-	MTAN 10100/436
1	10	6	35	100	30	13.0	37	14	16	-	MTAN 10100/635
1	10	6	43	100	30	13.0	45	21	16	-	MTAN 10100/643
1	10	6	48	100	30	13.0	50	26	16	-	MTAN 10100/648
1	12	4	26	130	21	7.5	29	8	16	-	MTAN 12130/426 *
1	12	4	31	130	30	13.0	35	15	16	-	MTAN 12130/431
1	12	4	36	130	30	13.0	40	20	16	-	MTAN 12130/436
1	12	6	35	130	30	13.0	37	14	16	-	MTAN 12130/635
1	12	6	43	130	30	13.0	45	21	16	-	MTAN 12130/643
1	12	6	48	130	30	13.0	50	26	16	-	MTAN 12130/648
1	12	6	53	130	30	13.0	55	30	16	-	MTAN 12130/653
2	12	4	31	130	30	13.0	43	15	16	G1/8"	MTAN 12131/431
2	12	4	36	130	30	13.0	48	20	16	G1/8"	MTAN 12131/436
2	12	6	43	130	30	13.0	53	21	16	G1/8"	MTAN 12131/643
2	12	6	48	130	30	13.0	58	26	16	G1/8"	MTAN 12131/648
2	12	6	53	130	30	13.0	63	33	16	G1/8"	MTAN 12131/653
2	12	4	31	130	30	19.5	37	15	16	M12x1.5	MTAN 12132/431
1	16	4	31	130	34	13.0	35	15	16	-	MTAN 16130/431
1	16	4	36	130	34	13.0	40	20	16	-	MTAN 16130/436
1	16	6	35	130	34	13.0	37	14	16	-	MTAN 16130/635
1	16	6	43	130	34	13.0	45	21	16	-	MTAN 16130/643
1	16	6	48	130	34	13.0	50	26	16	-	MTAN 16130/648
1	16	6	53	130	38	17.0	55	33	16	-	MTAN 16130/653
1	16	6	61	130	38	17.0	64	42	16	-	MTAN 16130/661
1	16	6	71	130	38	17.0	74	52	16	-	MTAN 16130/671
2	16	4	31	130	34	13.0	43	15	16	G1/8"	MTAN 16131/431
2	16	4	36	130	34	13.0	48	20	16	G1/8"	MTAN 16131/436
2	16	6	43	130	34	13.0	53	21	16	G1/8"	MTAN 16131/643
2	16	6	48	130	34	13.0	58	26	16	G1/8"	MTAN 16131/648
2	16	6	53	130	40	17.0	63	33	16	G1/8"	MTAN 16131/653
2	16	4	31	130	30	19.5	37	15	16	G1/8"	MTAN 16132/431

Dimensions in mm
* Incl. MTAP-00426

Positioning tool MTAP-00426



Order directly online

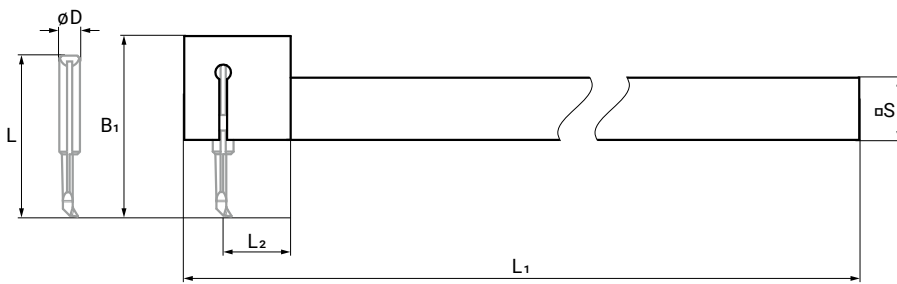
Order the right tool online using the QR code or weblink.

Example order number: MTAN 08100/426

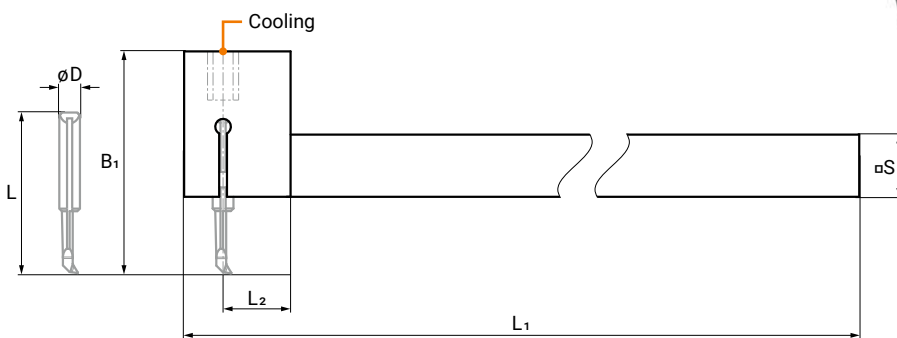


[ifanger.com/en/shop](https://www.ifanger.com/en/shop)

N° 1



N° 2



N°	□S	∅D	L ₁	L ₂	B ₁	H	Cooling	Ref. N°
1	8	4	100	20.5	20	16	-	MTAT 08100/4
1	10	4	100	20.5	20	16	-	MTAT 10100/4
1	12	4	130	20.5	20	16	-	MTAT 12130/4
1	12	6	130	20.5	24	16	-	MTAT 12130/6
1	16	4	130	20.5	20	16	-	MTAT 16130/4
1	16	6	130	20.5	24	16	-	MTAT 16130/6
2	12	4	130	20.5	20	16	G1/8"	MTAT 12131/4
2	12	6	130	20.5	24	16	G1/8"	MTAT 12131/6
2	16	4	130	20.5	28	16	G1/8"	MTAT 16131/4
2	16	6	130	20.5	32	16	G1/8"	MTAT 16131/6

Dimensions in mm

The Allen key is included with the holder.

Order directly online

Order the right tool online using the QR code or weblink.

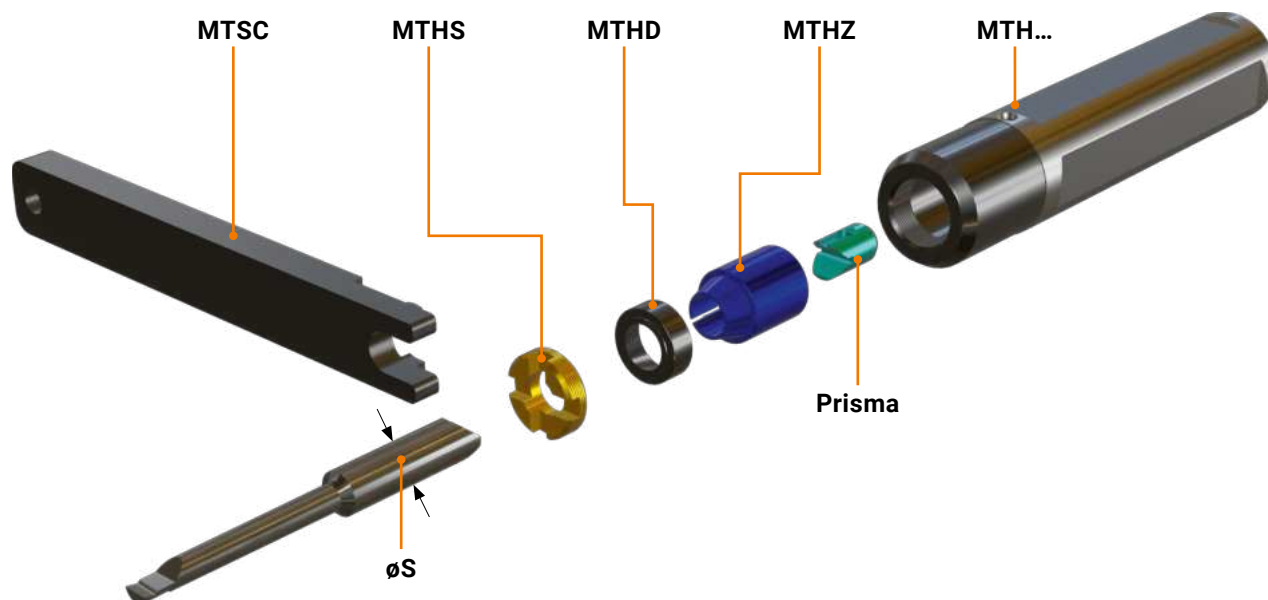
Example order number: MTAT 08100/4



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Spare parts

for holder type MTH...



øS	Description	Ref. N°
4	Thrust collar	MTHD-0004
6	Thrust collar	MTHD-0006
4	Screw	MTHS-0004
6	Screw	MTHS-0006
4	Collet chuck	MTHZ-0004
6	Collet chuck	MTHZ-0006
4	Wrench	MTSC-0004
6	Wrench	MTSC-0006
	Prisma	On request

Other spare parts

ifanger.com/spare_microturn-EN

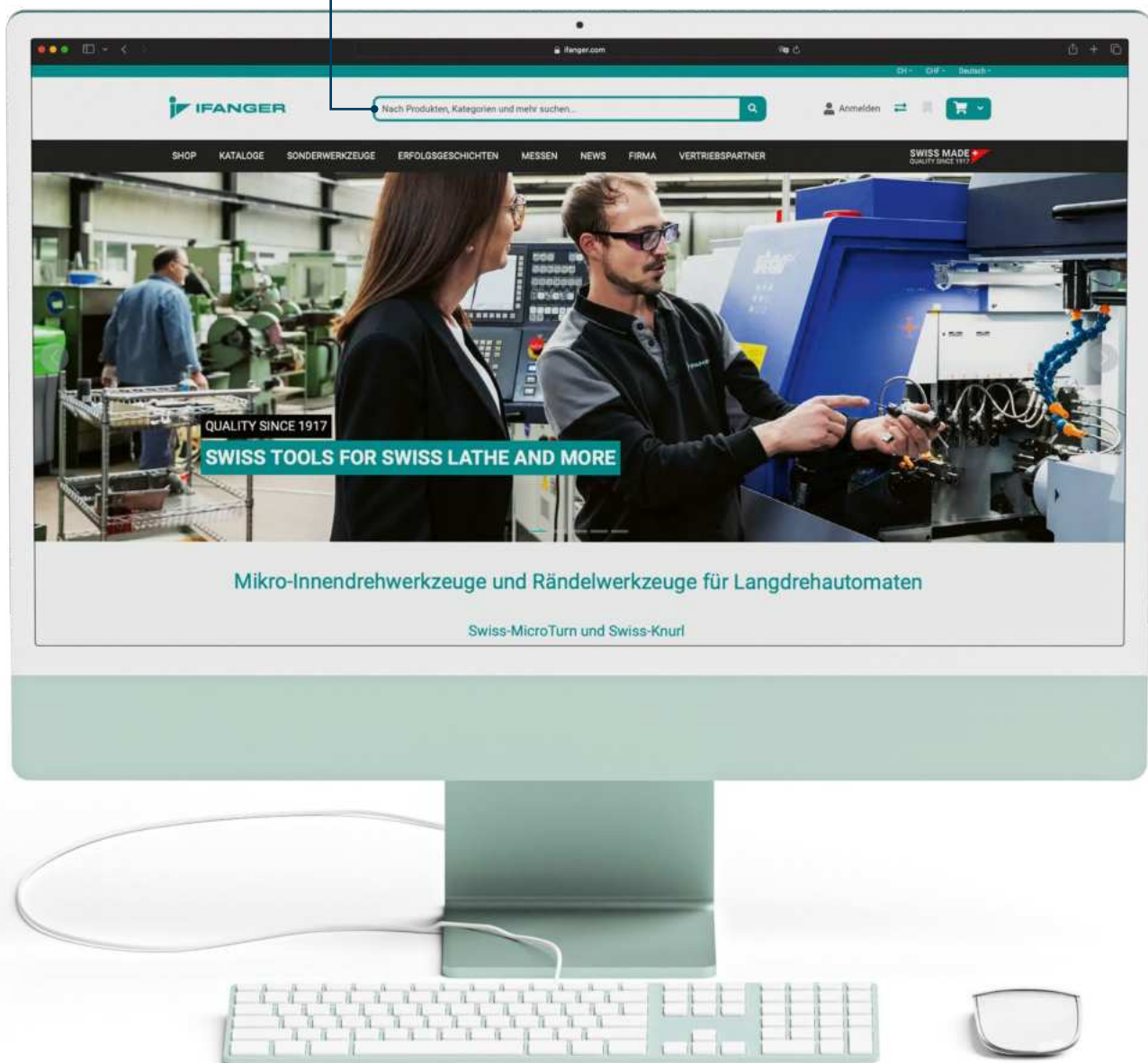


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You can access a large selection of machine-specific holders in our webshop. Simply enter your search term in the search field.

CITIZEN DMG MORI EMCO GOODWAY HANWHA INDEX MAIER
MANURHIN NEXTURN NOMURA STAR TORNOS TRAUB TSUGAMI



Special solutions

For your challenge



Step by step to your special tool

1. Get in touch

Get in touch with us directly – either via the contact form, a specialist consultant or a sales partner.

2. Define specifications

We will contact you by telephone or visit you in person to discuss your requirements and specifications for the special tool.

3. Non-binding quotation

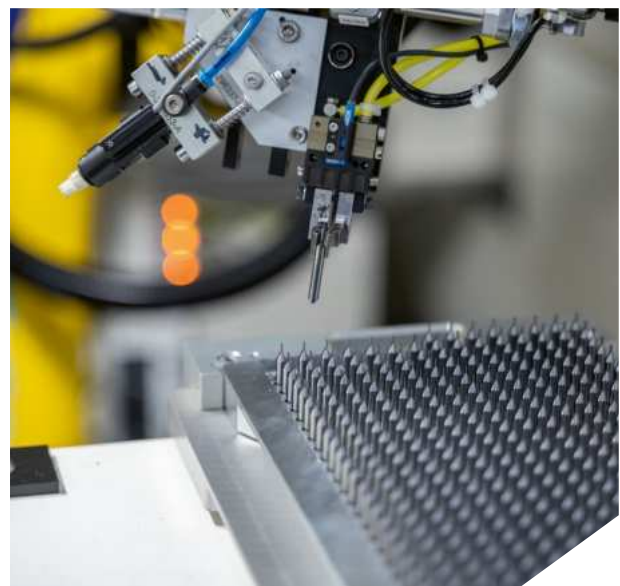
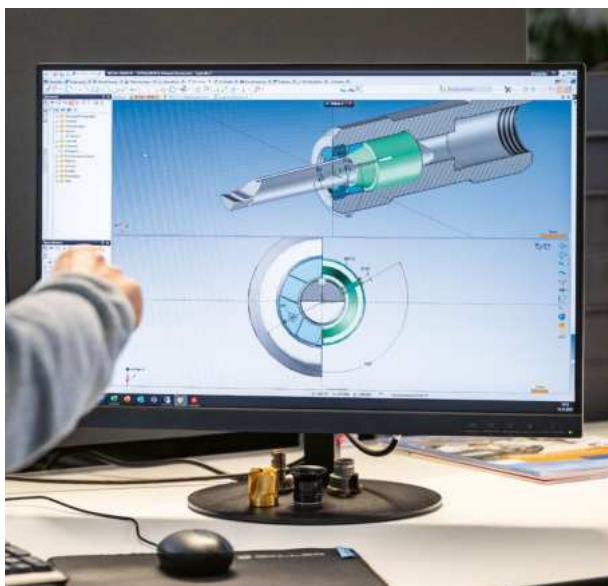
After our consultation, you will receive a detailed quotation covering all aspects of the development and manufacture of the special tool.

4. Development and production

After you place your order, we realize your special tool and make it available to you quickly.

Get in touch

ifanger.com/en/contact





THE CUTTING TOOL THAT KEEPS YOU AHEAD

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