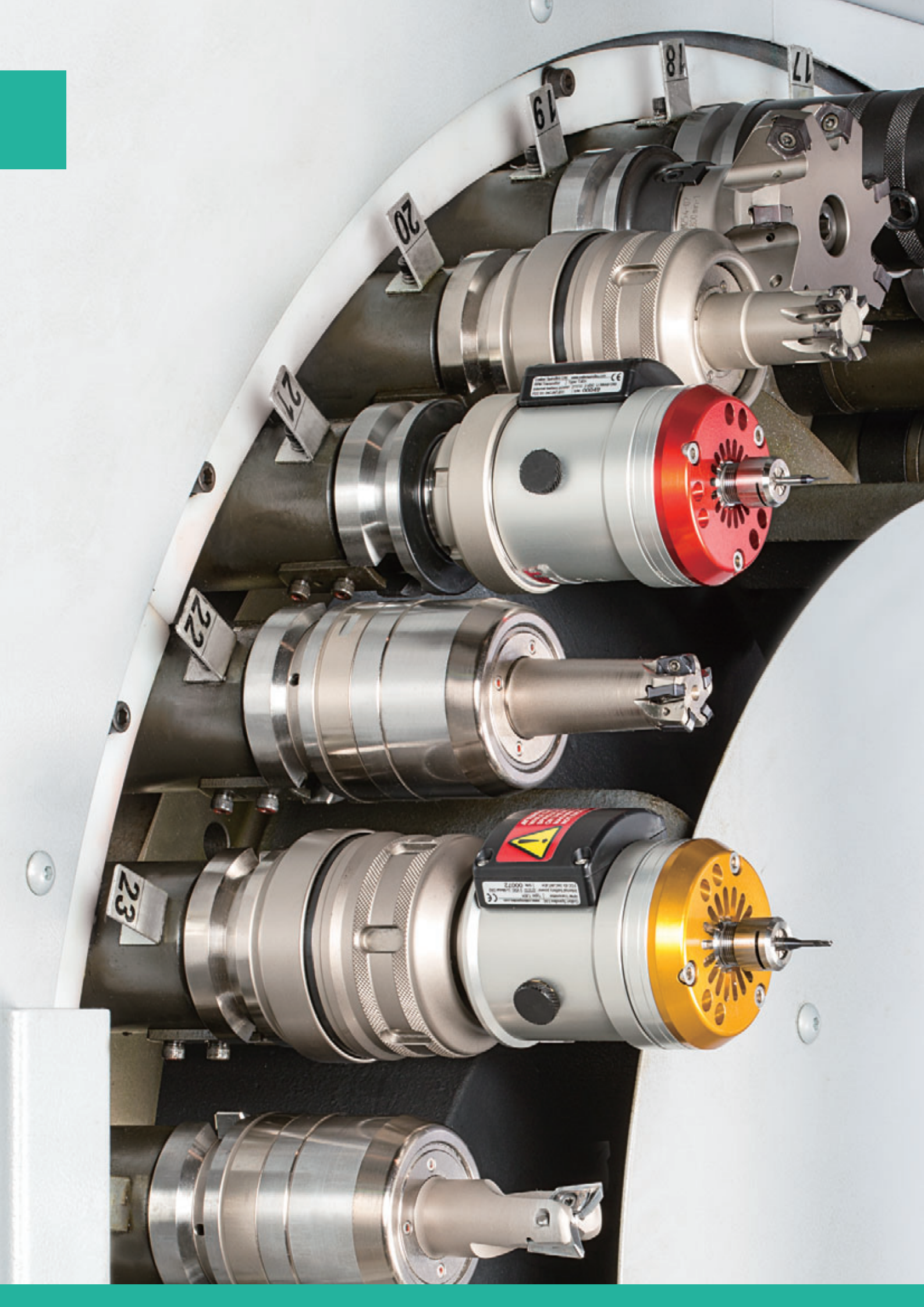


w w w . t u n g a l o y . c o m



Transform the existing machine into a **high-speed machine!**





SPINJET
TUNGALOY

Productivity quadruples due to spindles that rotate at **high speed with coolant pressure.**

SPINJET

TUNGALOY

- **Outstanding productivity on existing machines due to high-speed rotation**

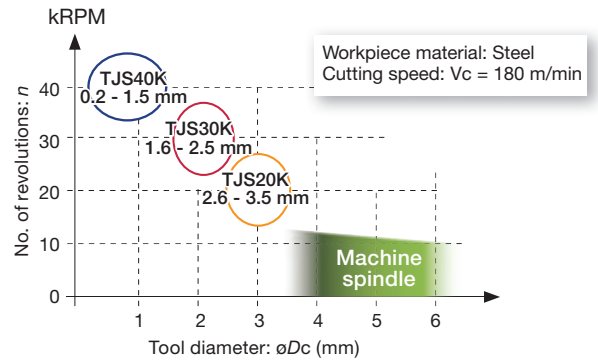
Coolant pressure rotates the turbine using a unique mechanism and helps small-diameter tools machine at high speed.



- **Long tool life and stable machining**

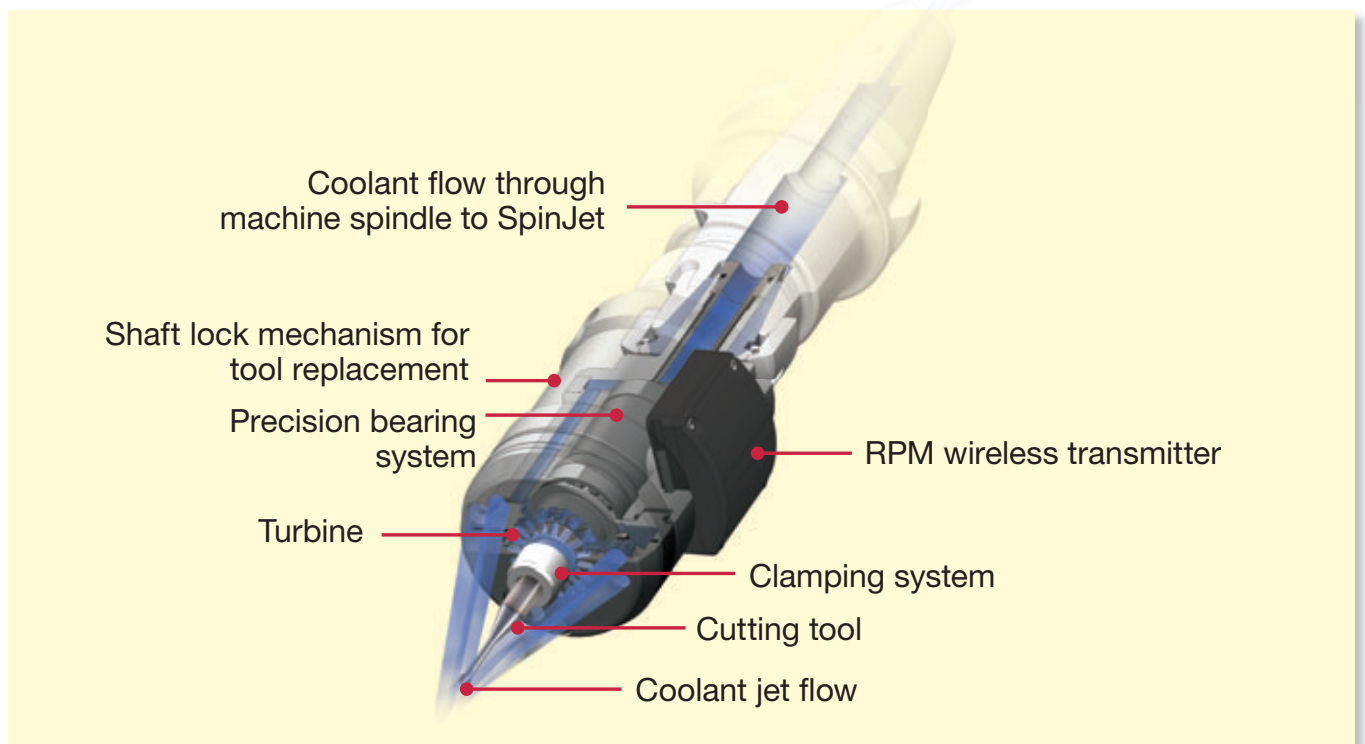
Appropriate cutting conditions and reduced heat with coolant jet flow achieve long tool life and stable machining for small-diameter tools.

■ Operating speed range vs. tool diameter



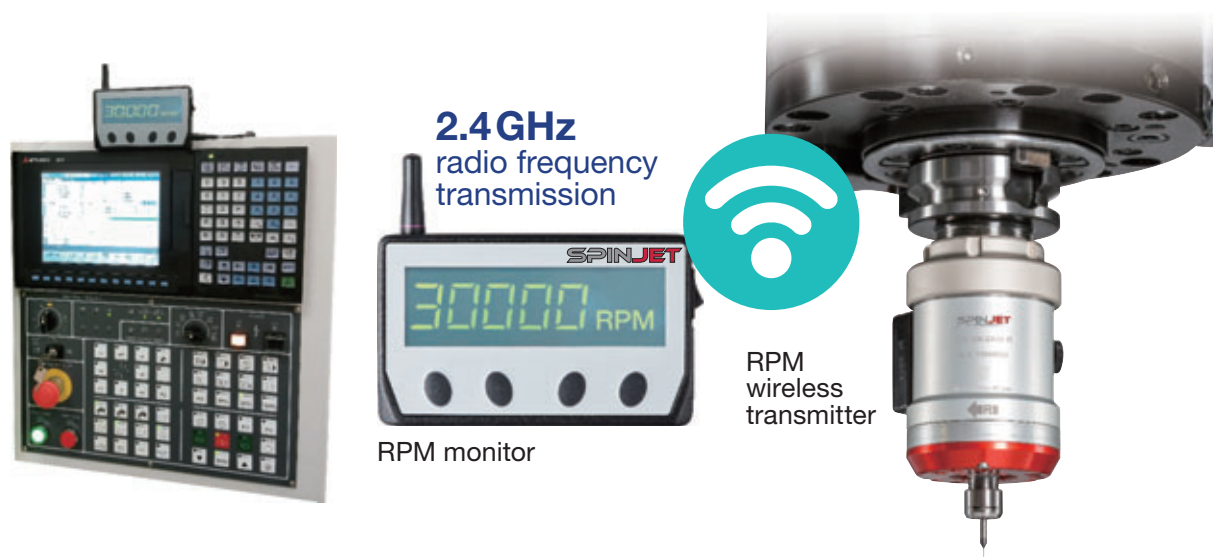
- **Energy saving**

Tools rotate only with coolant pressure, and the machine spindle is idle while SpinJet is in operation.






● Wireless RPM monitoring system

SpinJet is equipped with a wireless transmitter that monitors the actual speed of tool rotation during machining. Monitoring range: Up to 5 m from the transmitter



● Maximum 60,000 RPM (when coolant pressure is 4 MPa)

TungJet is available in three versions for different tool diameters: 20,000, 30,000, and 40,000 RPM (when coolant pressure is 2 MPa). RPM is controlled by adjusting the coolant pressure, and the increase in pressure delivers maximum 60,000 RPM.

Ring colour	Blue	Red	Yellow
Shape			
No. of revolutions: n (RPM)	40,000	30,000	20,000
Cat. No.	TJS40K...	TJS30K	TJS20K
Coolant pressure: (MPa)	2	2	2
Min. flow rate: (l/min)	12	12	12
Max. shank dia: ϕD_s (mm)	6	6	6
Tool dia: ϕD_c (mm)	1.0 - 1.5	1.0 - 2.5	2.0 - 3.5

■ Speed vs. pressure

Jet spindle type / n (RPM)	Coolant pressure		
	2 MPa	3 MPa	4 MPa
TJS20K-ER32	20000	30000	40000
TJS30K-ER32	30000	40000	50000
TJS40K-ER32	40000	50000	60000

These are approximate RPM values, and they depend on coolant pressure, flow rate, and type.

● Applicable on a wide variety of machines

SpinJet is available in several adaptation types.

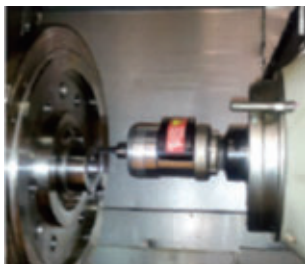
■ Adaptation types of jet spindles



● High-speed machining with remarkable efficiency on all machines

Compact and lightweight SpinJet is applicable for turning and machining centers, and lathe machines.

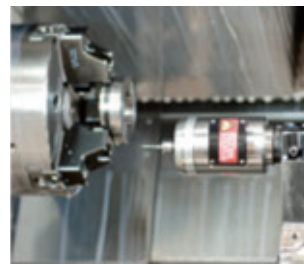
Suitable for machines with spindle-through coolant system, spindle rotation up to 15,000 RPM, and coolant pressure of at least 2 MPa



Turning center



Machining center



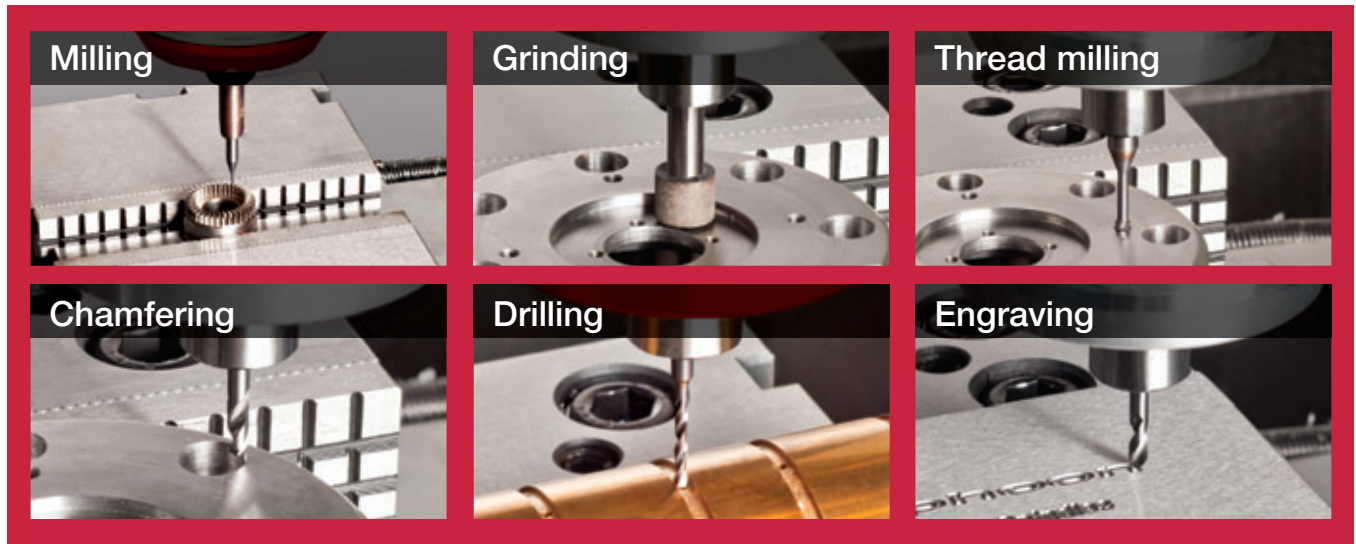
Lathe machine

Applicable on various tool magazines



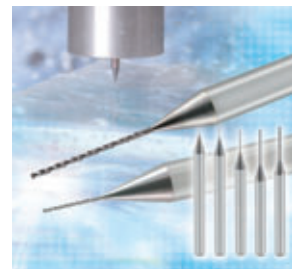
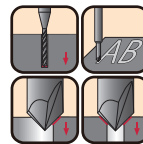
● Suitable for a wide range of applications

SpinJet provides highly efficient machining with various small-diameter tools up to $\varnothing 6$ mm.



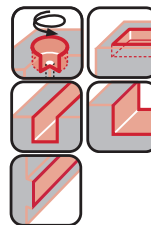
GIGAMINIDRILL DSM

High precision, high reliability and long tool life
Micro-diameter drills that provide safe and secure operations.
Drill diameter: $\varnothing D_c = \varnothing 0.1 - \varnothing 3.0$ mm



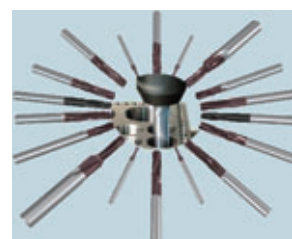
SOLIDMEISTER

Solid endmills with long tool life and high reliability
Square and ball nose types



SOLIDTHREAD MTECS

Small-diameter threading endmills for metric and unified internal threads
Low cutting force due to short contact time of tools and workpiece materials, resulting in high-precision threading



Jet spindles

TJS-ER32 Holder for ER32 collet chuck

ER11SPREX...AA

ER32

ø80

ø63

15

82

110

Parts

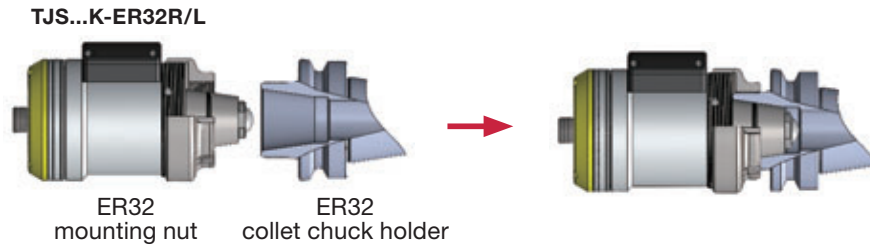
Descriptions	Cat. No.
Display*	TJSTSDDISPLAY
Nut	NUTER11GHS
Wrench for nut	WRENCHER11SMS
Wrench for setting	WRENCHDIA3.2X45

*Option

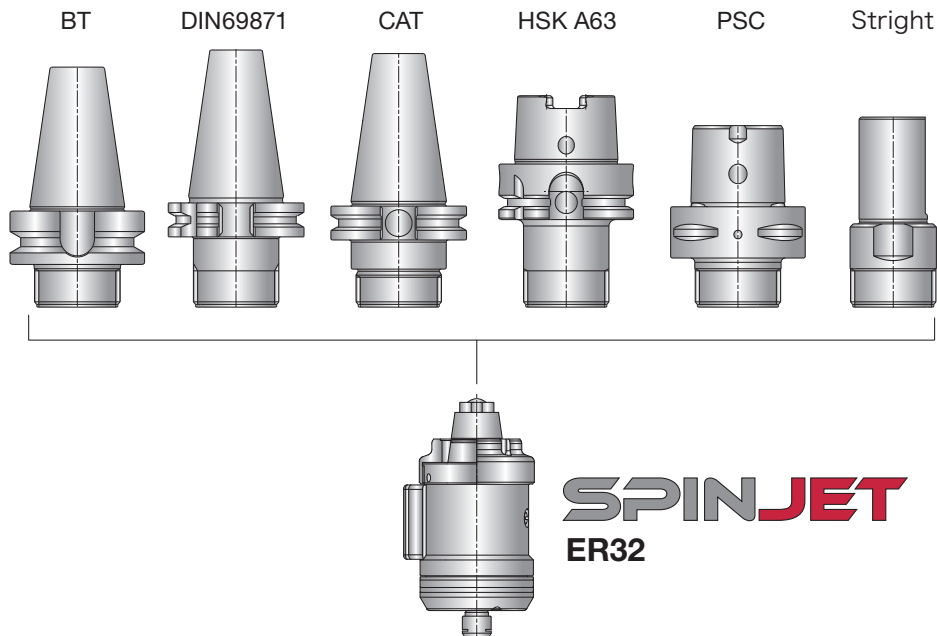
Cat. No.	Stock	Dimensions (mm)		Weight (kg)	Direction of tool rotation
		Max. tool diameter ϕD_c			
TJS20KER32L		$\phi 3.5$		1.1	L
TJS20KER32R		$\phi 3.5$		1.1	R
TJS30KER32L		$\phi 2.5$		1.1	L
TJS30KER32R		$\phi 2.5$		1.1	R
TJS40KER32L		$\phi 1.5$		1.1	L
TJS40KER32R		$\phi 1.5$		1.1	R

- Max. tool shank diameter: $\phi 6.0$ mm
- Coolant pressure through machine spindle:
Min. 2 MPa / Max. 4 MPa
- Min. flow rate: 12 l/min

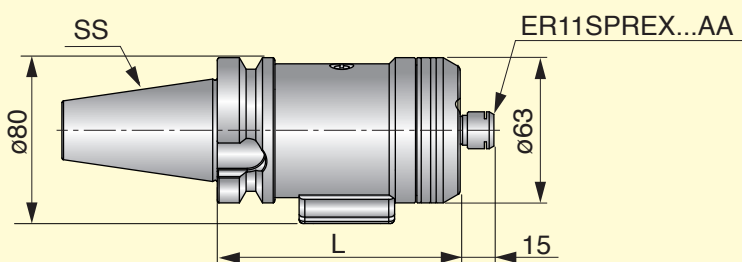
Built-in ER32 collet chuck



Options of SpinJet adaptation with ER32



TJS-BT Holder with BT shank



G2.5
40,000 RPM



Parts

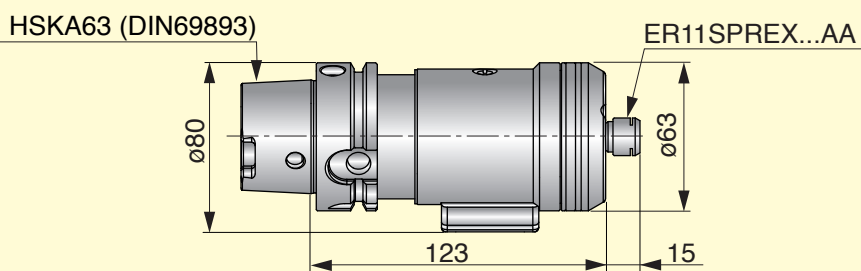
Descriptions	Cat. No.
Display*	TJSTSDDISPLAY
Nut	NUTER11GHS
Wrench for nut	WRENCHER11SMS
Wrench for setting	WRENCHDIA3.2X45

*Option

Cat. No.	Stock	Dimensions (mm)			Weight (kg)	Direction of tool rotation
		SS	L	Max. tool dia. $\varnothing Dc$		
TJS20KBT30L		BT30	116	$\varnothing 3.5$	1.5	L
TJS20KBT30R		BT30	116	$\varnothing 3.5$	1.5	R
TJS30KBT30L		BT30	116	$\varnothing 2.5$	1.5	L
TJS30 BT30R		BT30	116	$\varnothing 2.5$	1.5	R
TJS40KBT30L		BT30	116	$\varnothing 1.5$	1.5	L
TJS40KBT30R		BT30	116	$\varnothing 1.5$	1.5	R
TJS20KBT40L		BT40	105	$\varnothing 3.5$	1.9	L
TJS20KBT40R		BT40	105	$\varnothing 3.5$	1.9	R
TJS30KBT40L		BT40	105	$\varnothing 2.5$	1.9	L
TJS30KBT40R		BT40	105	$\varnothing 2.5$	1.9	R
TJS40KBT40L		BT40	105	$\varnothing 1.5$	1.9	L
TJS40KBT40R		BT40	105	$\varnothing 1.5$	1.9	R

- Max. tool shank diameter: $\varnothing 6.0$ mm
- Coolant pressure through machine spindle:
Min. 2 MPa / Max. 4 MPa
- Min. flow rate: 12 l/min

TJS-HSK A63 Holder with HSK A63 shank



G2.5
40,000 RPM



Parts

Descriptions	Cat. No.
Display*	TJSTSDDISPLAY
Nut	NUTER11GHS
Wrench for nut	WRENCHER11SMS
Wrench for setting	WRENCHDIA3.2X45

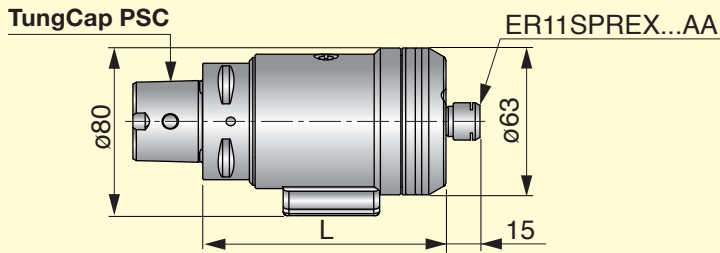
*Option

Cat. No.	Stock	Dimensions (mm)		Weight (kg)	Direction of tool rotation
		Max. tool diameter $\varnothing Dc$			
TJS20KHKA63L		$\varnothing 3.5$		1.6	L
TJS20KHKA63R		$\varnothing 3.5$		1.6	R
TJS30KHKA63L		$\varnothing 2.5$		1.6	L
TJS30KHKA63R		$\varnothing 2.5$		1.6	R
TJS40KHKA63L		$\varnothing 1.5$		1.6	L
TJS40KHKA63R		$\varnothing 1.5$		1.6	R

- Max. tool shank diameter: $\varnothing 6.0$ mm
- Coolant pressure through machine spindle:
Min. 2 MPa / Max. 4 MPa
- Min. flow rate: 12 l/min

TJS-C

Holder with PSC shank



G2.5
40,000 RPM



Parts

Descriptions	Cat. No.
Display*	TJSTSDDISPLAY
Nut	NUTER11GHS
Wrench for nut	WRENCHER11SMS
Wrench for setting	WRENCHDIA3.2X45

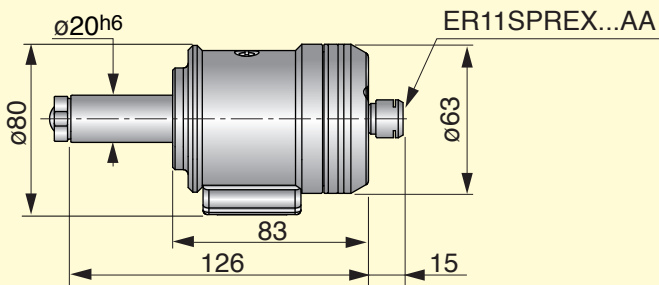
*Option

Cat. No.	Stock	TungCap PSC	Dimensions (mm)		Weight (kg)	Direction of tool rotation
			L	Max. tool dia. $\varnothing Dc$		
TJS20KC5L		C5	104	$\varnothing 3.5$	1.5	L
TJS20KC5R		C5	104	$\varnothing 3.5$	1.5	R
TJS30KC5L		C5	104	$\varnothing 2.5$	1.5	L
TJS30KC5R		C5	104	$\varnothing 2.5$	1.5	R
TJS40KC5L		C5	104	$\varnothing 1.5$	1.5	L
TJS40KC5R		C5	104	$\varnothing 1.5$	1.5	R
TJS20KC6L		C6	106	$\varnothing 3.5$	1.65	L
TJS20KC6R		C6	106	$\varnothing 3.5$	1.65	R
TJS30KC6L		C6	106	$\varnothing 2.5$	1.65	L
TJS30KC6R		C6	106	$\varnothing 2.5$	1.65	R
TJS40KC6L		C6	106	$\varnothing 1.5$	1.65	L
TJS40KC6R		C6	106	$\varnothing 1.5$	1.65	R

- Max. tool shank diameter: $\varnothing 6.0$ mm
- Coolant pressure through machine spindle:
Min. 2 MPa / Max. 4 MPa
- Min. flow rate: 12 l/min

TJS-ST

Holder with straight shank



G2.5
40,000 RPM



Parts

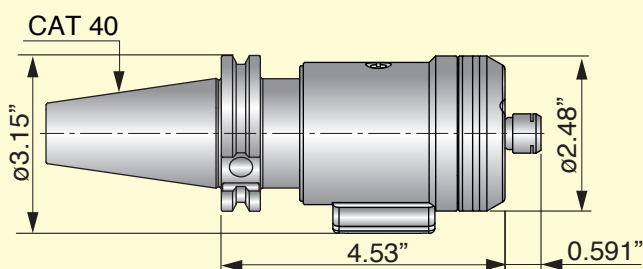
Descriptions	Cat. No.
Display*	TJSTSDDISPLAY
Nut	NUTER11GHS
Wrench for nut	WRENCHER11SMS
Wrench for setting	WRENCHDIA3.2X45

*Option

Cat. No.	Stock	Dimensions (mm)		Weight (kg)	Direction of tool rotation
		Max. tool diameter $\varnothing Dc$			
TJS20KST20L		$\varnothing 3.5$		1.1	L
TJS20KST20R		$\varnothing 3.5$		1.1	R
TJS30KST20L		$\varnothing 2.5$		1.1	L
TJS30KST20R		$\varnothing 2.5$		1.1	R
TJS40KST20L		$\varnothing 1.5$		1.1	L
TJS40KST20R		$\varnothing 1.5$		1.1	R

- Max. tool shank diameter: $\varnothing 6.0$ mm
- Coolant pressure through machine spindle:
Min. 2 MPa / Max. 4 MPa
- Min. flow rate: 12 l/min

TJS-CAT Holder with CAT40 shank



G2.5
40,000 RPM



Parts

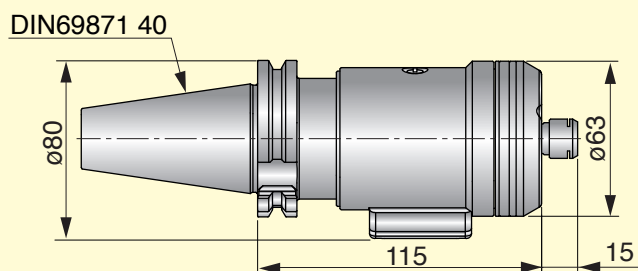
Descriptions	Cat. No.
Display*	TJSTSDDISPLAY
Nut	NUTER11GHS
Wrench for nut	WRENCHER11SMS
Wrench for setting	WRENCHDIA3.2X45

*Option

Cat. No.	Stock	Dimensions (in)	Weight (Lbs)	Direction of tool rotation
		Max. tool diameter ϕD_c		
TJS20KCAT40L		$\phi 0.138$	3.528	L
TJS20KCAT40R		$\phi 0.138$	3.528	R
TJS30KCAT40L		$\phi 0.100$	3.528	L
TJS30KCAT40R		$\phi 0.100$	3.528	R
TJS40KCAT40L		$\phi 0.060$	3.528	L
TJS40KCAT40R		$\phi 0.060$	3.528	R

- Max. tool shank diameter: $\phi 6.0$ mm
- Coolant pressure through machine spindle:
Min. 2 MPa / Max. 4 MPa
- Min. flow rate: 12 l/min

TJS-DIN69871 Holder with DIN69871 shank



G2.5
40,000 RPM



Parts

Descriptions	Cat. No.
Display*	TJSTSDDISPLAY
Nut	NUTER11GHS
Wrench for nut	WRENCHER11SMS
Wrench for setting	WRENCHDIA3.2X45

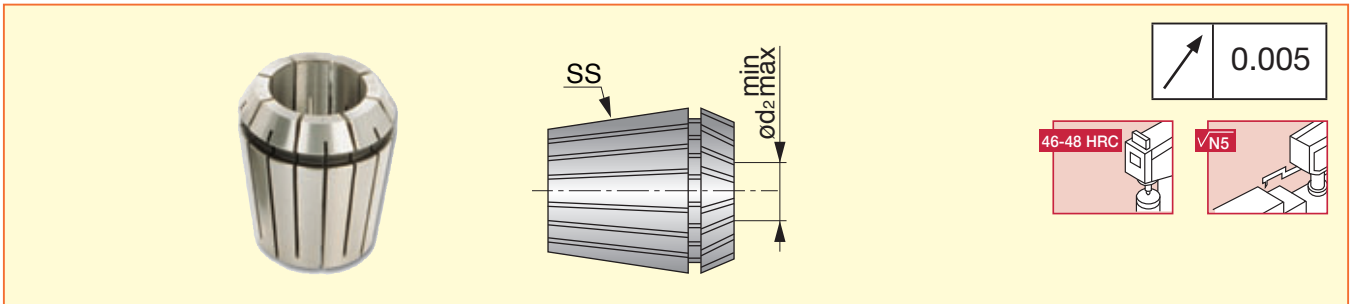
*Option

Cat. No.	Stock	Dimensions (mm)	Weight (kg)	Direction of tool rotation
		Max. tool diameter ϕD_c		
TJS20KDIN6987140L		$\phi 3.5$	1.6	L
TJS20KDIN6987140R		$\phi 3.5$	1.6	R
TJS30KDIN6987140L		$\phi 2.5$	1.6	L
TJS30KDIN6987140R		$\phi 2.5$	1.6	R
TJS40KDIN6987140L		$\phi 1.5$	1.6	L
TJS40KDIN6987140R		$\phi 1.5$	1.6	R

- Max. tool shank diameter: $\phi 6.0$ mm
- Coolant pressure through machine spindle:
Min. 2 MPa / Max. 4 MPa
- Min. flow rate: 12 l/min

Accessories for spindles

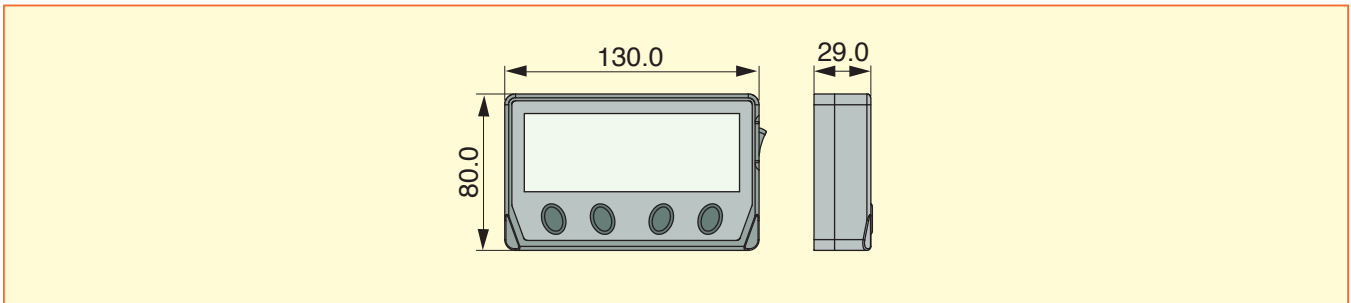
ER-SPR-AA ER11 collets



Cat. No.	Stock	Dimensions (mm)		
		SS	ød ₂ min	ød ₂ max
ER11SPR0.5-1AA		ER11	0.5	1
ER11SPR1-2AA		ER11	1	2
ER11SPR2-3AA		ER11	2	3
ER11SPR3-4AA		ER11	3	4
ER11SPR4-5AA		ER11	4	5
ER11SPR5-6AA		ER11	5	6
ER11SPR6-7AA		ER11	6	7

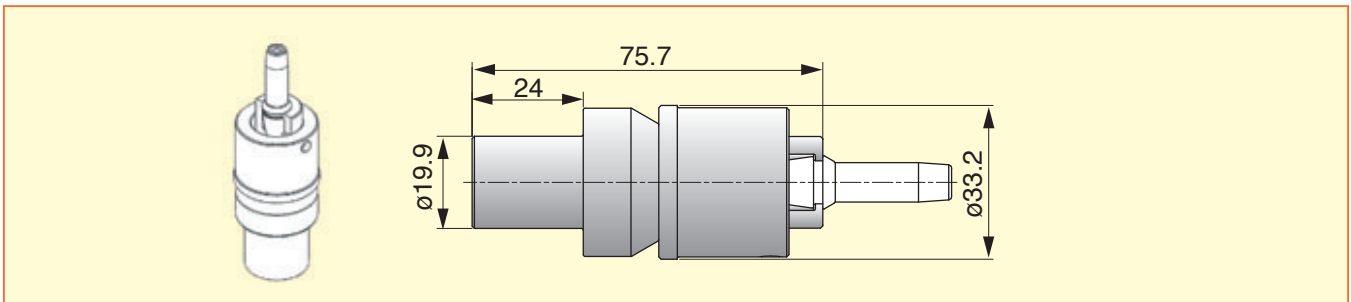
AA collet run-out: 0.005 mm

TJS TSD DISPLAY Wireless RPM speed display



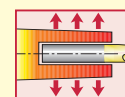
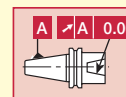
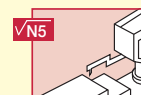
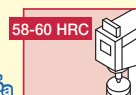
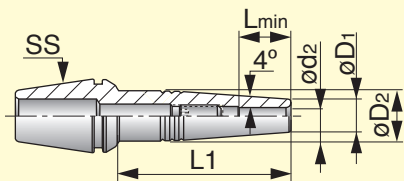
Cat. No.
TJSTSDDISPLAY

IND ER11 TOOL ADAPTER ER-SRK shrink collet adapter for induction heating device



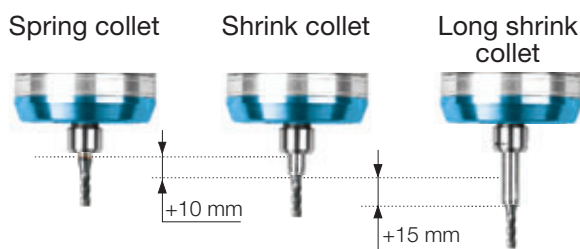
Cat. No.
INDER11TOOLADAPTER

ER-SRK Thermal shrink chucks with an integral ER collets

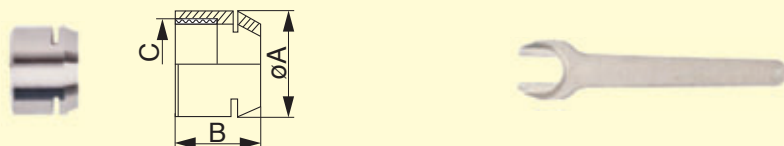


Cat. No.	Stock	Dimensions (mm)					
		SS	d2	L1	Lmin	D2	D1
ER11SRK3X10		ER11	3	10	9.5	8.5	7.6
ER11SRK3X25		ER11	3	25	11.5	8.5	7.6
ER11SRK4X10		ER11	4	10	9.5	8.5	7.6
ER11SRK4X25		ER11	4	25	11.5	8.5	7.6

For carbide tools only

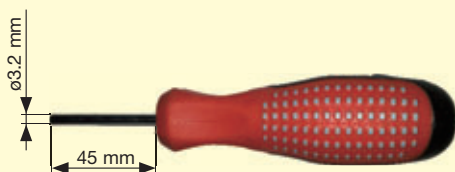


■ Nut and wrench for collets



Cat. No.	Dimensions (mm)			
	øA	B	C	Wrench
NUTER11GHS	16.00	11.5	M13X0.75	WRENCHER11SMS

■ Wrench for setting

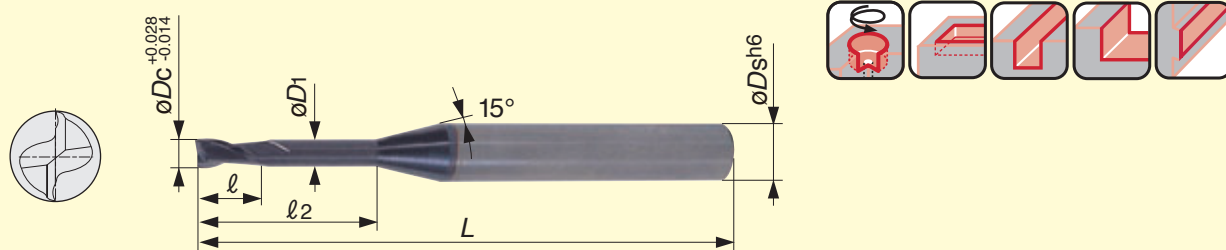


Cat. No.
WRENCHDIA3.2x45

Coated solid carbide endmills

TEC

2-flutes, 30°-helix, square type for rib processing < HRC65

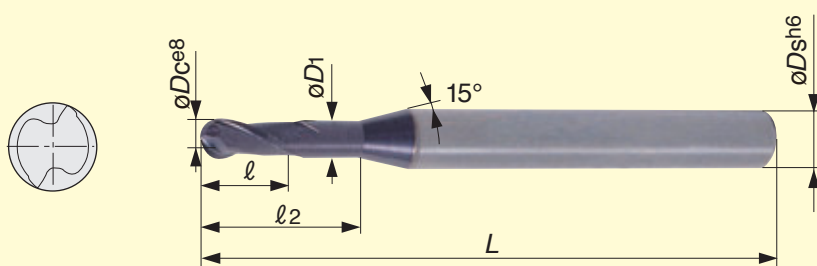


Cat. No.	Grade		Dimensions (mm)				
	AH750	$\varnothing Dc$	$\varnothing D1$	$\varnothing Ds$	ℓ	ℓ_2	L
TEC004A2-006/02C4M45		0.4	0.37	4	0.60	2	45
TEC004A2-006/04C4M45		0.4	0.37	4	0.60	4	45
TEC005A2-007/02C4M45		0.5	0.45	4	0.70	2	45
TEC005A2-007/04C4M45		0.5	0.45	4	0.70	4	45
TEC005A2-007/06C4M45		0.5	0.45	4	0.70	6	45
TEC006A2-009/02C4M45		0.6	0.55	4	0.90	2	45
TEC006A2-009/04C4M45		0.6	0.55	4	0.90	4	45
TEC006A2-009/06C4M45		0.6	0.55	4	0.90	6	45
TEC007A2-010/02C4M45		0.7	0.65	4	1.00	2	45
TEC007A2-010/04C4M45		0.7	0.65	4	1.00	4	45
TEC007A2-010/06C4M45		0.7	0.65	4	1.00	6	45
TEC008A2-012/04C4M45		0.8	0.75	4	1.20	4	45
TEC008A2-012/06C4M45		0.8	0.75	4	1.20	6	45
TEC008A2-012/08C4M45		0.8	0.75	4	1.20	8	45
TEC009A2-0135/06C4M45		0.9	0.85	4	1.35	6	45
TEC009A2-0135/08C4M45		0.9	0.85	4	1.35	8	45
TEC009A2-0135/10C4M45		0.9	0.85	4	1.35	10	45
TEC010A2-015/04C4M45		1.0	0.97	4	1.50	4	45
TEC010A2-015/06C4M45		1.0	0.97	4	1.50	6	45
TEC010A2-015/08C4M45		1.0	0.95	4	1.50	8	45
TEC010A2-015/10C4M45		1.0	0.95	4	1.50	10	45
TEC010A2-015/12C4M45		1.0	0.93	4	1.50	12	45
TEC010A2-015/16C4M50		1.0	0.93	4	1.50	16	50
TEC012A2-018/06C4M45		1.2	1.17	4	1.80	6	45
TEC012A2-018/08C4M45		1.2	1.15	4	1.80	8	45
TEC012A2-018/10C4M45		1.2	1.15	4	1.80	10	45
TEC012A2-018/12C4M45		1.2	1.13	4	1.80	12	45
TEC012A2-018/16C4M50		1.2	1.13	4	1.80	16	50
TEC014A2-021/06C4M45		1.4	1.35	4	2.10	6	45
TEC014A2-021/08C4M45		1.4	1.35	4	2.10	8	45
TEC014A2-021/10C4M45		1.4	1.35	4	2.10	10	45
TEC014A2-021/12C4M45		1.4	1.33	4	2.10	12	45
TEC014A2-021/16C4M50		1.4	1.31	4	2.10	16	50
TEC015A2-023/06C4M45		1.5	1.47	4	2.30	6	45
TEC015A2-023/08C4M45		1.5	1.45	4	2.30	8	45
TEC015A2-023/10C4M45		1.5	1.45	4	2.30	10	45
TEC015A2-023/12C4M45		1.5	1.43	4	2.30	12	45
TEC015A2-023/16C4M50		1.5	1.41	4	2.30	16	50

Cat. No.	Grade		Dimensions (mm)				
	AH750	$\varnothing D_c$	$\varnothing D_1$	$\varnothing D_s$	ℓ	ℓ_2	L
TEC015A2-023/18C4M55		1.5	1.41	4	2.30	18	55
TEC015A2-023/20C4M55		1.5	1.41	4	2.30	20	55
TEC016A2-024/06C4M45		1.6	1.57	4	2.40	6	45
TEC016A2-024/08C4M45		1.6	1.55	4	2.40	8	45
TEC016A2-024/10C4M45		1.6	1.55	4	2.40	10	45
TEC016A2-024/12C4M45		1.6	1.53	4	2.40	12	45
TEC016A2-024/16C4M50		1.6	1.53	4	2.40	16	50
TEC016A2-024/18C4M55		1.6	1.53	4	2.40	18	55
TEC016A2-024/20C4M55		1.6	1.53	4	2.40	20	55
TEC016A2-024/26C4M60		1.6	1.53	4	2.40	26	60
TEC018A2-027/06C4M45		1.8	1.77	4	2.70	6	45
TEC018A2-027/08C4M45		1.8	1.75	4	2.70	8	45
TEC018A2-027/10C4M45		1.8	1.75	4	2.70	10	45
TEC018A2-027/12C4M45		1.8	1.73	4	2.70	12	45
TEC018A2-027/16C4M50		1.8	1.71	4	2.70	16	50
TEC018A2-027/18C4M55		1.8	1.71	4	2.70	18	55
TEC018A2-027/20C4M55		1.8	1.69	4	2.70	20	55
TEC020A2-030/06C4M45		2.0	1.97	4	3.00	6	45
TEC020A2-030/08C4M45		2.0	1.95	4	3.00	8	45
TEC020A2-030/10C4M45		2.0	1.95	4	3.00	10	45
TEC020A2-030/12C4M45		2.0	1.93	4	3.00	12	45
TEC020A2-030/16C4M50		2.0	1.91	4	3.00	16	50
TEC020A2-030/20C4M55		2.0	1.89	4	3.00	20	55
TEC020A2-030/30C4M70		2.0	1.89	4	3.00	30	70
TEC025A2-037/08C4M45		2.5	2.40	4	3.70	8	45
TEC025A2-037/10C4M45		2.5	2.40	4	3.70	10	45
TEC025A2-037/12C4M45		2.5	2.40	4	3.70	12	45
TEC025A2-037/16C4M55		2.5	2.40	4	3.70	16	55
TEC025A2-037/20C4M60		2.5	2.40	4	3.70	20	60
TEC025A2-037/30C4M80		2.5	2.40	4	3.70	30	80
TEC030A2-045/08C6M45		3.0	2.85	6	4.50	8	45
TEC030A2-045/10C6M45		3.0	2.85	6	4.50	10	45
TEC030A2-045/12C6M45		3.0	2.85	6	4.50	12	45
TEC030A2-045/16C6M55		3.0	2.85	6	4.50	16	55
TEC030A2-045/20C6M60		3.0	2.85	6	4.50	20	60
TEC030A2-045/30C6M70		3.0	2.85	6	4.50	30	70
TEC030A2-045/40C6M90		3.0	2.85	6	4.50	40	90

TEB

2-flutes, 30°-helix, ball nose type for rib processing < HRC65



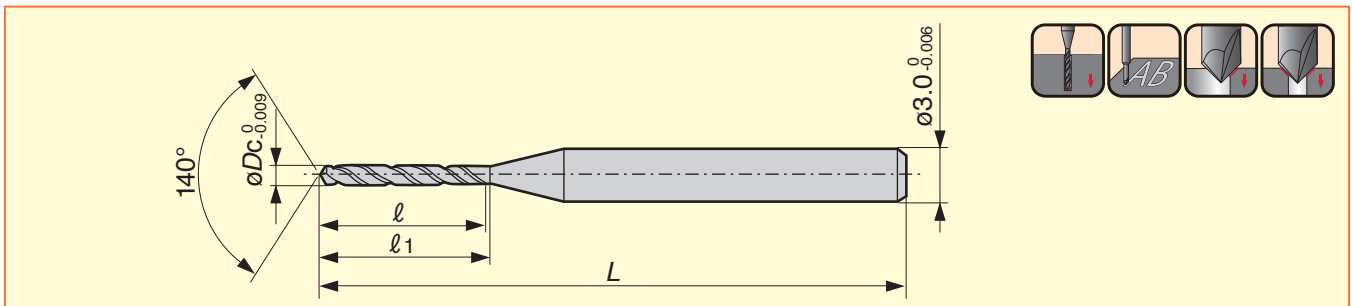
Cat. No.	Grade		Dimensions (mm)				
	AH750	$\varnothing D_c$	$\varnothing D_1$	$\varnothing D_s$	ℓ	ℓ_2	L
TEB004A2-006/02C4M45		0.4	0.36	4	0.6	2	45
TEB004A2-006/03C4M45		0.4	0.36	4	0.6	3	45
TEB005A2-007/02C4M45		0.5	0.45	4	0.7	2	45
TEB005A2-007/04C4M45		0.5	0.45	4	0.7	4	45
TEB005A2-007/06C4M45		0.5	0.45	4	0.7	6	45
TEB006A2-009/02C4M45		0.6	0.55	4	0.9	2	45
TEB006A2-009/04C4M45		0.6	0.55	4	0.9	4	45
TEB006A2-009/06C4M45		0.6	0.55	4	0.9	6	45
TEB008A2-012/04C4M45		0.8	0.75	4	1.2	4	45
TEB008A2-012/06C4M45		0.8	0.75	4	1.2	6	45
TEB008A2-012/08C4M45		0.8	0.75	4	1.2	8	45
TEB010A2-015/04C4M45		1.0	0.97	4	1.5	4	45
TEB010A2-015/06C4M45		1.0	0.97	4	1.5	6	45
TEB010A2-015/08C4M45		1.0	0.95	4	1.5	8	45
TEB010A2-015/10C4M45		1.0	0.95	4	1.5	10	45
TEB010A2-015/12C4M45		1.0	0.93	4	1.5	12	45
TEB010A2-015/16C4M50		1.0	0.93	4	1.5	16	50
TEB012A2-018/08C4M45		1.2	1.17	4	1.8	8	45
TEB012A2-018/12C4M45		1.2	1.13	4	1.8	12	45
TEB014A2-021/08C4M45		1.4	1.35	4	2.1	8	45
TEB014A2-021/12C4M45		1.4	1.33	4	2.1	12	45
TEB014A2-021/16C4M50		1.4	1.31	4	2.1	16	50
TEB015A2-023/06C4M45		1.5	1.47	4	2.3	6	45
TEB015A2-023/08C4M45		1.5	1.45	4	2.3	8	45
TEB015A2-023/10C4M45		1.5	1.45	4	2.3	10	45
TEB015A2-023/12C4M45		1.5	1.43	4	2.3	12	45
TEB015A2-023/16C4M50		1.5	1.41	4	2.3	16	50
TEB015A2-023/20C4M55		1.5	1.39	4	2.3	20	55
TEB016A2-024/08C4M45		1.6	1.55	4	2.4	8	45
TEB016A2-024/12C4M45		1.6	1.53	4	2.4	12	45
TEB016A2-024/16C4M50		1.6	1.51	4	2.4	16	50
TEB016A2-024/20C4M55		1.6	1.49	4	2.4	20	55
TEB018A2-027/08C4M45		1.8	1.75	4	2.7	8	45
TEB018A2-027/12C4M45		1.8	1.73	4	2.7	12	45
TEB018A2-027/16C4M50		1.8	1.71	4	2.7	16	50
TEB018A2-027/20C4M55		1.8	1.69	4	2.7	20	55
TEB020A2-030/06C4M45		2.0	1.97	4	3.0	6	45
TEB020A2-030/10C4M45		2.0	1.93	4	3.0	10	45

Cat. No.	Grade		Dimensions (mm)				
	AH750	ϕD_c	ϕD_1	ϕD_s	ℓ	ℓ_2	L
TEB020A2-030/12C4M50		2.0	1.93	4	3.0	12	50
TEB020A2-030/16C4M50		2.0	1.91	4	3.0	16	50
TEB020A2-030/20C4M55		2.0	1.89	4	3.0	20	55
TEB020A2-030/30C4M70		2.0	1.89	4	3.0	30	70
TEB030A2-045/08C6M50		3.0	2.85	6	4.5	8	50
TEB030A2-045/10C6M50		3.0	2.85	6	4.5	10	50
TEB030A2-045/12C6M50		3.0	2.85	6	4.5	12	50
TEB030A2-045/16C6M55		3.0	2.85	6	4.5	16	55
TEB030A2-045/20C6M60		3.0	2.85	6	4.5	20	60
TEB030A2-045/30C6M70		3.0	2.85	6	4.5	30	70

Coated solid carbide drills

DSM

For high-speed machining of steel

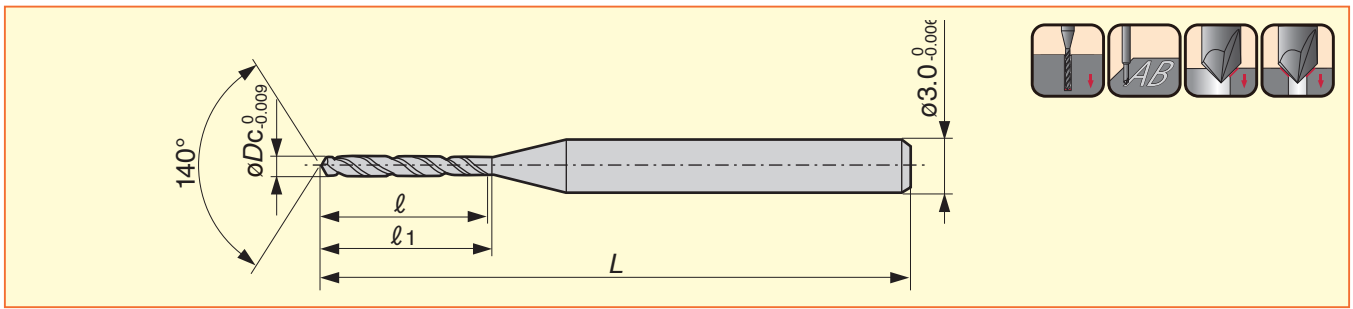


Drill dia. $\varnothing D_c$ (mm)	L/D	Cat. No.	Stock	Dimensions (mm)			Drill dia. $\varnothing D_c$ (mm)	L/D	Cat. No.	Stock	Dimensions (mm)		
				L	ℓ	ℓ_1					L	ℓ	ℓ_1
0.10	10	DSM0010G10	●	38	1.15	1.4	0.48	10	DSM0048G15	●	38	8.1	8.7
0.11	10	DSM0011G10	●	38	1.25	1.5	0.49	10	DSM0049G15	●	38	8.1	8.7
0.12	10	DSM0012G10	●	38	1.35	1.6	0.50	10	DSM0050G15	●	38	8.1	8.7
0.13	10	DSM0013G10	●	38	1.55	1.8	0.51	10	DSM0051G10		38	6.6	7.2
0.14	10	DSM0014G10	●	38	1.65	1.9	0.52	10	DSM0052G10		38	6.6	7.2
0.15	10	DSM0015G10	●	38	1.75	2.0	0.53	10	DSM0053G10		38	6.6	7.2
0.16	10	DSM0016G10	●	38	1.85	2.1	0.54	10	DSM0054G10		38	6.6	7.2
0.17	10	DSM0017G10	●	38	1.95	2.2	0.55	10	DSM0055G10	●	38	6.6	7.2
0.18	10	DSM0018G10	●	38	2.15	2.4	0.56	10	DSM0056G10		38	7.3	7.9
0.19	10	DSM0019G10	●	38	2.25	2.5	0.57	10	DSM0057G10		38	7.3	7.9
0.20	10	DSM0020G10	●	38	2.35	2.6	0.58	10	DSM0058G10		38	7.3	7.9
0.21	10	DSM0021G10	●	38	2.45	2.7	0.59	10	DSM0059G10		38	7.3	7.9
0.22	10	DSM0022G10	●	38	2.55	2.8	0.60	10	DSM0060G10	●	38	7.3	7.9
0.23	10	DSM0023G10	●	38	2.75	3.0	0.61	10	DSM0061G10		38	7.9	8.5
0.24	10	DSM0024G10	●	38	2.85	3.1	0.62	10	DSM0062G10		38	7.9	8.5
0.25	10	DSM0025G10	●	38	3.0	3.3	0.63	10	DSM0063G10		38	7.9	8.5
0.26	10	DSM0026G10	●	38	3.1	3.4	0.64	10	DSM0064G10		38	7.9	8.5
0.27	10	DSM0027G10	●	38	3.2	3.5	0.65	10	DSM0065G10	●	38	7.9	8.5
0.28	10	DSM0028G10	●	38	3.4	3.7	0.66	10	DSM0066G10		38	8.6	9.2
0.29	10	DSM0029G10	●	38	3.5	3.8	0.67	10	DSM0067G10		38	8.6	9.2
0.30	10	DSM0030G10	●	38	3.9	4.2	0.68	10	DSM0068G10		38	8.6	9.2
0.31	15	DSM0031G15	●	38	5.6	5.9	0.69	10	DSM0069G10		38	8.6	9.2
0.32	15	DSM0032G15	●	38	5.6	5.9	0.70	10	DSM0070G10	●	38	8.6	9.2
0.33	15	DSM0033G15	●	38	5.6	5.9	0.71	10	DSM0071G10		38	9.2	9.8
0.34	15	DSM0034G15	●	38	5.6	5.9	0.72	10	DSM0072G10		38	9.2	9.8
0.35	15	DSM0035G15	●	38	5.6	5.9	0.73	10	DSM0073G10		38	9.2	9.8
0.36	15	DSM0036G15	●	38	6.5	6.8	0.74	10	DSM0074G10		38	9.2	9.8
0.37	15	DSM0037G15	●	38	6.5	6.8	0.75	10	DSM0075G10	●	38	9.2	9.8
0.38	15	DSM0038G15	●	38	6.5	6.8	0.76	10	DSM0076G10		38	9.9	10.5
0.39	15	DSM0039G15	●	38	6.5	6.8	0.77	10	DSM0077G10		38	9.9	10.5
0.40	15	DSM0040G15	●	38	6.5	6.8	0.78	10	DSM0078G10		38	9.9	10.5
0.41	15	DSM0041G15	●	38	7.4	7.7	0.79	10	DSM0079G10		38	9.9	10.5
0.42	15	DSM0042G15	●	38	7.4	7.7	0.80	10	DSM0080G10	●	38	9.9	10.5
0.43	15	DSM0043G15	●	38	7.4	7.7	0.81	10	DSM0081G10		38	10.5	11.1
0.44	15	DSM0044G15	●	38	7.4	7.7	0.82	10	DSM0082G10		38	10.5	11.1
0.45	15	DSM0045G15	●	38	7.4	7.7	0.83	10	DSM0083G10		38	10.5	11.1
0.46	15	DSM0046G15	●	38	8.1	8.7	0.84	10	DSM0084G10		38	10.5	11.1
0.47	15	DSM0047G15	●	38	8.1	8.7	0.85	10	DSM0085G10		38	10.5	11.1

● : Stocked items

Drill dia. øDc (mm)	L/D	Cat. No.	Stock	Dimensions (mm)			Drill dia. øDc (mm)	L/D	Cat. No.	Stock	Dimensions (mm)		
				L	ℓ	ℓ1					L	ℓ	ℓ1
0.86	10	DSM0086G10		38	9.9	10.5	1.32	5	DSM0132G05		38	10.5	11.1
0.87	10	DSM0087G10		38	9.9	10.5	1.33	5	DSM0133G05		38	10.5	11.1
0.88	10	DSM0088G10		38	9.9	10.5	1.34	10	DSM0134G05		38	10.5	11.1
0.89	10	DSM0089G10		38	9.9	10.5	1.35	10	DSM0135G05		38	10.5	11.1
0.90	10	DSM0090G10	●	38	9.9	10.5	1.36	10	DSM0136G05		38	10.5	11.1
0.91	10	DSM0091G10		38	10.5	11.1	1.37	10	DSM0137G05		38	10.5	11.1
0.92	10	DSM0092G10		38	10.5	11.1	1.38	10	DSM0138G05		38	10.5	11.1
0.93	10	DSM0093G10		38	10.5	11.1	1.39	10	DSM0139G05		38	10.5	11.1
0.94	10	DSM0094G10		38	10.5	11.1	1.40	10	DSM0140G05	●	38	10.5	11.1
0.95	10	DSM0095G10		38	10.5	11.1	1.41	10	DSM0141G05		38	11.3	11.9
0.96	10	DSM0096G10		38	11.0	11.6	1.42	10	DSM0142G05		38	11.3	11.9
0.97	10	DSM0097G10		38	11.0	11.6	1.43	10	DSM0143G05		38	11.3	11.9
0.98	10	DSM0098G10		38	11.0	11.6	1.44	10	DSM0144G05		38	11.3	11.9
0.99	10	DSM0099G10		38	11.0	11.6	1.45	10	DSM0145G05	●	38	11.3	11.9
1.00	10	DSM0100G10	●	38	11.5	12.1	1.46	10	DSM0146G05		38	11.3	11.9
1.01	5	DSM0101G05		38	8.0	8.6	1.47	10	DSM0147G05		38	11.3	11.9
1.02	5	DSM0102G05		38	8.0	8.6	1.48	10	DSM0148G05		38	11.3	11.9
1.03	5	DSM0103G05		38	8.0	8.6	1.49	5	DSM0149G05		38	11.3	11.9
1.04	5	DSM0104G05		38	8.0	8.6	1.50	5	DSM0150G05	●	38	11.3	11.9
1.05	5	DSM0105G05	●	38	8.0	8.6	1.51	5	DSM0151G05		45	12.1	12.7
1.06	5	DSM0106G05		38	8.0	8.6	1.52	5	DSM0152G05		45	12.1	12.7
1.07	5	DSM0107G05		38	8.0	8.6	1.53	5	DSM0153G05		45	12.1	12.7
1.08	5	DSM0108G05		38	8.0	8.6	1.54	5	DSM0154G05		45	12.1	12.7
1.09	5	DSM0109G05		38	8.0	8.6	1.55	5	DSM0155G05	●	45	12.1	12.7
1.10	5	DSM0110G05	●	38	8.0	8.6	1.56	5	DSM0156G05		45	12.1	12.7
1.11	5	DSM0111G05		38	8.9	9.5	1.57	5	DSM0157G05		45	12.1	12.7
1.12	5	DSM0112G05		38	8.9	9.5	1.58	5	DSM0158G05		45	12.1	12.7
1.13	5	DSM0113G05		38	8.9	9.5	1.59	5	DSM0159G05		45	12.1	12.7
1.14	5	DSM0114G05		38	8.9	9.5	1.60	5	DSM0160G05	●	45	12.1	12.7
1.15	5	DSM0115G05		38	8.9	9.5	1.61	5	DSM0161G05		45	12.9	13.6
1.16	5	DSM0116G05		38	8.9	9.5	1.62	5	DSM0162G05		45	12.9	13.6
1.17	5	DSM0117G05		38	8.9	9.5	1.63	5	DSM0163G05		45	12.9	13.6
1.18	5	DSM0118G05		38	8.9	9.5	1.64	5	DSM0164G05		45	12.9	13.6
1.19	5	DSM0119G05		38	8.9	9.5	1.65	5	DSM0165G05	●	45	12.9	13.6
1.20	5	DSM0120G05	●	38	8.9	9.5	1.66	5	DSM0166G05		45	12.9	13.6
1.21	5	DSM0121G05		38	9.7	10.3	1.67	5	DSM0167G05		45	12.9	13.6
1.22	5	DSM0122G05		38	9.7	10.3	1.68	5	DSM0168G05		45	12.9	13.6
1.23	5	DSM0123G05		38	9.7	10.3	1.69	5	DSM0169G05		45	12.9	13.6
1.24	5	DSM0124G05		38	9.7	10.3	1.70	5	DSM0170G05	●	45	12.9	13.6
1.25	5	DSM0125G05		38	9.7	10.3	1.71	5	DSM0171G05		45	13.7	14.3
1.26	5	DSM0126G05		38	9.7	10.3	1.72	5	DSM0172G05		45	13.7	14.3
1.27	5	DSM0127G05		38	9.7	10.3	1.73	5	DSM0173G05		45	13.7	14.3
1.28	5	DSM0128G05		38	9.7	10.3	1.74	5	DSM0174G05		45	13.7	14.3
1.29	5	DSM0129G05		38	9.7	10.3	1.75	5	DSM0175G05		45	13.7	14.3
1.30	5	DSM0130G05	●	38	9.7	10.3	1.76	5	DSM0176G05		45	13.7	14.3
1.31	5	DSM0131G05		38	10.5	11.1	1.77	5	DSM0177G05		45	13.7	14.3

● : Stocked items



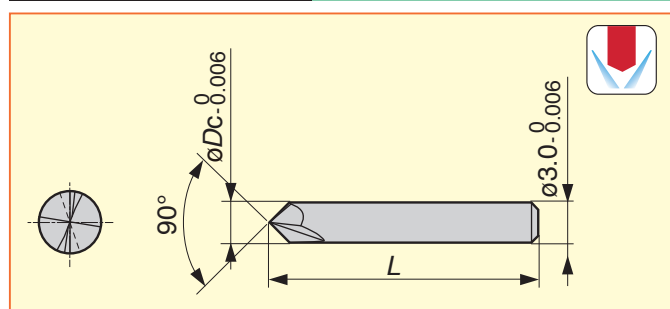
Drill dia. $\varnothing D_c$ (mm)	L/D	Cat. No.	Stock	Dimensions (mm)			Drill dia. $\varnothing D_c$ (mm)	L/D	Cat. No.	Stock	Dimensions (mm)		
				L	ℓ	ℓ_1					L	ℓ	ℓ_1
1.78	5	DSM0178G05		45	13.7	14.3	2.16	5	DSM0216G05		45	16.9	17.5
1.79	5	DSM0179G05		45	13.7	14.3	2.17	5	DSM0217G05		45	16.9	17.5
1.80	5	DSM0180G05	●	45	13.7	14.3	2.18	5	DSM0218G05		45	16.9	17.5
1.81	5	DSM0181G05		45	14.5	15.1	2.19	5	DSM0219G05		45	16.9	17.5
1.82	10	DSM0182G05		45	14.5	15.1	2.20	5	DSM0220G05	●	45	16.9	17.5
1.83	10	DSM0183G05		45	14.5	15.1	2.21	5	DSM0221G05		45	17.7	18.3
1.84	10	DSM0184G05		45	14.5	15.1	2.22	5	DSM0222G05		45	17.7	18.3
1.85	10	DSM0185G05		45	14.5	15.1	2.23	5	DSM0223G05		45	17.7	18.3
1.86	10	DSM0186G05		45	14.5	15.1	2.24	5	DSM0224G05		45	17.7	18.3
1.87	10	DSM0187G05		45	14.5	15.1	2.25	5	DSM0225G05		45	17.7	18.3
1.88	10	DSM0188G05		45	14.5	15.1	2.26	5	DSM0226G05		45	17.7	18.3
1.89	10	DSM0189G05		45	14.5	15.1	2.27	5	DSM0227G05		45	17.7	18.3
1.90	10	DSM0190G05	●	45	14.5	15.1	2.28	5	DSM0228G05		45	17.7	18.3
1.91	10	DSM0191G05		45	15.3	15.9	2.29	5	DSM0229G05		45	17.7	18.3
1.92	10	DSM0192G05		45	15.3	15.9	2.30	10	DSM0230G05	●	45	14.5	15.1
1.93	10	DSM0193G05		45	15.3	15.9	2.31	10	DSM0231G05		55	18.5	19.1
1.94	10	DSM0194G05		45	15.3	15.9	2.32	10	DSM0232G05		55	18.5	19.1
1.95	10	DSM0195G05	●	45	15.3	15.9	2.33	10	DSM0233G05		55	18.5	19.1
1.96	10	DSM0196G05		45	15.3	15.9	2.34	10	DSM0234G05		55	18.5	19.1
1.97	5	DSM0197G05		45	15.3	15.9	2.35	10	DSM0235G05		55	18.5	19.1
1.98	5	DSM0198G05		45	15.3	15.9	2.36	10	DSM0236G05		55	18.5	19.1
1.99	5	DSM0199G05		45	15.3	15.9	2.37	10	DSM0237G05		55	18.5	19.1
2.00	5	DSM0200G05	●	45	15.3	15.9	2.38	10	DSM0238G05		55	18.5	19.1
2.01	5	DSM0201G05		45	16.1	16.7	2.39	10	DSM0239G05		55	18.5	19.1
2.02	5	DSM0202G05		45	16.1	16.7	2.40	10	DSM0240G05	●	55	18.5	19.1
2.03	5	DSM0203G05		45	16.1	16.7	2.41	10	DSM0241G05		55	19.3	19.9
2.04	5	DSM0204G05		45	16.1	16.7	2.42	10	DSM0242G05		55	19.3	19.9
2.05	5	DSM0205G05		45	16.1	16.7	2.43	10	DSM0243G05		55	19.3	19.9
2.06	5	DSM0206G05		45	16.1	16.7	2.44	10	DSM0244G05		55	19.3	19.9
2.07	5	DSM0207G05		45	16.1	16.7	2.45	5	DSM0245G05		55	19.3	19.9
2.08	5	DSM0208G05		45	16.1	16.7	2.46	5	DSM0246G05		55	19.3	19.9
2.09	5	DSM0209G05		45	16.1	16.7	2.47	5	DSM0247G05		55	19.3	19.9
2.10	5	DSM0210G05	●	45	16.1	16.7	2.48	5	DSM0248G05		55	19.3	19.9
2.11	5	DSM0211G05		45	16.9	17.5	2.49	5	DSM0249G05		55	19.3	19.9
2.12	5	DSM0212G05		45	16.9	17.5	2.50	5	DSM0250G05	●	55	19.3	19.9
2.13	5	DSM0213G05		45	16.9	17.5	2.51	5	DSM0251G05		55	20.1	20.7
2.14	5	DSM0214G05		45	16.9	17.5	2.52	5	DSM0252G05		55	20.1	20.7
2.15	5	DSM0215G05		45	16.9	17.5	2.53	5	DSM0253G05		55	20.1	20.7

● : Stocked items

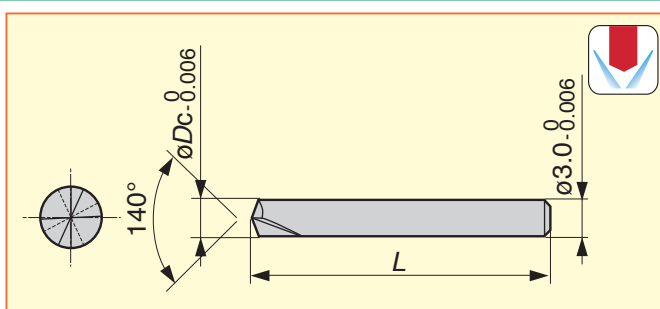
Drill dia. $\varnothing D_c$ (mm)	L/D	Cat. No.	Stock	Dimensions (mm)		
				L	ℓ	ℓ_1
2.54	5	DSM0254G05		55	20.1	20.7
2.55	5	DSM0255G05		55	20.1	20.7
2.56	5	DSM0256G05		55	20.1	20.7
2.57	5	DSM0257G05		55	20.1	20.7
2.58	5	DSM0258G05		55	20.1	20.7
2.59	5	DSM0259G05		55	20.1	20.7
2.60	5	DSM0260G05	●	55	20.1	20.7
2.61	5	DSM0261G05		55	20.9	21.5
2.62	5	DSM0262G05		55	20.9	21.5
2.63	5	DSM0263G05		55	20.9	21.5
2.64	5	DSM0264G05		55	20.9	21.5
2.65	5	DSM0265G05		55	20.9	21.5
2.66	5	DSM0266G05		55	20.9	21.5
2.67	5	DSM0267G05		55	20.9	21.5
2.68	5	DSM0268G05		55	20.9	21.5
2.69	5	DSM0269G05		55	20.9	21.5
2.70	5	DSM0270G05	●	55	20.9	21.5
2.71	5	DSM0271G05		55	21.7	22.3
2.72	5	DSM0272G05		55	21.7	22.3
2.73	5	DSM0273G05		55	21.7	22.3
2.74	5	DSM0274G05		55	21.7	22.3
2.75	5	DSM0275G05		55	21.7	22.3
2.76	5	DSM0276G05		55	21.7	22.3
2.77	5	DSM0277G05		55	21.7	22.3

Drill dia. $\varnothing D_c$ (mm)	L/D	Cat. No.	Stock	Dimensions (mm)		
				L	ℓ	ℓ_1
2.78	10	DSM0278G05		45	21.7	22.3
2.79	10	DSM0279G05		55	21.7	22.3
2.80	10	DSM0280G05	●	55	21.7	22.3
2.81	10	DSM0281G05		55	22.5	23.1
2.82	10	DSM0282G05		55	22.5	23.1
2.83	10	DSM0283G05		55	22.5	23.1
2.84	10	DSM0284G05		55	22.5	23.1
2.85	10	DSM0285G05		55	22.5	23.1
2.86	10	DSM0286G05		55	22.5	23.1
2.87	10	DSM0287G05		55	22.5	23.1
2.88	10	DSM0288G05		55	22.5	23.1
2.89	10	DSM0289G05		55	22.5	23.1
2.90	10	DSM0290G05	●	55	22.5	23.1
2.91	10	DSM0291G05		55	23.3	23.9
2.92	10	DSM0292G05		55	23.3	23.9
2.93	5	DSM0293G05		55	23.3	23.9
2.94	5	DSM0294G05		55	23.3	23.9
2.95	5	DSM0295G05		55	23.3	23.9
2.96	5	DSM0296G05		55	23.3	23.9
2.97	5	DSM0297G05		55	23.3	23.9
2.98	5	DSM0298G05		55	23.3	23.9
2.99	5	DSM0299G05		55	23.3	23.9
3.00	5	DSM0300G05	●	55	23.3	23.9

DSM-CP Starting drills for GigaMiniDrill



Drill dia. $\varnothing D_c$ (mm)	Cat. No.	Stock	Dimensions (mm)	
			$\varnothing D_c$	L
0.1 ~ 3.0	DSM-CP90	●	3.0	38.1

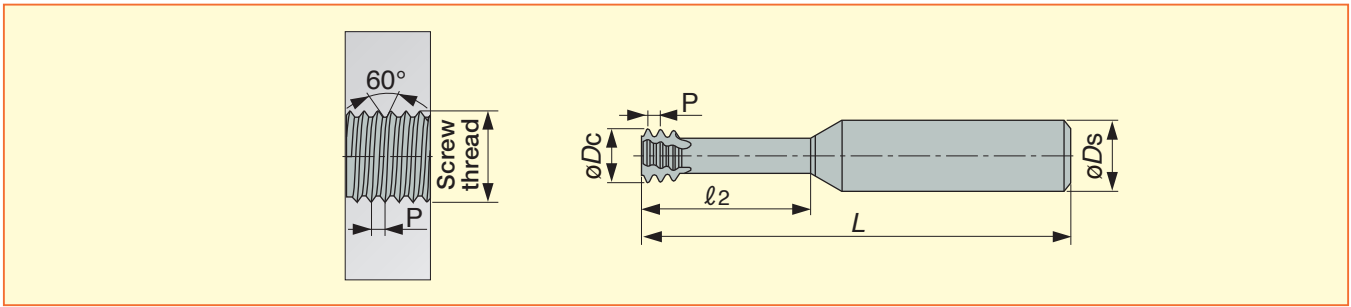


Drill dia. $\varnothing D_c$ (mm)	Cat. No.	Stock	Dimensions (mm)	
			$\varnothing D_c$	L
0.1 ~ 3.0	DSM-CP140	●	3.0	38.1

● : Stocked items

● Small-diameter solid carbide endmills for thread

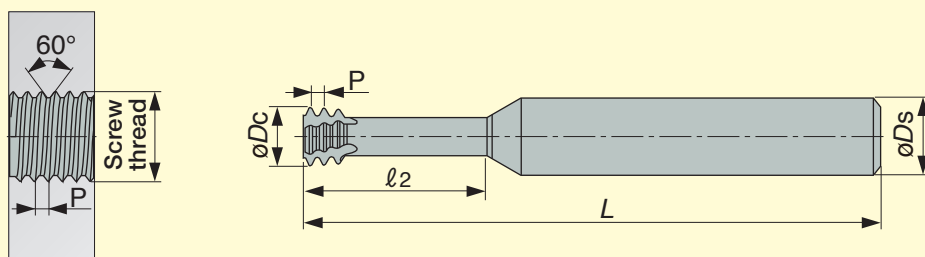
MTECS...ISO For metric internal thread



Pitch P (mm)	Cat. No.	Grade AH725	Screw thread	No. of flutes	Dimensions (mm)			
					øDs	øDc	l ₂	L
0.25	MTECS03007C20.25ISO		M1	3	3	0.72	2.5	39
0.25	MTECS03009C30.25ISO		M1.2	3	3	0.9	3	39
0.3	*MTECS03011C40.3ISO		M1.4	3	3	1.05	4	39
0.35	*MTECS03012C50.35ISO		M1.6	3	3	1.2	4.8	39
0.4	*MTECS03016C60.4ISO		M2	3	3	1.53	6	39
0.4	MTECS06016C40.4ISO		M2	3	6	1.53	4.5	58
0.4	MTECS06016C40.4ISO-L		M2	3	6	1.53	4.5	105
0.45	*MTECS03017C70.45ISO		M2.2	3	3	1.65	7	39
0.45	MTECS06017C50.45ISO		M2.2	3	6	1.65	5	58
0.45	MTECS0602C50.45ISO		M2.5	3	6	1.95	5.5	58
0.45	MTECS0602C50.45ISO-L		M2.5	3	6	1.95	5.5	105
0.45	MTECS0602C70.45ISO		M2.5	3	6	1.95	7.5	58
0.5	MTECS06024C60.5ISO		M3	3	6	2.37	6.5	58
0.5	MTECS06024C60.5ISO-L		M3	3	6	2.37	6.5	105
0.5	MTECS06024C90.5ISO		M3	3	6	2.37	9.5	58
0.5	MTECS06024C90.5ISO-L		M3	3	6	2.37	9.5	105
0.5	MTECS03024C120.5ISO		M3	3	3	2.4	12.5	39
0.5	MTECS03024C150.5ISO		M3	3	3	2.4	15.5	39
0.5	MTECS06054D200.5ISO		M6	4	6	5.35	20	58
0.6	MTECS06028C100.6ISO		M3.5	3	6	2.75	10.5	58
0.6	MTECS06028C70.6ISO		M3.5	3	6	2.75	7.5	58
0.7	MTECS06031C120.7ISO		M4	3	6	3.1	12.5	58
0.7	MTECS06031C120.7ISO-L		M4	3	6	3.1	12.5	105
0.7	MTECS06031C160.7ISO		M4	3	6	3.1	16.7	58
0.7	MTECS06031C90.7ISO		M4	3	6	3.1	9	58

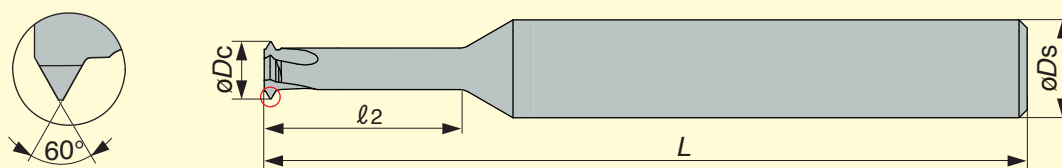
*Specially designed for dental implant screws

MTECSH...ISO For metric internal threads, left-hand (M04)



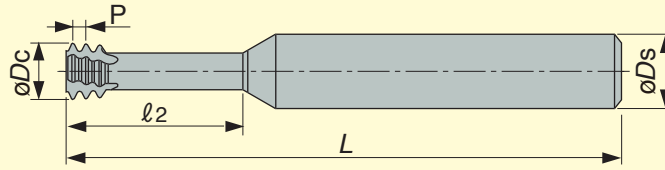
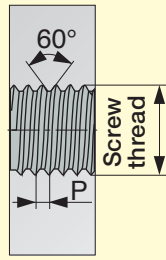
Pitch P (mm)	Cat. No.	Grade AH750	Screw thread	No. of flutes	Dimensions (mm)			
					øDs	øDc	l ₂	L
0.3	MTECSH03011C40.3ISO		M1.4	3	3	1.05	4	39
0.35	MTECSH03012C50.35ISO		M1.6	3	3	1.2	4.8	39
0.4	MTECSH03016C60.4ISO		M2	3	3	1.55	6	39
0.4	MTECSH06016C40.4ISO		M2	3	6	1.55	4.5	58
0.45	MTECSH06017C50.45ISO		M2.2	3	6	1.65	5	58
0.45	MTECSH0602C50.45ISO		M2.5	3	6	1.95	5.5	58
0.45	MTECSH0602C70.45ISO		M2.5	3	6	1.95	7.5	58
0.5	MTECSH06024C60.5ISO		M3	3	6	2.35	6.5	58
0.5	MTECSH06024C90.5ISO		M3	3	6	2.35	9.5	58
0.6	MTECSH06028C70.6ISO		M3.5	3	6	2.75	7.5	58
0.7	MTECSH06031C120.7ISO		M4	3	6	3.1	12.5	58
0.7	MTECSH06031C90.7ISO		M4	3	6	3.1	9	58
0.8	MTECSH06038C120.8ISO		M5	3	6	3.8	12.5	58
0.8	MTECSH06038C160.8ISO		M5	3	6	3.8	16	58

MTECI...ISO For metric internal threads, single point



Pitch P (mm)	Cat. No.	Grade AH720	Metric screw thread		No. of flutes	Dimensions (mm)			
			Coarse	Fine		øDs	øDc	l ₂	L
0.25	MTECI03007C30.25ISO		M1X0.25	-	3	3.00	0.72	3.60	39.00
0.25	MTECI03009C40.25ISO		M1.2X0.25	M1.4X0.25, M1.6X0.25	3	3.00	0.90	4.30	39.00
0.3	MTECI03011C50.3ISO		M1.4X0.3	-	3	3.00	1.05	5.00	39.00
0.35	MTECI03012C60.35ISO		M1.6X0.35	M2X0.35, M2.2X0.35	3	3.00	1.20	5.70	39.00
0.4	MTECI03016C70.4ISO		M2X0.4	-	3	3.00	1.55	7.10	39.00
0.5	MTECI03024C100.5ISO		M3X0.5	M3.5X0.5, M4X0.5	3	3.00	2.37	10.60	39.00

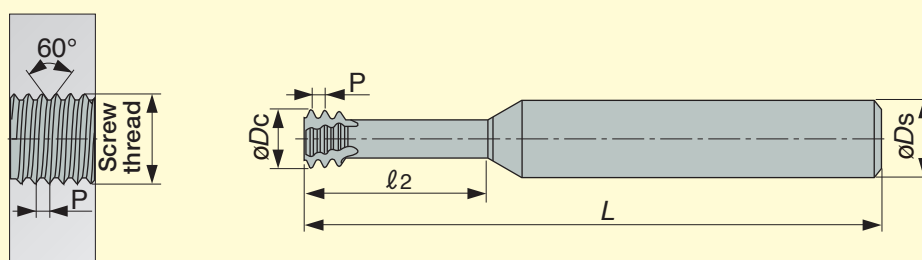
MTECS...UN For unified internal thread



No. of threads TPI	Cat. No.	Grade AH725	Unified screw thread		No. of flutes	Dimensions (mm)			
			Coarse	Fine		$\varnothing D_s$	$\varnothing D_c$	l_2	L
80	MTECS03012C880UN		-	0	3	3.00	1.15	8.00	39.00
80	MTECS06012C480UN		-	0	3	6.00	1.15	4.00	58.00
72	*MTECS03015C672UN		-	1	3	3.00	1.45	6.00	39.00
56	MTECS03016C656UN		2	3	3	3.00	1.65	6.60	39.00
56	MTECS03016C956UN		2	3	3	3.00	1.65	9.20	39.00
56	MTECS03016C1156UN		2	3	3	3.00	1.65	11.40	39.00
56	MTECS06016C456UN		2	3	3	6.00	1.65	4.40	58.00
56	MTECS06016C656UN		2	3	3	6.00	1.65	6.60	58.00
56	MTECS06016C656UN-L		2	3	3	6.00	1.65	6.60	105.00
48	MTECS06019C548UN		3	4	3	6.00	1.90	5.20	58.00
40	MTECS03021C840UN		4	-	3	3.00	2.10	8.00	39.00
40	MTECS03021C1240UN		4	-	3	3.00	2.10	12.00	39.00
40	MTECS06021C840UN		4	-	3	6.00	2.10	8.00	58.00
40	MTECS06021C840UN-L		4	-	3	6.00	2.10	8.00	105.00
40	MTECS06024C940UN		5	6	3	6.00	2.45	9.60	58.00
40	MTECS06021C640UN		4	-	3	6.00	2.10	6.30	58.00
40	MTECS06021C640UN-L		4	-	3	6.00	2.10	6.30	105.00
40	MTECS06024C740UN		5	6	3	6.00	2.45	7.00	58.00
36	MTECS06033C936UN		-	8	3	6.00	3.30	9.00	58.00
32	MTECS03025C1032UN		6	-	3	3.00	2.55	10.50	39.00
32	MTECS03025C1432UN		6	-	3	3.00	2.55	14.80	39.00
32	MTECS06025C732UN		6	-	3	6.00	2.55	7.10	58.00
32	MTECS06025C732UN-L		6	-	3	6.00	2.55	7.10	105.00
32	MTECS06025C1032UN		6	-	3	6.00	2.55	10.50	58.00
32	MTECS06025C1032UN-L		6	-	3	6.00	2.55	10.50	105.00
32	MTECS06032C932UN		8	10	3	6.00	3.20	9.50	58.00
32	MTECS06032C932UN-L		8	10	3	6.00	3.20	9.50	105.00
32	MTECS06032C1232UN		8	10	3	6.00	3.20	12.50	58.00
32	MTECS06032C1232UN-L		8	10	3	6.00	3.20	12.50	105.00
32	MTECS06037C1032UN		-	10	3	6.00	3.70	10.50	58.00
32	MTECS06037C1532UN		-	10	3	6.00	3.70	15.00	58.00
32	MTECS06037C1532UN-L		-	10	3	6.00	3.70	15.00	105.00

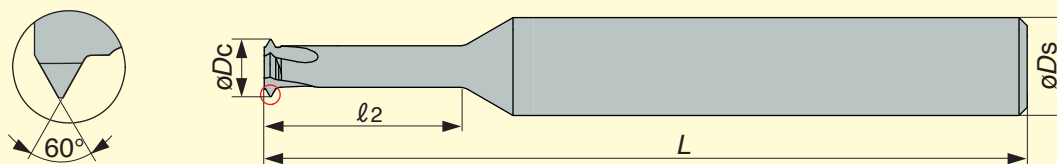
*Specially designed for dental implant screws

MTECSH...UN For unified internal threads, left-hand (M04)



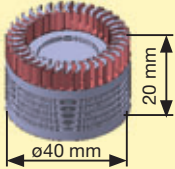
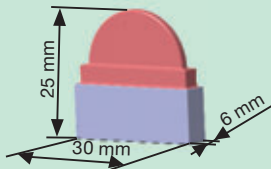
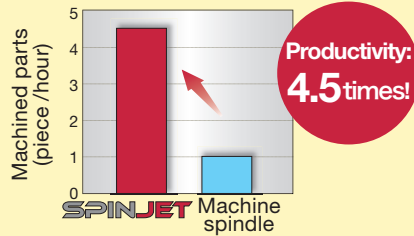
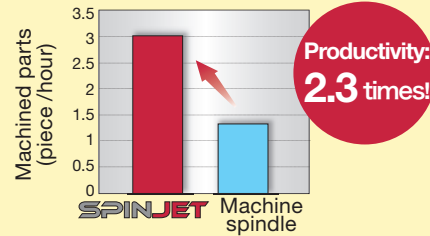
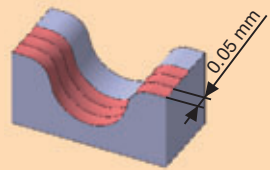
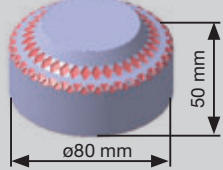
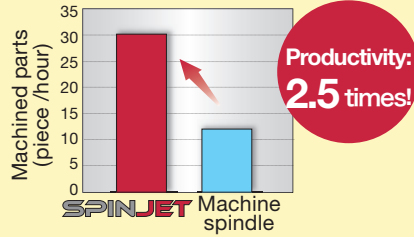
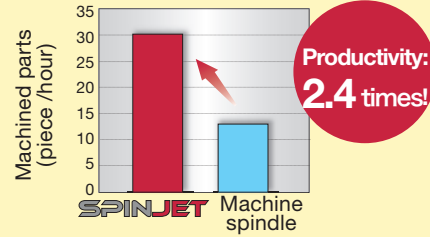
No. of threads TPI	Cat. No.	Grade AH750	Unified screw thread		No. of flutes	Dimensions (mm)			
			Coarse	Fine		$\varnothing D_s$	$\varnothing D_c$	l_2	L
72	MTECSH03015C672UN		-	1	3	3	1.45	6	39
80	MTECSH06012C480UN		-	0	3	6	1.15	4	58
64	MTECSH06014C364UN		1	2	3	6	1.4	3.8	58
56	MTECSH06016C656UN		2	3	3	6	1.65	6.6	58
56	MTECSH06016C456UN		2	3	3	6	1.65	4.4	58
48	MTECSH06019C548UN		3	4	3	6	1.9	5.2	58
40	MTECSH06021C640UN		4	-	3	6	2.1	6.3	58
40	MTECSH06024C740UN		5	6	3	6	2.45	7	58
40	MTECSH06021C840UN		4	-	3	6	2.1	8	58
40	MTECSH06024C940UN		5	6	3	6	2.45	9.6	58
36	MTECSH06033C936UN		-	8	3	6	3.3	9	58
32	MTECSH06025C732UN		6	-	3	6	2.55	7.1	58
32	MTECSH06025C1032UN		6	-	3	6	2.55	10.5	58
32	MTECSH06032C932UN		8	-	3	6	3.2	9.5	58
32	MTECSH06037C1032UN		-	10	3	6	3.7	10.5	58
32	MTECSH06032C1232UN		8	-	3	6	3.2	12.5	58
32	MTECSH06037C1532UN		-	10	3	6	3.7	15	58

MTECI...UN For unified internal threads, single point



No. of threads TPI	Cat. No.	Grade AH720	Unified screw thread		No. of flutes	Dimensions (mm)			
			Coarse	Fine		$\varnothing D_s$	$\varnothing D_c$	l_2	L
40	MTECI03021C1040UN		4	-	3	3	2.1	10.1	39
56	MTECI03016C956UN		2	3	3	3	1.65	8.9	39
72	MTECI03015C772UN		-	1	3	3	1.45	6.6	39
80	MTECI03012C580UN		-	0	3	3	1.15	5.5	39

Practical examples

Workpiece type		Machine parts	Electrode	
Holder		TJS30KST20R	TJS30KST20R	
Endmill		TEB010A2-015/12C4M45 (ø1.0, z = 2)	TEB010A2-015/12C4M45 (ø1.0, z = 2)	
Grade		AH750	AH750	
Workpiece material		SUS303 / X10CrNiS18-9 (25HRC) M	C1100 N	
				
Cutting conditions	Cutting speed: Vc (m/min)	120	95	
	No. of revolutions: n (RPM)	35,600	30,000	
	Feed per tooth: fz (mm/t)	0.016	0.025	
	Depth of cut: ap (mm)	0.01	0.04	
	Width of cut: ae (mm)	1	0.04	
	Process	Grooving	Profiling	
	Coolant	Wet	Wet	
	Machine	Vertical M/C, BT30	Vertical M/C, BT30	
Results	 <p>Productivity increased by 4.5 times due to high-speed rotation of 35,600 RPM. Tool life is also tripled.</p>		 <p>Productivity increased by 2.3 times due to high-speed rotation of 30,000 RPM.</p>	
Workpiece type		Medical equipment	Plastic mold	
Holder		TJS30KER32R	TJS30KST20R	
Endmill		TEB010A2-015/12C4M45 (ø1.0, z = 2)	TEB010A2-015/04C4M45 (ø1.0, z = 2)	
Grade		AH750	AH750	
Workpiece material		Titanium alloys S	V2 (60HRC) H	
				
Cutting conditions	Cutting speed: Vc (m/min)	80	91	
	No. of revolutions: n (RPM)	25,000	29,000	
	Feed per tooth: fz (mm/t)	0.03	0.027 - 0.051	
	Depth of cut: ap (mm)	0.03	0.02	
	Width of cut: ae (mm)	0.05	0.02	
	Process	Profiling	Profiling	
	Coolant	Wet	Wet	
	Machine	Vertical M/C, BT30	Vertical M/C, BT30	
Results	 <p>Productivity increased by 2.5 times due to high-speed rotation of 25,000 RPM. Tool life is also extended by 4 times.</p>		 <p>Productivity increased by 2.4 times due to high-speed rotation of 29,000 RPM.</p>	



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