

# NEW PRODUCT NEWS



Tungaloy Report No. 529S3-G

Multifunctional tool for drilling and turning

# TUNGALOY **B**ORE MINI

**Expansion of DMIN 8 mm to the lineup**



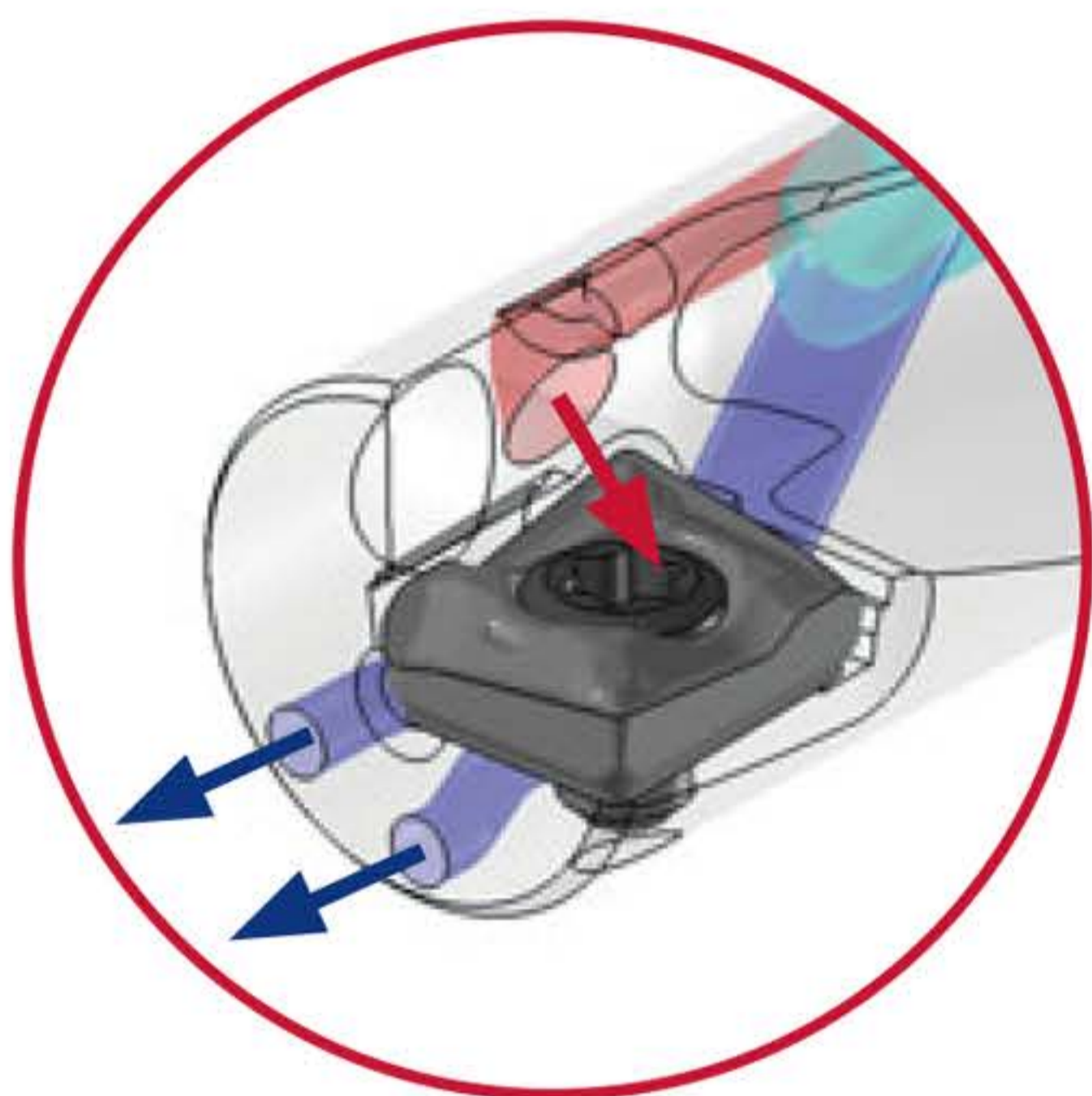
## TUNGB<sup>ORE</sup>MINI

### New toolholders for the minimum bore diameter (DMIN) range of $\varnothing 8$ mm

#### ■ New Line ups

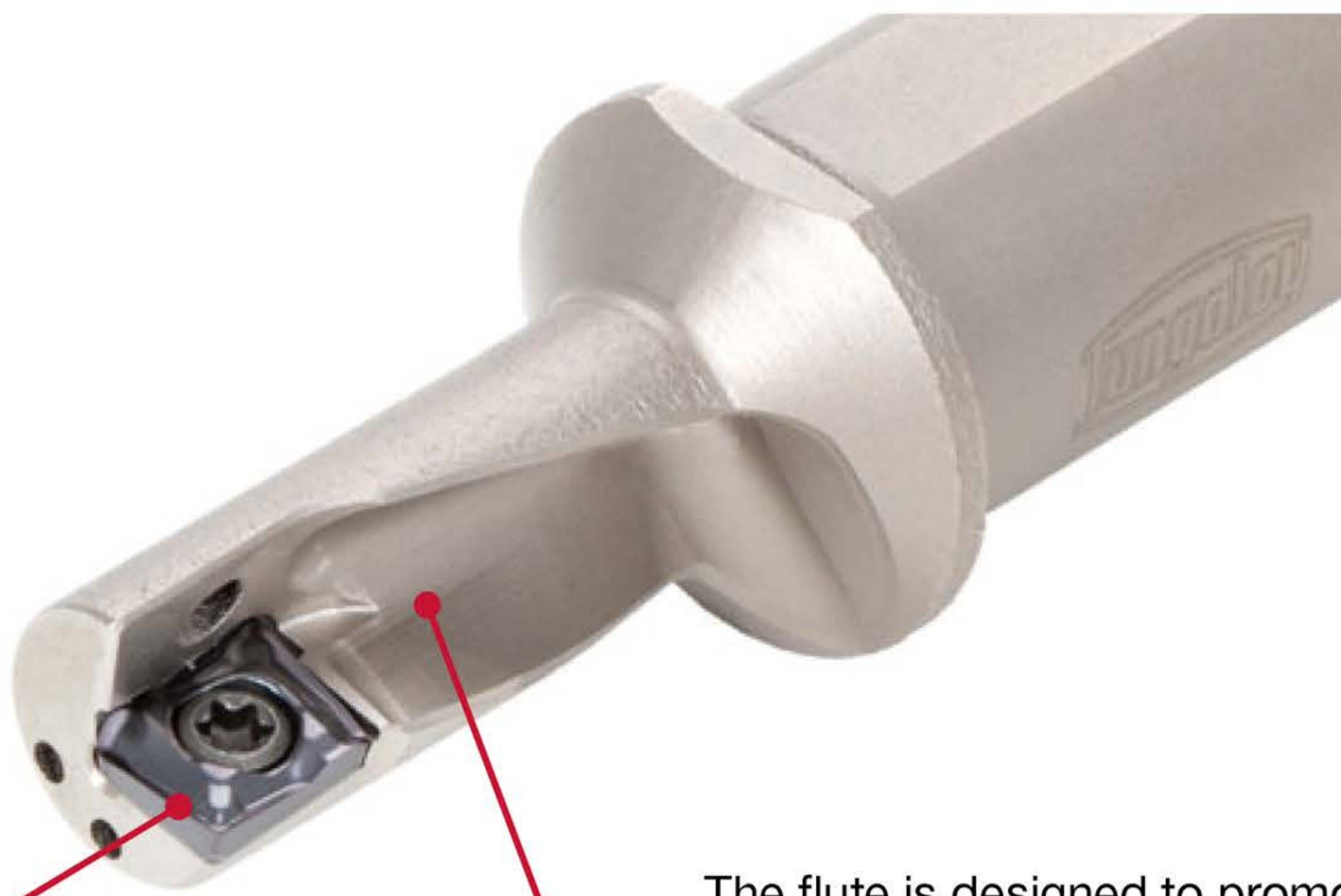
TUNGB <sup>ORE</sup> MINI	Minimum bore diameter: DMIN (mm)								
	$\varnothing 8$	$\varnothing 10$	$\varnothing 12$	$\varnothing 14$	$\varnothing 16$	$\varnothing 18$	$\varnothing 20$	$\varnothing 25$	$\varnothing 32$
	New	Line up							

#### ■ Features

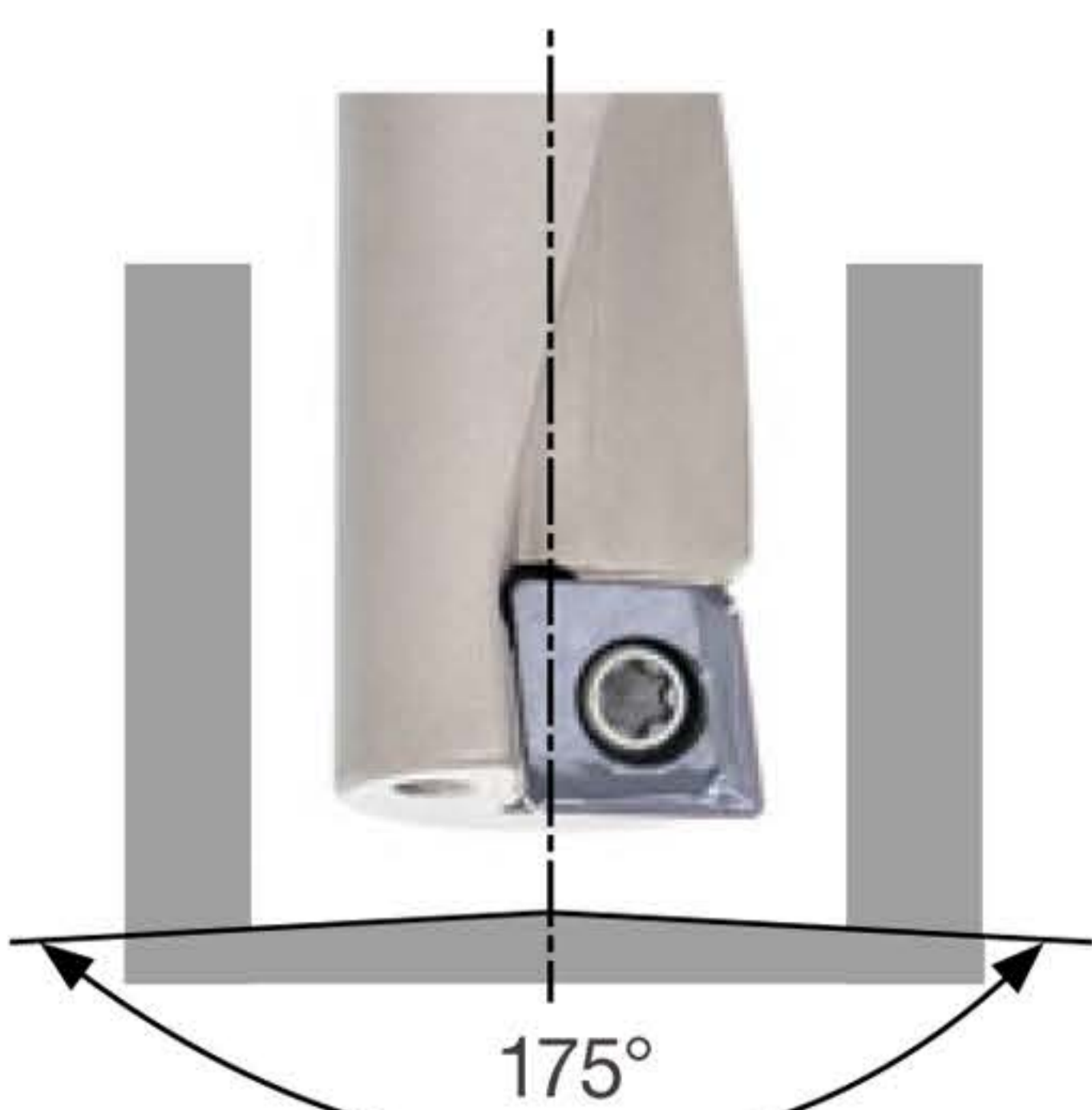


Optimized through-coolant ensures effective chip evacuation during machining

Single-sided insert with 2 corners



The flute is designed to promote smooth chip flow, while ensuring tool rigidity



Creates a near-flat hole bottom

Optimized chipbreaker design enables effective chip control in all applications



**XOMU-PS**

For toolholders for DMIN = 10 - 32 mm



**New**

**XCMT-PS**

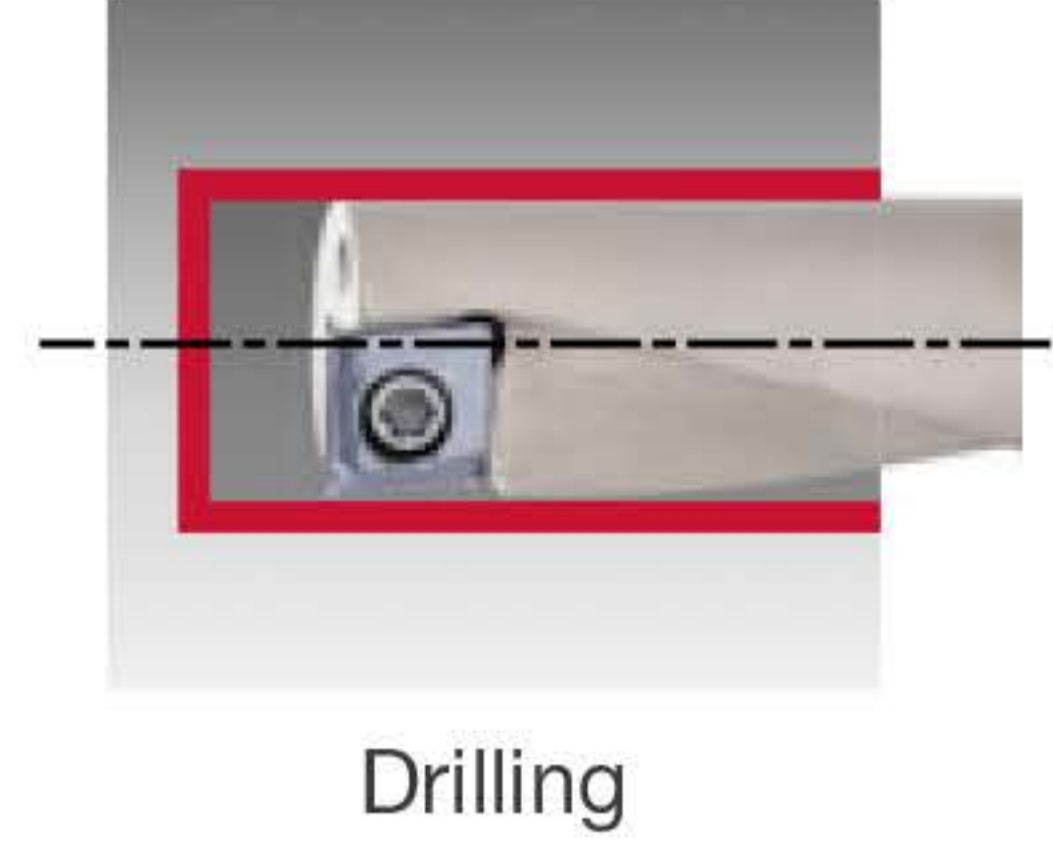
For toolholders for DMIN = 8 mm

## Tungaloy Report No. 529S3-G

### CUTTING PERFORMANCE

#### Drilling

**P** Holder : TBM08RF12-2.25  
 Insert : XCMT040102R-PS AH725  
 Workpiece material : S45C / C45  
 Cutting speed :  $V_c = 100$  m/min  
 Application : Drilling  
 Coolant : Internal

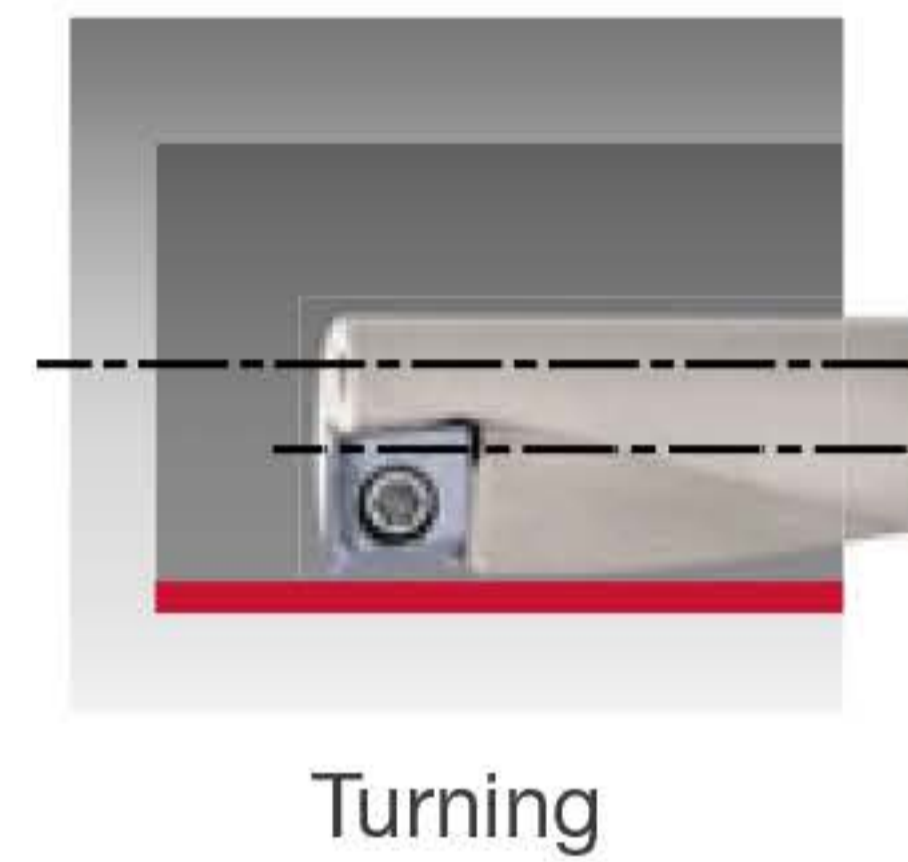


0.02	0.03	0.04	0.05
Feed: $f$ (mm/rev)			

Stable machining and excellent chip control during hole making process.

#### Internal turning

**P** Holder : TBM08RF12-2.25  
 Insert : XCMT040102R-PS AH725  
 Workpiece material : S45C / C45  
 Cutting speed :  $V_c = 150$  m/min  
 Application : Internal turning  
 Coolant : Internal



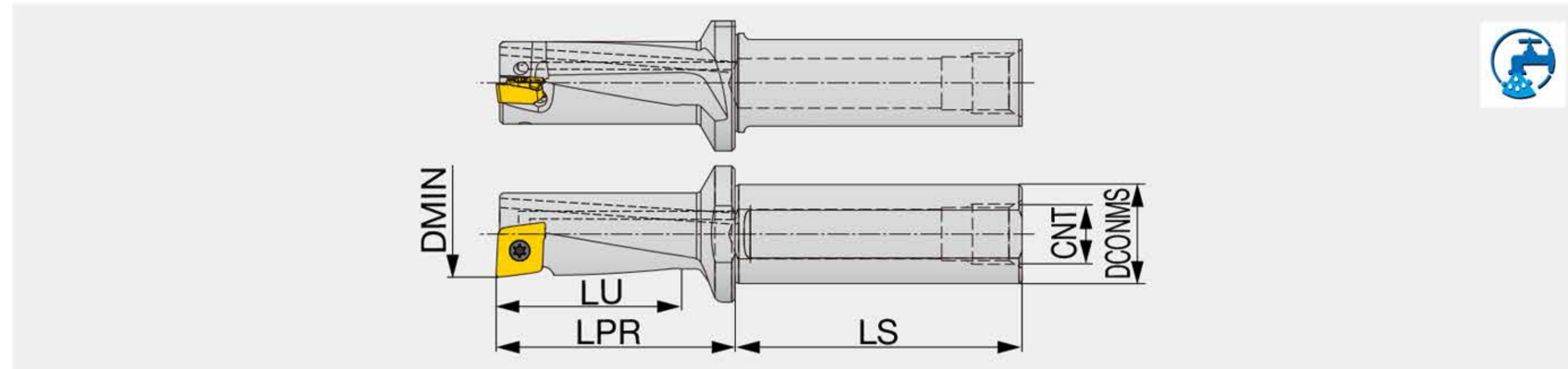
Depth of cut: $a_p$ (mm)	1				
	0.5				
	0.2				
		0.04	0.06	0.1	0.12
Feed: $f$ (mm/rev)					

Excellent chip control during I.D. finishing operation.

## Tungaloy Report No. 529S3-G

### TBM

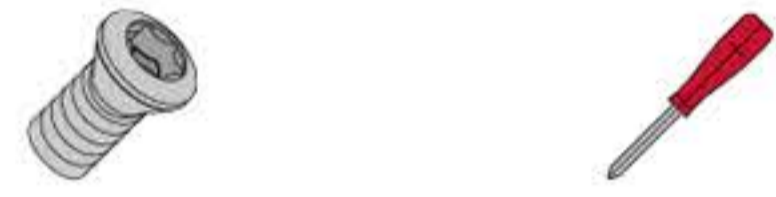
Maximum hole depth for L/D = 2.25



Designation	DMIN	DCONMS	LU	LS	LPR	CNT	Insert	Torque*
<b>New</b> TBM08RF12-2.25	8	12	18	41.5	22.5	-	XCMT040102R-PS	0.7
TBM10R/LF12-2.25	10	12	22.5	41.5	28.45	UNF 5/16-24	XOMU05X204-PS	0.7
TBM12R/LF16-2.25	12	16	27	43.9	33.53	G 1/8	XOMU06H204-PS	1
TBM14R/LF16-2.25	14	16	31.5	46.4	38.57	G 1/8	XOMU07H304-PS	1.3
TBM16R/LF20-2.25	16	20	36	57.1	42.9	G 1/8	XOMU08T304-PS	2.3
TBM18RF25-2.25	18	25	40.5	54	53.96	G 1/8	XOMU09T304-PS	2.3
TBM20RF25-2.25	20	25	45	54	54.94	G 1/8	XOMU100404-PS	3.5
TBM25RF32-2.25	25	32	56.5	59	69	G 1/8	XOMU120404-PS	3.5
TBM32RF40-2.25	32	40	72	69	87.95	G 1/8	XOMU160508-PS	3.5

Torque\*: Recommended clamping torque (N·m)

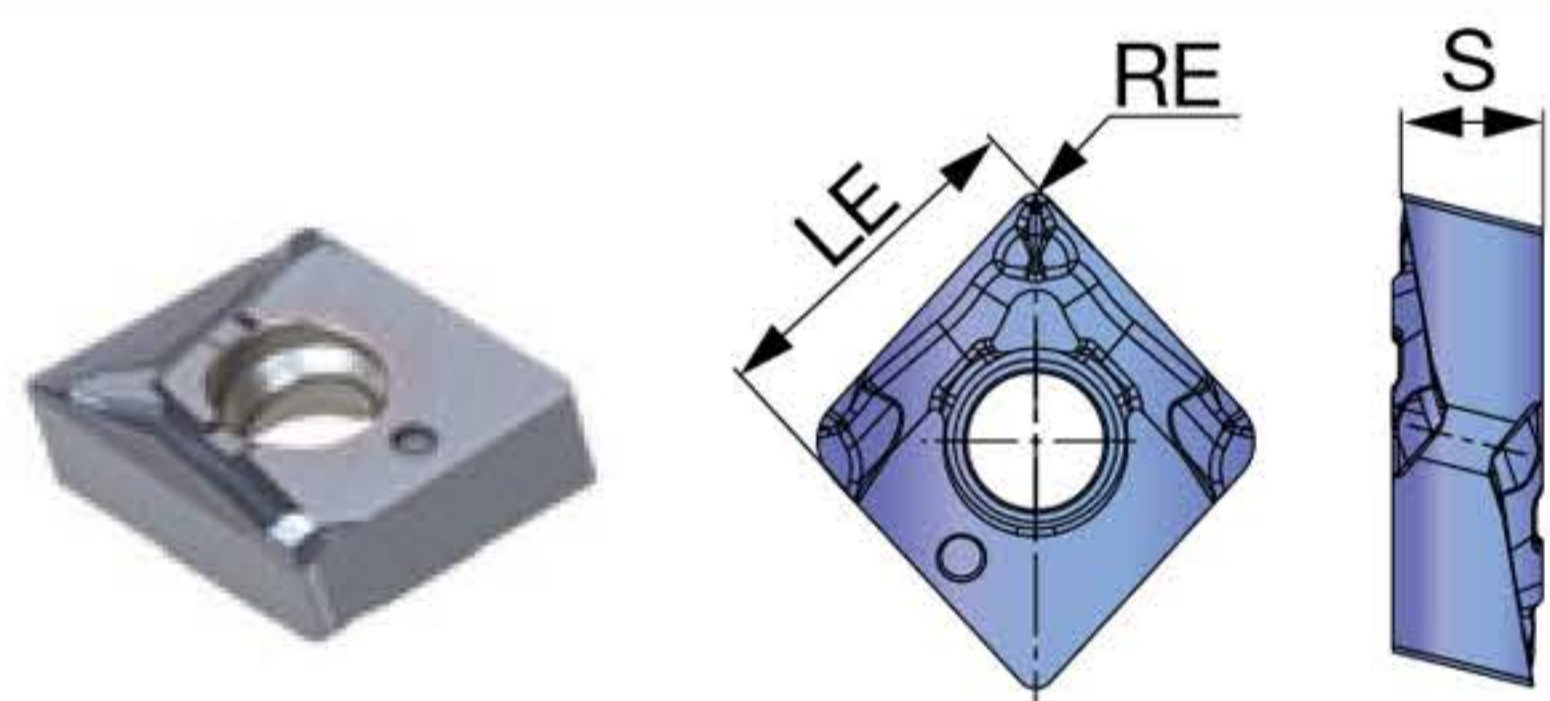
### SPARE PARTS



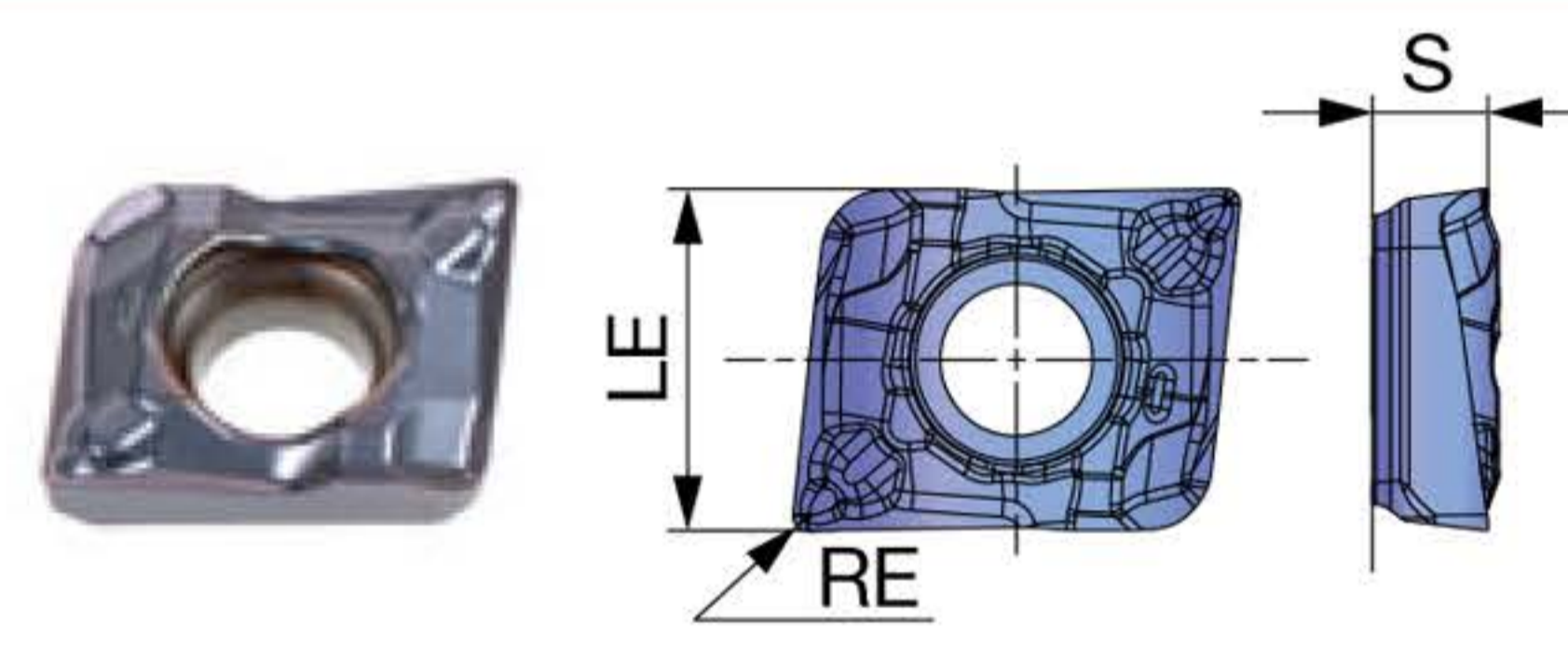
Designation	Clamping screw	Wrench
TBM08R...	CSTD-1.8	T-6D
TBM10R...	CSTB-2L040	T-6D
TBM12R...	CSPB-2.2	IP-7D
TBM14R...	CSPB-2.5	IP-8D
TBM16R..., TBM18RF...	CSTB-3	T-9D
TBM20RF...	CSPB-3.5	IP-15D
TBM25RF...	CSTB-4	T-15D
TBM32RF...	CSTB-4.5L110P	T-15D

### INSERT

#### XOMU-PS



#### XCMT-PS



	P	M	K	N	S	H
Steel	★					
Stainless	★					
Cast iron	★					
Non-ferrous	★					
Superalloys						
Hard materials						

★ : First choice

Designation	RE	Coated						S	LE
		AH725							
XCMT040102R-PS	0.2	●						1.59	4.7
XOMU05X204-PS	0.4	●						2.3	5.56
XOMU06H204-PS	0.4	●						2.7	6.3
XOMU07H304-PS	0.4	●						3.3	7.3
XOMU08T304-PS	0.4	●						3.97	8.3
XOMU09T304-PS	0.4	●						3.97	9.3
XOMU100404-PS	0.4	●						4.76	10.3
XOMU120404-PS	0.4	●						4.76	12.8
XOMU160508-PS	0.8	●						5.56	16.3

● : New product  
● : Line up

## Tungaloy Report No. 529S3-G

### STANDARD CUTTING CONDITIONS

#### Drilling

ISO	Workpiece materials	Cutting speed Vc (m/min)	Minimum bore diameter: DMIN (mm)								
			ø8	ø10	ø12	ø14	ø16	ø18	ø20	ø25	ø32
<b>P</b>	Low carbon steel Carbon steel	50 - 180	0.02 - 0.05	0.02 - 0.05	0.02 - 0.07	0.01 - 0.075	0.01 - 0.08	0.05 - 0.13	0.05 - 0.13	0.05 - 0.14	0.05 - 0.14
<b>M</b>	Stainless steel	50 - 160	0.02 - 0.05	0.02 - 0.05	0.02 - 0.07	0.01 - 0.075	0.01 - 0.08	0.05 - 0.13	0.05 - 0.13	0.05 - 0.14	0.05 - 0.14
<b>K</b>	Cast iron	50 - 180	0.02 - 0.05	0.02 - 0.05	0.02 - 0.07	0.01 - 0.075	0.01 - 0.08	0.05 - 0.13	0.05 - 0.13	0.05 - 0.14	0.05 - 0.14
<b>N</b>	Aluminium alloys	100 - 300	0.02 - 0.05	0.02 - 0.05	0.02 - 0.07	0.01 - 0.075	0.01 - 0.08	0.05 - 0.13	0.05 - 0.13	0.05 - 0.14	0.05 - 0.14

#### Internal turning

ISO	Workpiece materials	Cutting speed Vc (m/min)	Minimum bore diameter: DMIN (mm)								
			ø8	ø10	ø12	ø14	ø16	ø18	ø20	ø25	ø32
<b>P</b>	Low carbon steel Carbon steel	50 - 180	Depth of cut: ap (mm)								
			0.2 - 2.5	0.5 - 3	0.5 - 3.5	0.5 - 4.5	0.5 - 5	0.5 - 5.5	0.5 - 6	0.5 - 6.5	0.5 - 7
			Feed: f (mm/rev)								
			0.02 - 0.12	0.05 - 0.2	0.05 - 0.2	0.05 - 0.2	0.05 - 0.2	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3	0.1 - 0.4

ISO	Workpiece materials	Cutting speed Vc (m/min)	Minimum bore diameter: DMIN (mm)								
			ø8	ø10	ø12	ø14	ø16	ø18	ø20	ø25	ø32
<b>M</b>	Stainless steel	50 - 160	Depth of cut: ap (mm)								
			0.2 - 2.5	0.5 - 3	0.5 - 3.5	0.5 - 4.5	0.5 - 5	0.5 - 5.5	0.5 - 6	0.5 - 6.5	0.5 - 7
			Feed: f (mm/rev)								
			0.02 - 0.12	0.05 - 0.2	0.05 - 0.2	0.05 - 0.2	0.05 - 0.2	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3	0.1 - 0.4

ISO	Workpiece materials	Cutting speed Vc (m/min)	Minimum bore diameter: DMIN (mm)								
			ø8	ø10	ø12	ø14	ø16	ø18	ø20	ø25	ø32
<b>K</b>	Cast iron	50 - 180	Depth of cut: ap (mm)								
			0.2 - 2.5	0.5 - 3	0.5 - 3.5	0.5 - 4.5	0.5 - 5	0.5 - 5.5	0.5 - 6	0.5 - 6.5	0.5 - 7
			Feed: f (mm/rev)								
			0.02 - 0.12	0.05 - 0.2	0.05 - 0.2	0.05 - 0.2	0.05 - 0.2	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3	0.1 - 0.4

ISO	Workpiece materials	Cutting speed Vc (m/min)	Minimum bore diameter: DMIN (mm)								
			ø8	ø10	ø12	ø14	ø16	ø18	ø20	ø25	ø32
<b>N</b>	Aluminium alloys	100 - 300	Depth of cut: ap (mm)								
			0.2 - 2.5	0.5 - 3	0.5 - 3.5	0.5 - 4.5	0.5 - 5	0.5 - 5.5	0.5 - 6	0.5 - 6.5	0.5 - 7
			Feed: f (mm/rev)								
			0.02 - 0.12	0.05 - 0.2	0.05 - 0.2	0.05 - 0.2	0.05 - 0.2	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3	0.1 - 0.4

# CONTACT US



## MEGA TECH METALWORK CO.,LTD ( Headquarter )



**Tel : 02-943-1591**



**Fax : 02-943-1592**



**Line ID : @mgt\_metalwork**



**Email : sales.m@mgtg.co.th**



**Web : <https://www.mgtg.co.th/>**



**17/4 Soi Ramintra 89  
Ramintra Khannayao  
Bangkok 10230**



For more  
Information

**SCAN NOW**

