

# NPA

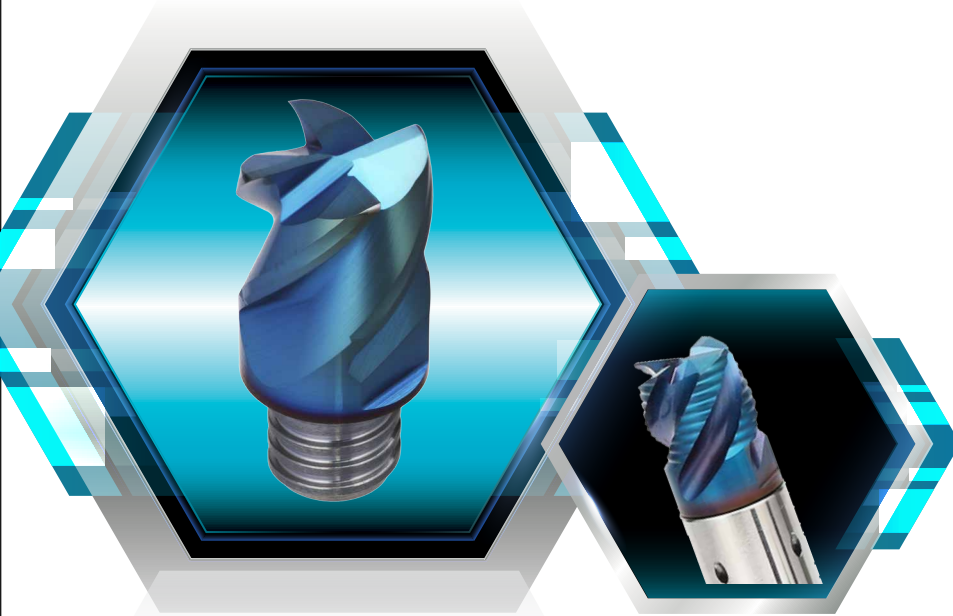
New Product Announcement No. 2019-43



## MAXIRUSH

INDEXABLE SOLID HEADS

### Head Changeable Type Solid End Mill



## KEY POINT

**TaeguTec has released a convenient head changeable type solid carbide end mill.**

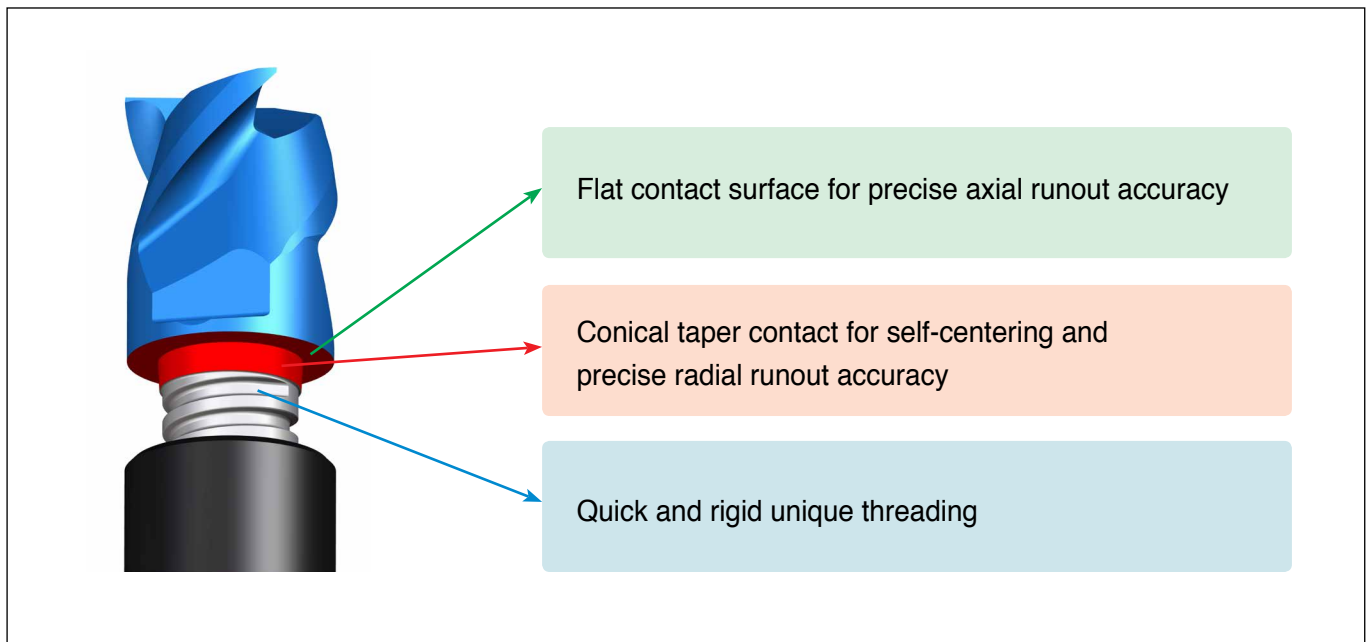
The innovative head changeable type solid carbide end mill, launched under the brand name **MAXI-RUSH**, replaces most of the existing conventional solid end mills machining range. The line is a new high productivity tooling solution offering outstanding advantages.

Superior performance is the result along with quick and easy indexable heads which reduce set up time and improve customer productivity. The **MAXI-RUSH** line is offered in many head types covering all applications; they also come in steel, carbide and tungsten shank holders in various lengths that can be combined to provide the widest flexibility in tooling solutions.

For further technical questions, please contact TaeguTec's product manager.

### Features

- Rigid and precise double contact fastening system



- Tooling downtime minimized by replacing the heads quickly

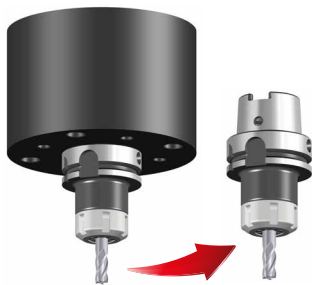
### Collet chuck + MAXI-RUSH



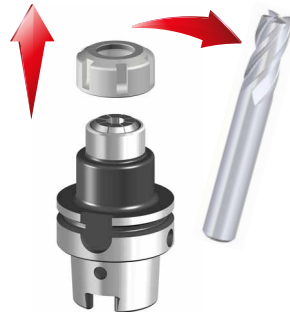
Easy head replacement  
with spindle engaged

Replacement  
time is  
dramatically  
reduced

### Collet chuck + end mill



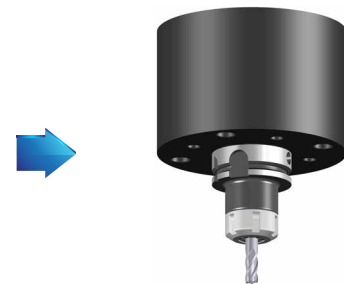
Separate the arbor  
from the spindle



Secure the arbor to the tool post and  
remove the nut and the end mill

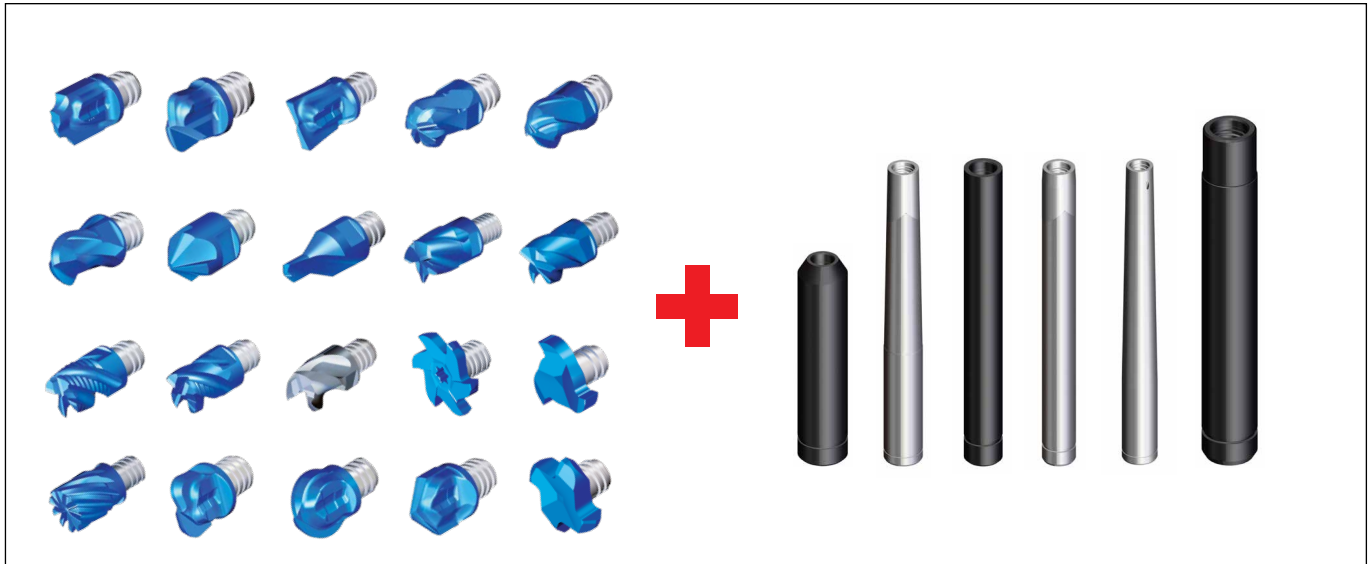


Set the height, if necessary,  
after tightening the end mill



Re-mount the arbor  
to the spindle

- Available in a wide variety of indexable head types and shank types



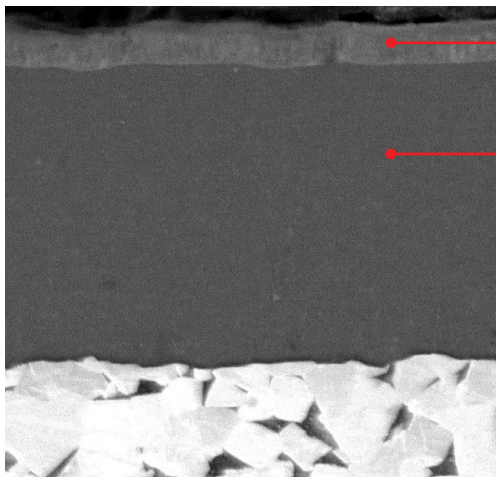
- Flat, ball, corner radius, chamfer, slot, etc  
 Available in various head types for all applications
- Available diameter range:  
 General: Ø6-Ø25, Slot: Ø13.5-Ø27.7

- With various shapes and lengths such as straight shanks with neck and taper neck in various materials, the optimal choice considering stiffness and interference
- Available in both steel, carbide and tungsten materials
- Internal through coolant capability

- Applied with the latest coating grade for dedicated MAXI-RUSH (TT5523, TT5543)

- Optimal combination of wear resistance and chipping resistance makes it suitable for various materials and applications
- Distinctive shiny blue color appearance

## TT5523



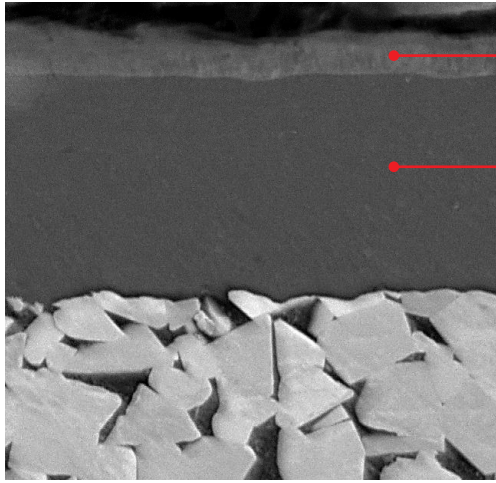
Unique blue color layer

Nano-crystalline structured AlTiN layer

- Excellent abrasion resistant sub-micron substrate
- Anti-abrasion and oxidation resistant PVD AlTiN coating layer
- High-speed milling of steel and cast iron, stainless steel and heat resistant super alloys
- Applied to all MAXI-RUSH items except the T-slot type



**TT5543**



Unique blue color layer

Nano-crystalline structured AlTiN layer

- Tough carbide grade with an advanced PVD AlTiN coating layer
- Suitable for T-Slot interrupted and rough machining of various materials
- Applied to T-slot items only



**Availability**

In stock

**Price**

Available in the GAL system

Sincerely,  
 TaeguTec

**Cho Yeo-myeong**  
 Rotating General PM

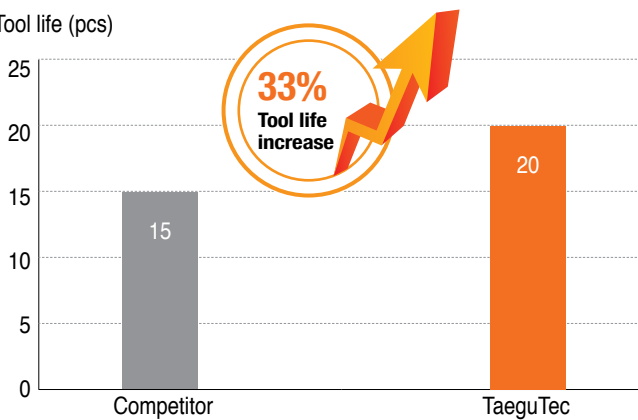
Sincerely,  
 TaeguTec

**Choi Chul won**  
 Milling Product Manager

## Case study 1

		Competitor	TaeguTec
Material		AISI 4140, 42CrMo4	
Operation		Shouldering	
Tool		Solid end mill (Ø12, 4z)	MXEE120L09R05-04S08 TT5523 (Ø12, 4z)
Cutting Speed	V (m/min)	180	180
	f (mm/tooth)	0.05	0.06
Feed	F (mm/min)	955	1146
	ap (mm)	3	3
Width of cut	ae (mm)	1	1
Tool life (pcs)		15	20

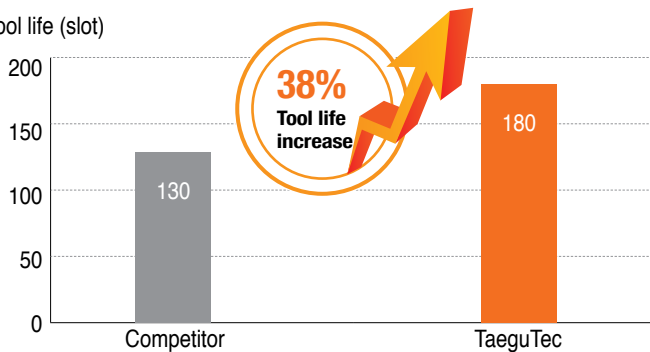
Tool life (pcs)



## Case study 2

		Competitor	TaeguTec
Material		DIN GGG 40	
Operation		T-slotting	
Tool		T-shape solid end mill (Ø25, 6z)	TTB250W6.0R04-06S10 TT5543 (Ø25, 6z)
Cutting Speed	V (m/min)	200	200
	f (mm/tooth)	0.05	0.07
Feed	F (mm/min)	764	1070
	ap (mm)	6	6
Width of cut	ae (mm)	2.3	2.3
Tool life (slot)		130	180

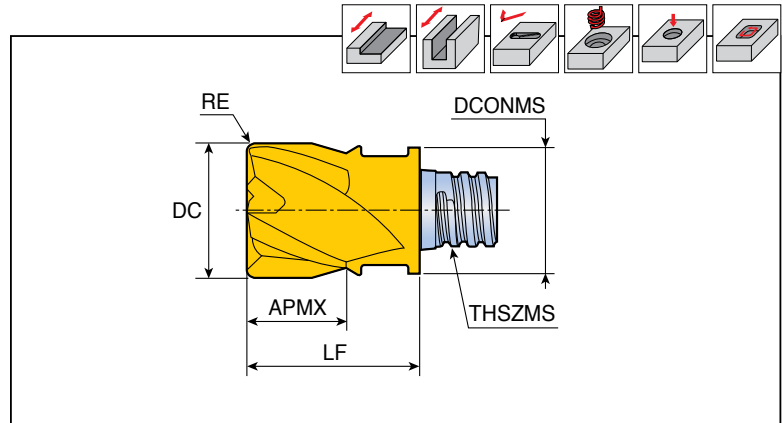
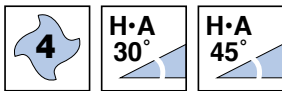
Tool life (slot)





## MXEE(D)-04

4 flute, for general purpose



Designation	Feed (mm/tooth)	Dimension (mm)							Grade
		DC	RE	FHA	APMX	THSZMS	DCONMS	LF	
<b>MXEE 060L05R00-04S05</b>	0.025-0.060	6	-	45	5	S05	8	10	●
<b>MXEE 080L05R00-04S05</b>	0.030-0.080	8	-	45	5	S05	7.7	10	●
<b>MXED 080L05R05-04S05</b>	0.030-0.080	8	0.5	30	5	S05	7.7	10	●
<b>MXED 080L05R10-04S05</b>	0.030-0.080	8	1.0	30	5	S05	7.7	10	●
<b>MXED 080L05R15-04S05</b>	0.030-0.080	8	1.5	30	5	S05	7.7	10	●
<b>MXEE 100L07R00-04S06</b>	0.035-0.090	10	-	45	7	S06	9.7	13	●
<b>MXED 100L07R05-04S06</b>	0.035-0.090	10	0.5	30	7	S06	9.7	13	●
<b>MXEE 100L07R05-04S06</b>	0.035-0.090	10	0.5	45	7	S06	9.7	13	●
<b>MXED 100L07R10-04S06</b>	0.035-0.090	10	1.0	30	7	S06	9.7	13	●
<b>MXEE 100L07R10-04S06</b>	0.035-0.090	10	1.0	45	7	S06	9.7	13	●
<b>MXEE 120L09R00-04S08</b>	0.035-0.110	12	-	45	9	S08	11.7	16.5	●
<b>MXED 120L09R05-04S08</b>	0.035-0.110	12	0.5	30	9	S08	11.7	16.5	●
<b>MXEE 120L09R05-04S08</b>	0.035-0.110	12	0.5	45	9	S08	11.7	16.5	●
<b>MXED 120L09R10-04S08</b>	0.035-0.110	12	1.0	30	9	S08	11.7	16.5	●
<b>MXEE 120L09R10-04S08</b>	0.035-0.110	12	1.0	45	9	S08	11.7	16.5	●
<b>MXEE 160L12R00-04S10</b>	0.040-0.130	16	-	45	12	S10	15.3	20.5	●
<b>MXED 160L12R05-04S10</b>	0.040-0.130	16	0.5	30	12	S10	15.3	20.5	●
<b>MXEE 160L12R05-04S10</b>	0.040-0.130	16	0.5	45	12	S10	15.3	20.5	●
<b>MXED 160L12R10-04S10</b>	0.040-0.130	16	1.0	30	12	S10	15.3	20.5	●
<b>MXEE 160L12R40-04S10</b>	0.040-0.130	16	4.0	45	12	S10	15.3	20.5	●
<b>MXEE 200L15R00-04S12</b>	0.050-0.150	20	-	45	15	S12	18.3	25.5	●
<b>MXED 200L15R05-04S12</b>	0.050-0.150	20	0.5	30	15	S12	18.3	25.5	●
<b>MXED 200L15R10-04S12</b>	0.050-0.150	20	1.0	30	15	S12	18.3	25.5	●
<b>MXED 200L15R20-04S12</b>	0.050-0.150	20	2.0	30	15	S12	18.3	25.5	●
<b>MXED 200L15R30-04S12</b>	0.050-0.150	20	3.0	30	15	S12	18.3	25.5	●

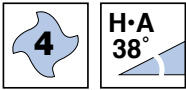
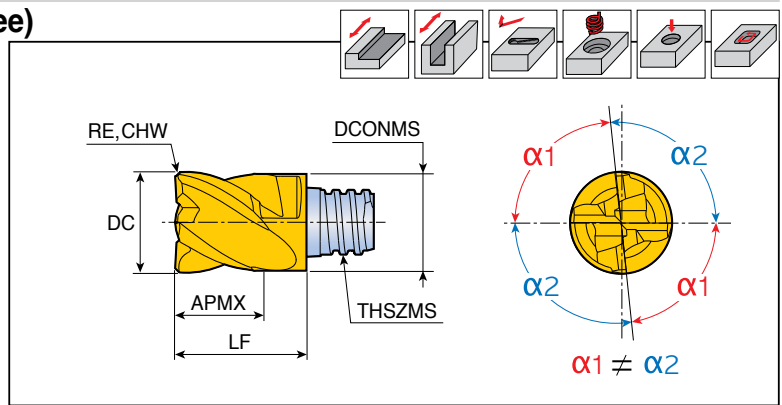
● FHA: Flute helix angle

● Standard items

## MXEE-I04



4 flute, irregular-pitch flutes (vibration free)



Designation	Feed (mm/tooth)	Dimension (mm)							Grade
		DC	RE	CHW	APMX	THSZMS	DCONMS	LF	
<b>MXEE 080L05C30I04S05</b>	0.030-0.080	8	-	0.3	5	S05	7.7	10	●
<b>100L07C40I04S06</b>	0.035-0.090	10	-	0.4	7	S06	9.7	13	●
<b>120L09C50I04S08</b>	0.035-0.110	12	-	0.5	9	S08	11.7	16.5	●
<b>160L12C60I04S10</b>	0.040-0.130	16	-	0.6	12	S10	15.3	20.5	●
<b>200L15C60I04S12</b>	0.050-0.150	20	-	0.6	15	S12	18.3	25.5	●
<b>250L22R30I04S15</b>	0.060-0.170	25	3.0	-	22	S15	23.9	37	●

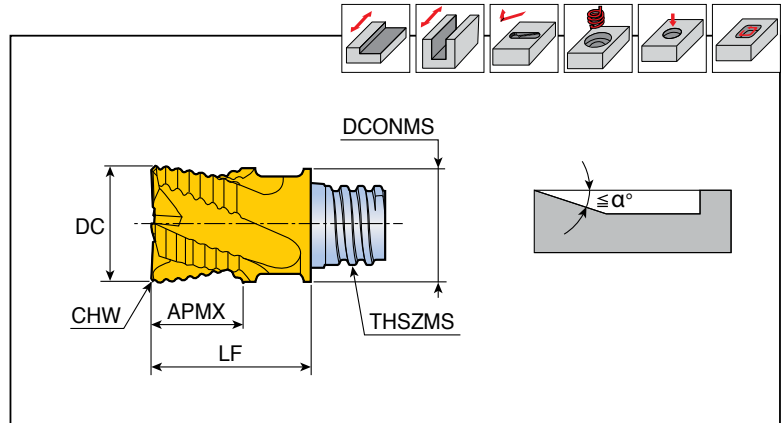
●: Standard items



## MXEE-R



4-6 flute, for roughing



Designation	Feed (mm/tooth)	Dimension (mm)								Grade
		DC	NOF	APMX	CHW	THSZMS	DCONMS	LF	$\alpha^\circ$	
<b>MXEE 080L05C25R04S05</b>	0.030-0.080	8	4	5	0.25	S05	7.7	10	90	●
<b>100L07C30R04S06</b>	0.035-0.090	10	4	7	0.30	S06	9.7	13	90	●
<b>120L09C35R04S08</b>	0.035-0.110	12	4	9	0.35	S08	11.7	16.5	90	●
<b>160L12C40R05S10</b>	0.040-0.130	16	5	12	0.40	S10	15.3	20.5	7	●
<b>200L15C40R06S12</b>	0.050-0.150	20	6	15	0.40	S12	18.3	25.5	3	●
<b>250L22C50R06S15</b>	0.060-0.170	25	6	22	0.50	S15	23.9	37	3	●

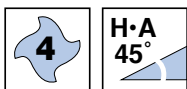
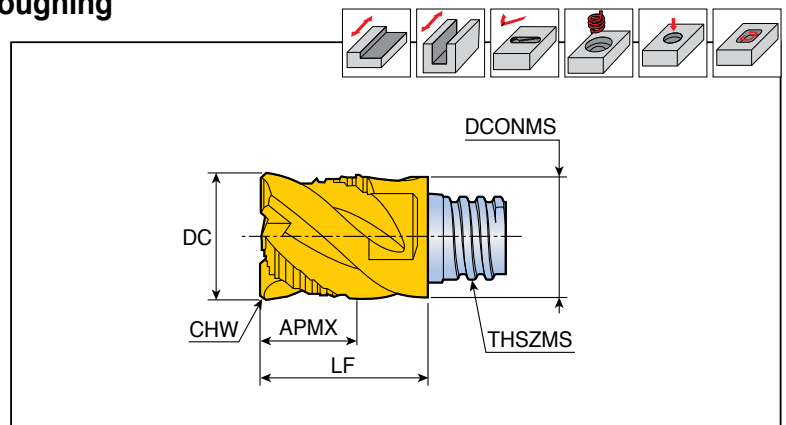
● NOF: Number of flutes

● Standard items

## MXEE-C04



4 flute, combined edges for finishing & roughing



Designation	Feed (mm/tooth)	Dimension (mm)						Grade
		DC	APMX	CHW	THSZMS	DCONMS	LF	
<b>MXEE 080L05C30C04S05</b>	0.030-0.080	8	5	0.3	S05	7.7	10	●
<b>100L07C30C04S06</b>	0.035-0.090	10	7	0.3	S06	9.7	13	●
<b>120L09C40C04S08</b>	0.035-0.110	12	9	0.4	S08	11.7	16.5	●
<b>160L12C60C04S10</b>	0.040-0.130	16	12	0.6	S10	15.3	20.5	●
<b>200L15C60C04S12</b>	0.050-0.150	20	15	0.6	S12	18.3	25.5	●
<b>250L22C60C04S15</b>	0.060-0.170	25	22	0.6	S15	23.9	37	●

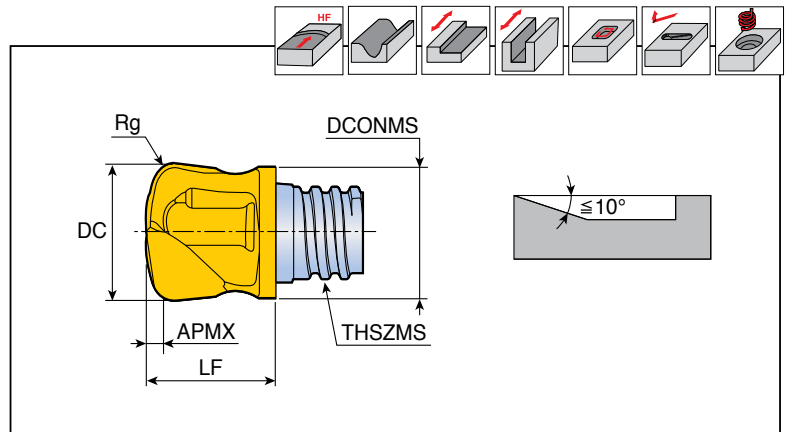
● Standard items





## MXFX-02

2 flute, for high feed milling



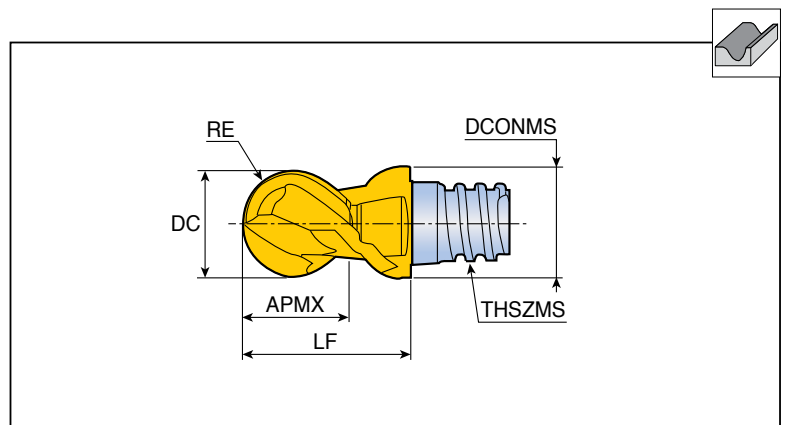
Designation	Feed (mm/tooth)	Dimension (mm)						Grade
		DC	Rg	APMX	THSZMS	DCONMS	LF	
<b>MXFX 100L0.6R20-02S06</b>	0.035-0.090	10	2.0	0.6	S06	9.6	12.5	●
<b>120L01R25-02S08</b>	0.035-0.110	12	2.5	1.0	S08	11.5	11.1	●
<b>160L1.1R30-02S10</b>	0.040-0.130	16	3.0	1.1	S10	15.2	20	●

• Rg: Radius for programmers

●: Standard items

## MXBD-BG-02

2 flute, for high precision machining



Designation	Feed (mm/tooth)	Dimension (mm)						Grade
		DC	RE	APMX	THSZMS	DCONMS	LF	
<b>MXBD 080L05-BG-02S05</b>	0.030-0.080	8	3.982 <sup>(1)</sup>	5	S05	7.7	10	●
<b>100L07-BG-02S06</b>	0.035-0.090	10	4.982 <sup>(1)</sup>	7	S06	9.7	13	●
<b>120L09-BG-02S08</b>	0.035-0.110	12	5.978 <sup>(2)</sup>	9	S08	11.7	16.5	●
<b>160L09-BG-02S10</b>	0.040-0.130	16	7.978 <sup>(2)</sup>	9	S10	15.3	20.5	●

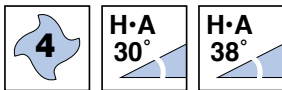
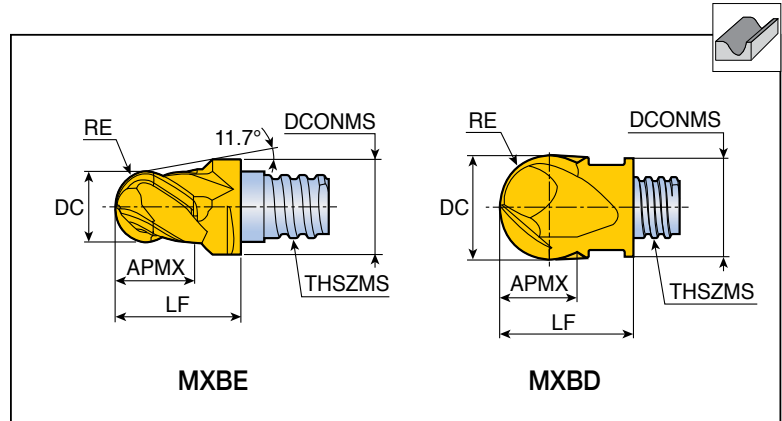
• RE Tolerance: <sup>(1)</sup>± 0.01, <sup>(2)</sup>± 0.012

●: Standard items

## MXBD(E)-BG-04



4 flute, for high precision machining



Designation	Feed (mm/tooth)	Dimension (mm)							Grade
		DC	RE	FHA	APMX	THSZMS	DCONMS	LF	
<b>MXBE 060L05-BG-04S05</b>	0.025-0.060	6	2.987 <sup>(1)</sup>	38	5.5	S05	8.0	10	●
<b>MXBD 080L05-BG-04S05</b>	0.030-0.080	8	3.982 <sup>(1)</sup>	30	5	S05	7.7	10	●
<b>100L07-BG-04S06</b>	0.035-0.090	10	4.982 <sup>(1)</sup>	30	7	S06	9.7	13	●
<b>120L09-BG-04S08</b>	0.035-0.110	12	5.978 <sup>(2)</sup>	30	9	S08	11.7	16.5	●
<b>160L12-BG-04S10</b>	0.040-0.130	16	7.978 <sup>(2)</sup>	30	12	S10	15.3	20.5	●
<b>200L15-BG-04S12</b>	0.050-0.150	20	9.972 <sup>(2)</sup>	30	15	S12	18.3	25.5	●
<b>250L22-BG-04S15</b>	0.060-0.170	25	12.470 <sup>(3)</sup>	30	22	S15	23.9	37	●

- RE Tolerance: <sup>(1)</sup>± 0.01, <sup>(2)</sup>± 0.012, <sup>(3)</sup>± 0.02
- FHA: Flute helix angle

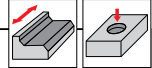
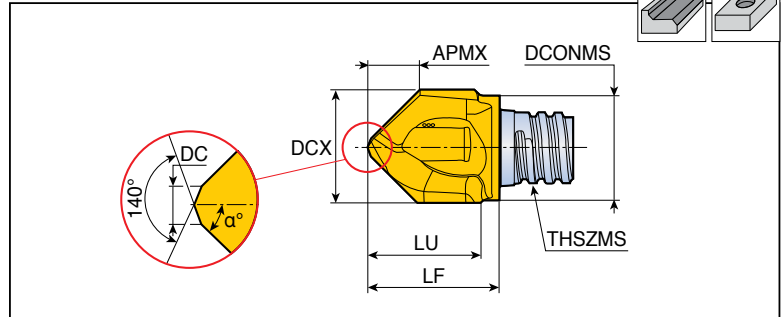
●: Standard items



## MXCP-02



2 flute, for spot drilling, chamfering and countersinking



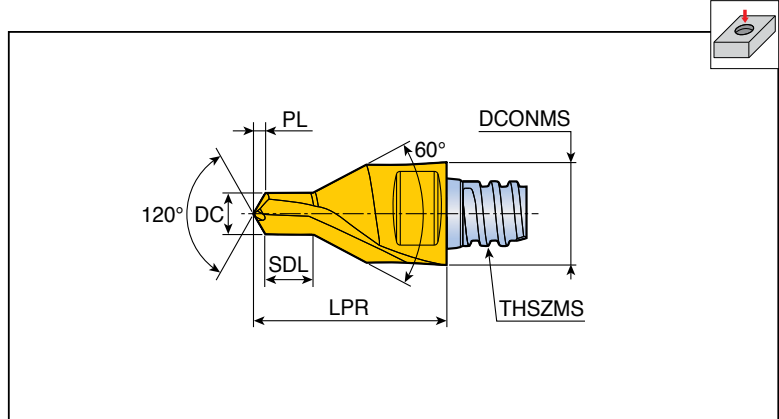
Designation	Feed (mm/tooth)	Dimension (mm)								Grade
		DCX	DC	APMX	THSZMS	DCONMS	LU	LF	$\alpha^\circ$	
<b>MXCP 100L09A30-02S06</b>	0.035-0.090	10	1.5	7.5	S06	9.5	8.5	11.75	30	●
<b>120L12A30-02S08</b>	0.035-0.110	12	1.5	9.2	S08	11.5	11	15.4	30	●
<b>160L15A30-02S10</b>	0.040-0.130	16	2.5	12	S10	15.2	16	20.2	30	●
<b>080L07A45-02S05</b>	0.030-0.080	8	1.0	3.7	S05	7.6	7.5	9.75	45	●
<b>083L07A45-02S05</b>	0.030-0.080	8.3	1.0	3.8	S05	7.6	7.5	10	45	●
<b>100L09A45-02S06</b>	0.035-0.090	10	1.5	4.4	S06	9.5	9.5	11.75	45	●
<b>104L09A45-02S06</b>	0.035-0.090	10.4	1.5	4.6	S06	9.5	9.5	11.75	45	●
<b>120L12A45-02S08</b>	0.035-0.110	12	1.5	5.4	S08	11.5	11.5	15.4	45	●
<b>124L12A45-02S08</b>	0.035-0.110	12.4	1.5	5.6	S08	11.5	11.5	15.4	45	●
<b>160L15A45-02S10</b>	0.040-0.130	16	1.5	7.1	S10	15.2	15	18.8	45	●
<b>165L15A45-02S10</b>	0.040-0.130	16.5	1.5	7.1	S10	15.2	15	18.8	45	●
<b>100L09A60-02S06</b>	0.035-0.090	10	1.5	2.7	S06	9.5	9.5	12.7	60	●
<b>120L12A60-02S08</b>	0.035-0.110	12	1.5	3.3	S08	11.5	11.5	15.2	60	●
<b>160L15A60-02S10</b>	0.040-0.130	16	1.5	4.4	S10	15.2	16	19.9	60	●

●: Standard items

## MXDP-02



2 flute, for center drilling



Designation	Feed (mm/tooth)	Dimension (mm)						Grade
		DC	PL	SDL	THSZMS	DCONMS	LPR	
<b>MXDP 328L04A30-02S05</b>	0.04-0.08	3.28	0.85	3.75	S05	8	15	●
<b>412L05A30-02S06</b>	0.05-0.10	4.12	1.07	4.83	S06	10	19	●
<b>513L07A30-02S08</b>	0.05-0.12	5.13	1.32	5.88	S08	12	23	●
<b>646L08A30-02S10</b>	0.06-0.15	6.46	1.65	7.25	S10	16	28	●

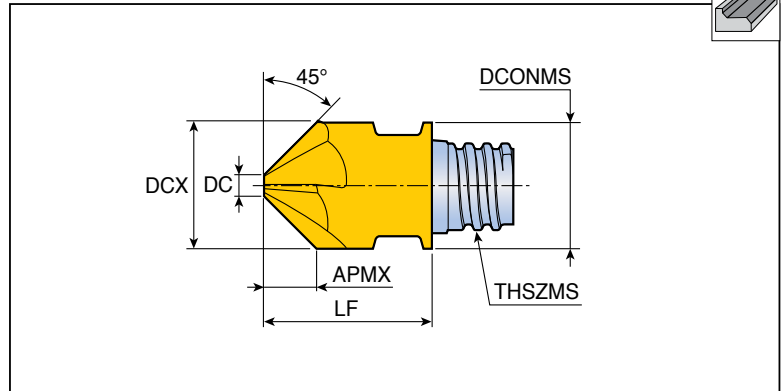
• SDL : Step diameter length

●: Standard items

## MXCA-04/06



4, 6 flute, chamfering and countersinking (without center edge)



Designation	Feed (mm/tooth)	Dimension (mm)							Grade
		DCX	DC	NOF	APMX	THSZMS	DCONMS	LF	
<b>MXCA 100L04A45-04S06</b>	0.035-0.090	10	1.95	4	4.0	S06	10	13	●
<b>120L05A45-04S08</b>	0.035-0.110	12	1.95	4	5.0	S08	12	16.5	●
<b>127L05A45-04S08</b>	0.035-0.110	12.7	1.98	4	5.3	S08	12.7	16.5	●
<b>160L06A45-06S10</b>	0.040-0.130	16	3.0	6	6.5	S10	16	20.3	●
<b>200L07A45-06S12</b>	0.050-0.150	20	5.0	6	7.5	S12	20	25.5	●

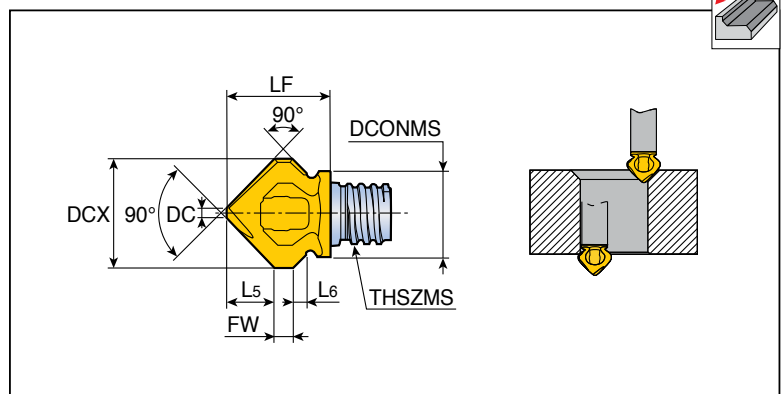
• NOF: Number of flutes

●: Standard items

## MXCW-02



2 flute, for double chamfering



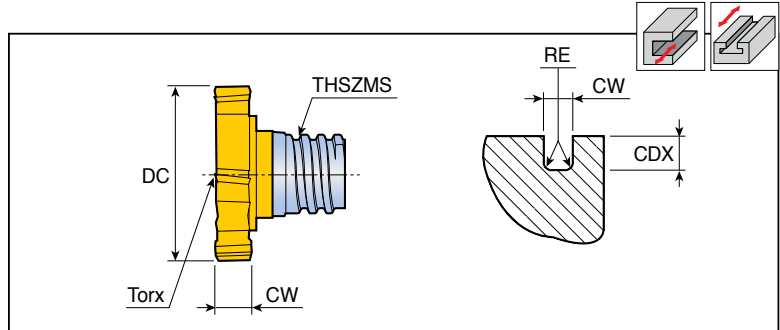
Designation	Feed (mm/tooth)	Dimension (mm)							Grade	
		DCX	DC	L5	L6	FW	THSZMS	DCONMS		LF
<b>MXCW 118L05A45-02S06</b>	0.035-0.110	11.8	1.2	5	1.2	2	S06	9.3	11.2	●

●: Standard items



## TTB-06

6 flute, for slotting



Designation	Feed (mm/tooth)	Dimension (mm)					Torx	Grade TT5543
		DC	CW	CDX	RE	THSZMS		
<b>TTB 135W3.0R04-06S05</b>	0.025-0.130	13.5	3	2.65	0.4	S05	T20	●
<b>135W4.0R04-06S05</b>	0.025-0.150	13.5	4	2.65	0.4	S05	T20	●
<b>160W2.0R04-06S06</b>	0.025-0.120	16	2	2.9	0.4	S06	T20	●
<b>160W3.0R04-06S06</b>	0.025-0.130	16	3	2.9	0.4	S06	T25	●
<b>160W4.0R04-06S06</b>	0.025-0.150	16	4	2.9	0.4	S06	T25	●
<b>165W2.0R04-06S06</b>	0.025-0.120	16.5	2	3.15	0.4	S06	T20	●
<b>165W3.0R04-06S06</b>	0.025-0.130	16.5	3	3.15	0.4	S06	T25	●
<b>165W4.0R04-06S06</b>	0.025-0.150	16.5	4	3.15	0.4	S06	T25	●
<b>195W4.0R04-06S08</b>	0.025-0.150	19.5	4	3.45	0.4	S08	T30	●
<b>195W5.0R04-06S08</b>	0.025-0.150	19.5	5	3.45	0.4	S08	T30	●
<b>195W6.0R04-06S08</b>	0.025-0.170	19.5	6	3.45	0.4	S08	T30	●
<b>225W5.0R04-06S08</b>	0.025-0.150	22.5	5	4.95	0.4	S08	T40	●
<b>225W6.0R04-06S08</b>	0.025-0.170	22.5	6	4.95	0.4	S08	T40	●
<b>225W8.0R04-06S08</b>	0.025-0.170	22.5	8	4.95	0.4	S08	T40	●
<b>250W6.0R04-06S08</b>	0.025-0.170	25	6	5.9	0.4	S08	T50	●
<b>250W8.0R04-06S08</b>	0.025-0.170	25	8	5.9	0.4	S08	T50	●
<b>250W5.0R04-06S10</b>	0.025-0.150	25	5	4.3	0.4	S10	T50	●
<b>250W6.0R04-06S10</b>	0.025-0.170	25	6	4.3	0.4	S10	T50	●
<b>250W8.0R04-06S10</b>	0.025-0.170	25	8	4.3	0.4	S10	T50	●

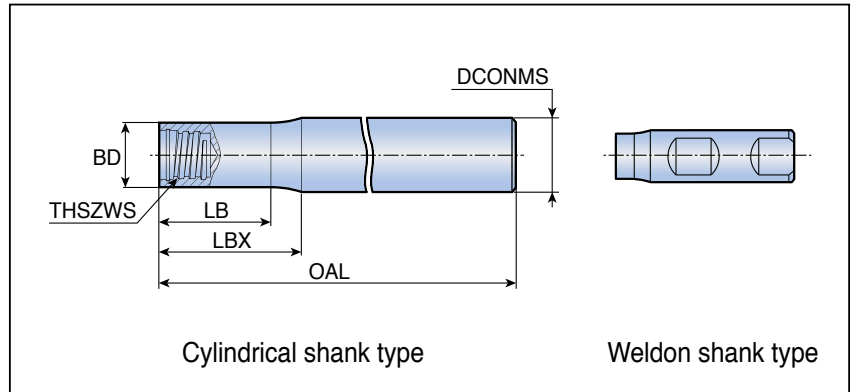
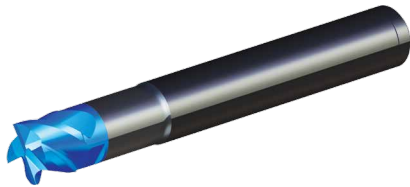
●: Standard items



## MXSSD



Straight shank and neck



Designation	Dimension (mm)						Shank type	Shank material
	THSZWS	DCONMS	BD	OAL	LB	LBX		
<b>MXSSD 08L060S05-S</b>	S05	8	7.6	60	12.8	15	Cylindrical	Steel
<b>08L070S05-C</b>	S05	8	7.6	70	19	20	Cylindrical	Carbide
<b>08L090S05-C</b>	S05	8	7.6	90	39	40	Cylindrical	Carbide
<b>08L110S05-C</b>	S05	8	7.6	110	59	60	Cylindrical	Carbide
<b>10L070S06-C</b>	S06	10	9.6	70	18.5	20	Cylindrical	Carbide
<b>10L075S06-S</b>	S06	10	9.6	75	17.7	20	Cylindrical	Steel
<b>10L090S06-C</b>	S06	10	9.6	90	38.5	40	Cylindrical	Carbide
<b>10L110S06-C</b>	S06	10	9.6	110	58.5	60	Cylindrical	Carbide
<b>10L150S06-C</b>	S06	10	9.6	150	98.5	100	Cylindrical	Carbide
<b>12L055W05-S</b>	S05	12	7.6	55	-	3.8	Weldon	Steel
<b>12L070S08-C</b>	S08	12	11.5	70	17	20	Cylindrical	Carbide
<b>12L090S08-C</b>	S08	12	11.5	90	37	40	Cylindrical	Carbide
<b>12L090S08-S</b>	S08	12	11.5	90	13.6	16	Cylindrical	Steel
<b>12L110S08-C</b>	S08	12	11.5	110	57	60	Cylindrical	Carbide
<b>12L130S08-C</b>	S08	12	11.5	130	77	80	Cylindrical	Carbide
<b>16L065W06-S</b>	S06	16	9.6	65	-	6	Weldon	Steel
<b>16L065W08-S</b>	S08	16	11.5	65	-	4	Weldon	Steel
<b>16L090S10-C</b>	S10	16	15.2	90	38	40	Cylindrical	Carbide
<b>16L100S10-S</b>	S10	16	15.2	100	18	20	Cylindrical	Steel
<b>16L110S10-C</b>	S10	16	15.2	110	58	60	Cylindrical	Carbide
<b>16L130S10-C</b>	S10	16	15.2	130	78	80	Cylindrical	Carbide
<b>16L150S10-C</b>	S10	16	15.2	150	98	100	Cylindrical	Carbide
<b>20L070W10-S</b>	S10	20	15.2	70	-	4	Weldon	Steel
<b>20L090S12-C</b>	S12	20	18.3	90	37	40	Cylindrical	Carbide
<b>20L120S12-S</b>	S12	20	18.3	120	20.5	25	Cylindrical	Steel
<b>20L130S12-C</b>	S12	20	18.3	130	77	80	Cylindrical	Carbide

• THSZWS: Connection thread size

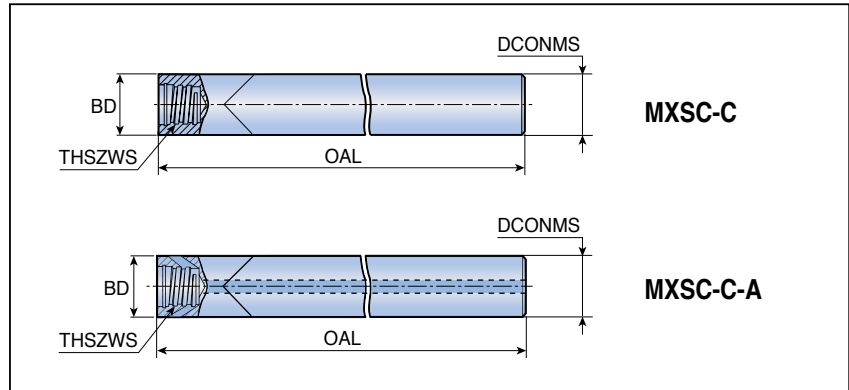




## MXSC



Straight carbide shanks for TST type slotting head



Designation	Dimension (mm)				Internal coolant	Shank material
	THSZWS	DCONMS	BD	OAL		
<b>MXSC 100L100S06-C</b>	S06	10	10	100	x	Carbide
<b>120L100S08-C-A</b>	S08	12	12	100	•	Carbide

- THSZWS: Connection thread size

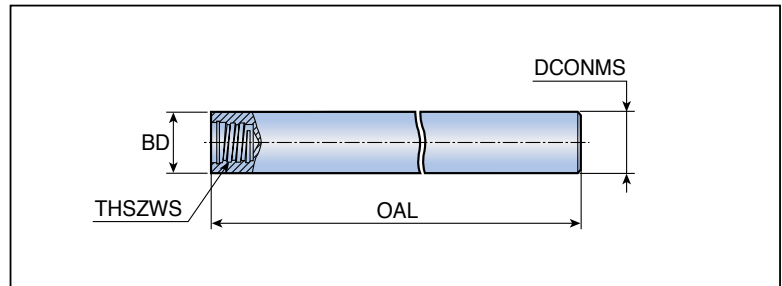
Note:

- For MXSC type shank, it is recommended to use the TST slotting head only. If other heads are used on the MXSC shank, the depth of cut must be smaller than the max. ap in each head. The MXSC type shank does not have external clearance, so the shank may interfere with the work piece.

## MXSTD



Straight shanks for TTB type slotting head



Designation	Dimension (mm)				Shank material
	THSZWS	DCONMS	BD	OAL	
<b>MXSTD 08L070S05-S</b>	S05	8	8	70	Steel
<b>10L080S06-S</b>	S06	10	10	80	Steel
<b>12L090S08-S</b>	S08	12	12	90	Steel
<b>16L100S10-S</b>	S10	16	16	100	Steel

- THSZWS: Connection thread size

Note:

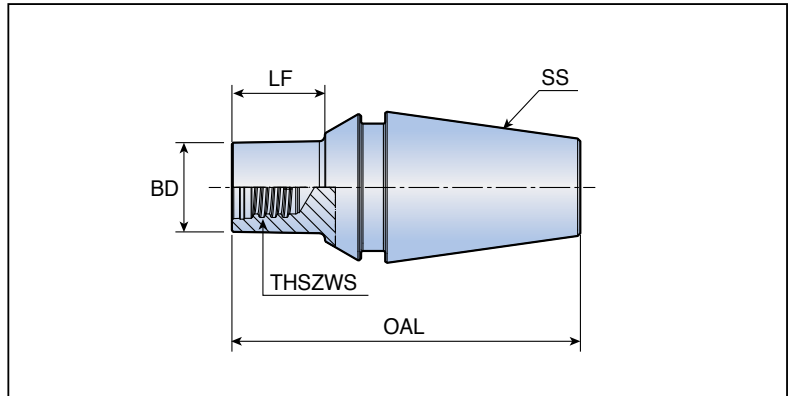
- For MXSTD type shank, it is recommended to use the TTB slotting head only. If other heads are used on the MXSTD shank, the depth of cut must be smaller than the max. ap in each head. The MXSTD type shank does not have external clearance, so the shank may interfere with the work piece.



## MXER






### ER collet chucks conversion adaptor with MAXI-RUSH



Designation	Dimension (mm)					Shank material
	SS	THSZWS	BD	LF	OAL	
<b>MXER 11CL006S05-S</b>	ER11	S05	7.92	6	24.0	Steel
<b>11CL020S05-S</b>	ER11	S05	7.92	20	38.0	Steel
<b>16CL012S05-S</b>	ER16	S05	7.92	12	39.5	Steel
<b>16CL020S05-S</b>	ER16	S05	7.92	20	47.5	Steel
<b>16CL010S06-S</b>	ER16	S06	9.92	10	37.5	Steel
<b>16CL020S06-S</b>	ER16	S06	9.92	20	47.5	Steel
<b>16CL006S08-S</b>	ER16	S08	11.6	6	33.5	Steel
<b>16CL020S08-S</b>	ER16	S08	11.6	20	47.5	Steel

• THSZWS: Connection thread size

## Wrench

Appearance	Designation	Connection thread size	Torque (N.m)	Head
	MX KEY-S05	S05	7	Square Ball Round Drilling Chamfering Counter boring
	MX KEY-S05	S06	10	
	MX KEY-S08	S08	15	
	MX KEY-S10	S10	28	
	MX KEY-S12	S12	28	
	MX KEY-S15	S15	40	
	MX SKEY-S06	S06	10	Slotting TST type
	MX SKEY-S08	S08	15	
	MX SKEY-T40L	S08	15	Slotting TST, TTB type
		S10	28	
	MX SKEY-T20	S05	7	
		S06	10	
	MX SKEY-T25	S06	10	
	MX SKEY-T30L	S08	15	
MX SKEY-T50L	S08	15		
		S10	28	

• Wrench should be ordered separately

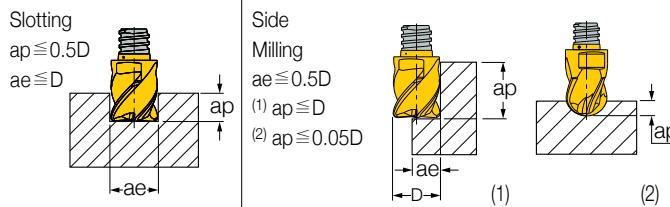
## Torque wrench

Appearance	Designation	Connection	TM head designation	Torque (N.m)
Handle	TORQUE WRENCH 5-50Nm 9X12	-	-	-
Open wrench for cylindrical head	MX WRENCH 6-05	S05	MXED, MXEE	7
	MX WRENCH 8-06	S06	MXEE-I, MXEE-R	10
	MX WRENCH 10-08	S08	MXEE-C, MXEE-A	15
	MX WRENCH 13-10	S10	MXRD, MXBD-BG	28
	MX WRENCH 16-12	S12	MXBE-BGA	28
	MX WRENCH 20-15	S15	MXDP, MXCA	40
Open wrench for 2 flutes head	MX WRENCH 4E-05	S05	MXRB, MXRC	7
	MX WRENCH 5E-06	S06	MXFX, MXBB-BM	10
	MX WRENCH 7E-08	S08	MXBB-BG	15
	MX WRENCH 8E-10	S10	MXCP, MXGC	28
MX WRENCH 9E-12	S12	MXCW, MXCR	28	
90° adapter for torx bit	INSERT TOOL 9X12mm	-	-	-
Torx bit socket	BIT SOCKET T20 DRIVE	S05, S06	TTB135 TTB160W2.00 TTB165W2.00	7, 10
	BIT SOCKET T25 DRIVE	S06	TTB160W3.00 TTB160W4.00	10
	BIT SOCKET T30 DRIVE	S08	TTB165W3.00	15
	BIT SOCKET T40 DRIVE	S08, S10	TTB165W4.00 TTB195	15, 28
	BIT SOCKET T50 DRIVE	S08, S10	TST277 TTB225 TTB250	15, 28

• Wrench should be ordered separately

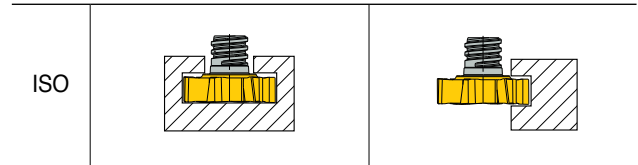
## Recommended Cutting Conditions

### Fz for Square & Round heads



D (mm)	Fz (mm/t)	D (mm)	Fz (mm/t)
6	0.027-0.05	6	0.027-0.06
8	0.032-0.07	8	0.032-0.08
10	0.034-0.08	10	0.034-0.09
12	0.036 - 0.1	12	0.036-0.11
16	0.05 - 0.12	16	0.05 - 0.13
20	0.052-0.14	20	0.052-0.15
25	0.062-0.15	25	0.062-0.17

### Fz for Slotting heads



<b>P</b>	0.025-0.12	0.035-0.15
<b>M</b>	0.025-0.10	0.025-0.12
<b>K</b>	0.025-0.15	0.035-0.17

Thread Size	Key	Clamping Torque (N.m)
<b>S05</b>	MX KEY-S05	7
<b>S06</b>	MX KEY-S06	10
<b>S08</b>	MX KEY-S08	15
<b>S10</b>	MX KEY-S10	28
<b>S12</b>	MX KEY-S12	28
<b>S15</b>	MX KEY-S15	40

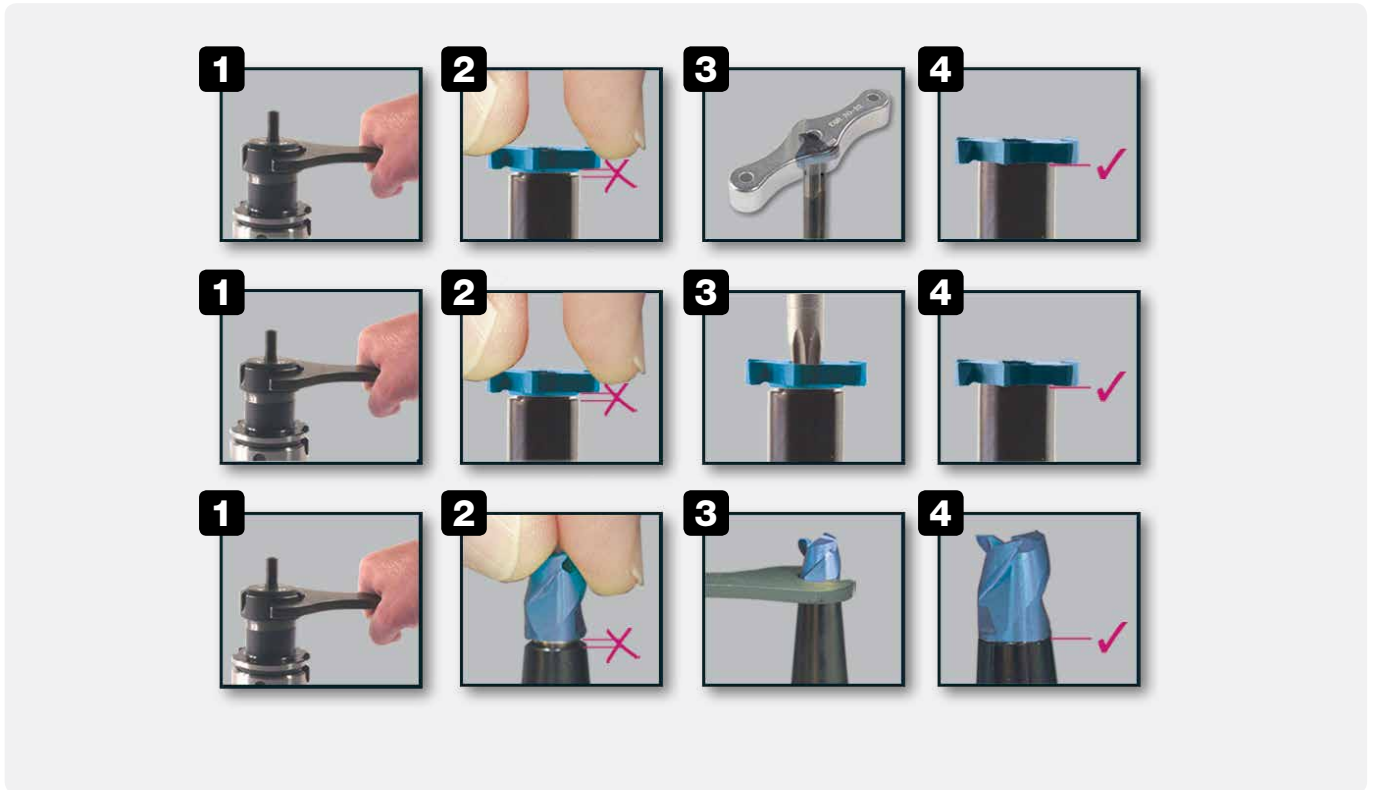
### Recommended Cutting Speed Vc(m/min)

ISO	Material Group	Hardness HB	Vc m/min
<b>P</b>	<b>1</b>	125	220-240
	<b>2</b>	190	170-200
	<b>3-6</b>	200	140-160
	<b>7-8</b>	300	110-130
	<b>9-11</b>	200	100-130
<b>M</b>	<b>12-13</b>	240	90-150
	<b>14</b>	180	70-100
<b>K</b>	<b>15</b>	180	70-240
	<b>16</b>	260	110-220
	<b>17</b>	170	130-250
	<b>19</b>	130	130-230
	<b>20</b>	230	100-200
<b>N</b>	<b>21-24</b>	90	600-700
<b>S</b>	<b>33-35</b>	350	10-20
	<b>36-37</b>		30-50
	<b>38</b>	HRC55	30-40
<b>H</b>	<b>39</b>	HRC60	25-30

### High feed milling - MXFX Only

ISO	Material Group	Fz (mm/t) vs. Tool Diameter D(mm)							
		Ap	Ae	8	10	12	16	20	25
<b>P</b>	<b>1</b>	0.045xD	0.7xD	0.50	0.60	0.70	0.80	0.95	1.05
	<b>2</b>	0.045xD	0.7xD	0.50	0.60	0.70	0.80	0.95	1.05
	<b>3</b>	0.045xD	0.7xD	0.50	0.60	0.70	0.80	0.95	1.05
	<b>4</b>	0.045xD	0.7xD	0.50	0.60	0.70	0.80	0.95	1.05
	<b>5</b>	0.045xD	0.7xD	0.45	0.55	0.60	0.70	0.80	0.90
	<b>6</b>	0.045xD	0.7xD	0.35	0.45	0.50	0.60	0.70	0.80
	<b>7</b>	0.045xD	0.7xD	0.35	0.45	0.50	0.60	0.70	0.80
	<b>8</b>	0.045xD	0.7xD	0.35	0.40	0.45	0.55	0.65	0.75
	<b>9</b>	0.045xD	0.7xD	0.35	0.40	0.45	0.55	0.65	0.75
	<b>10</b>	0.04xD	0.6xD	0.30	0.35	0.40	0.50	0.6	0.70
	<b>11</b>	0.04xD	0.6xD	0.30	0.35	0.40	0.45	0.55	0.65
<b>M</b>	<b>12-14</b>	0.04xD	0.6xD	0.35	0.40	0.45	0.55	0.65	0.75
<b>K</b>	<b>15-16</b>	Apmax	0.7xD	0.50	0.55	0.65	0.75	0.85	0.95
	<b>17-20</b>	Apmax	0.7xD	0.40	0.50	0.55	0.65	0.75	0.85
<b>H</b>	<b>38.1</b>	0.035xD	0.45xD	0.25	0.30	0.35	0.45	0.50	0.60
	<b>38.2</b>	0.03xD	0.3xD	0.20	0.25	0.35	0.40	0.50	0.55
	<b>39</b>	0.02xD	0.25xD	0.15	0.20	0.20	0.25	0.25	0.30

## Clamping Instructions



- Use TaeguTec cutting heads only
- Before mounting, clean the connection area of both the head and the holder
- Do not apply lubricant onto the connection areas
- Use the correct TT designated wrench (sold separately)
- Apply the proper clamping torque listed in this guide; excessive tightening may cause the cutting head to break