

# NPN

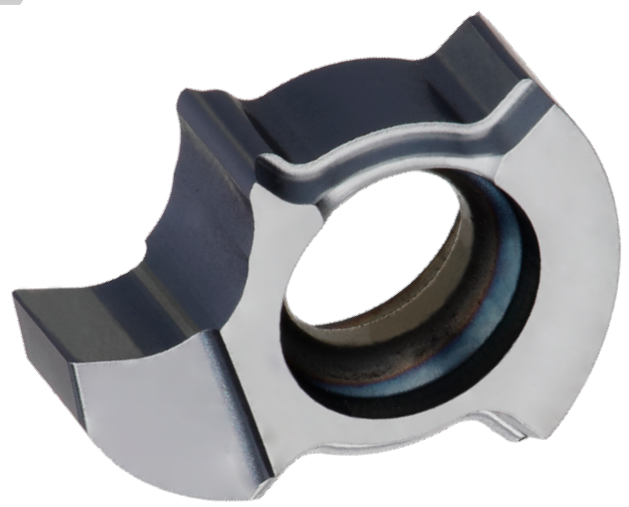
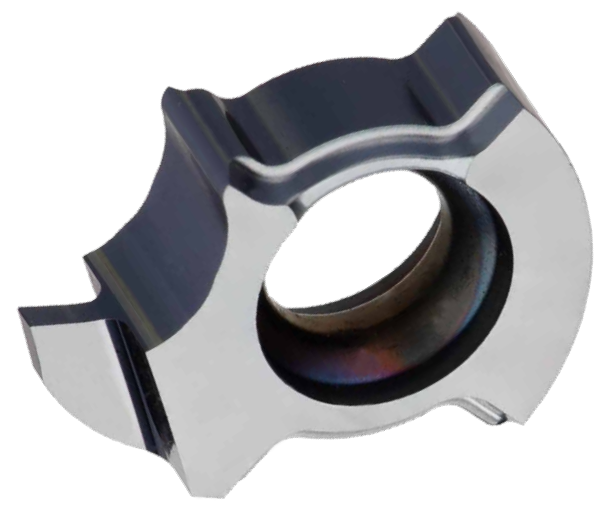
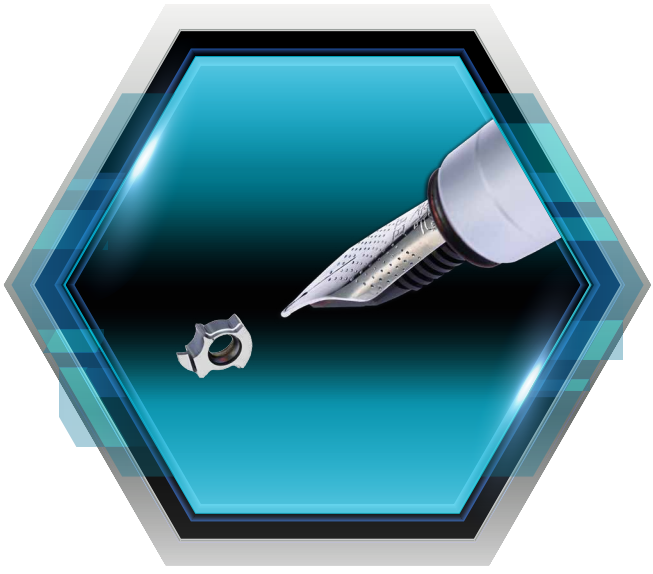
New Product News



## MINIRUSH

INTERNAL GROOVING

TT8020 Grade for TMIS 8... Inserts



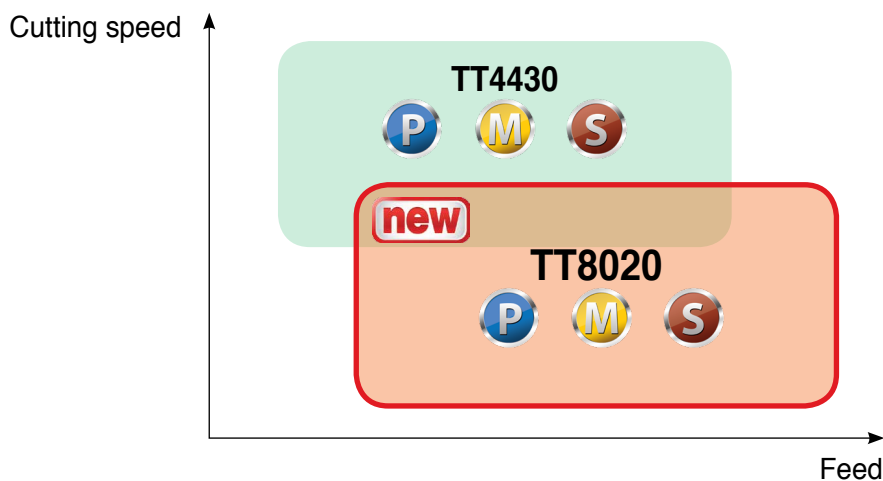
## KEY POINT

**TaeguTec has added the TT8020 grade to the MINI-I-RUSH line.**

Taegutec has added the high toughness TT8020 grade to the MINI-I-RUSH line that has been providing excellent tool life and surface finish for small diameter grooving applications.

Due to the grade's toughness, it provides advantages; it prevents sudden breakage caused by chips, excellent performance in low-speed machining and excellent performance even in unstable machining conditions.

With the introduction of the high toughness TT8020 grade, the MINI-I-RUSH line can be applied to a wide variety of materials and applications.



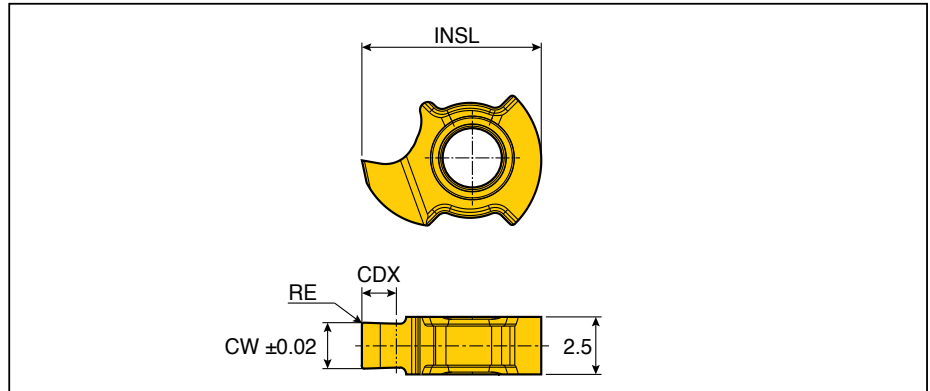
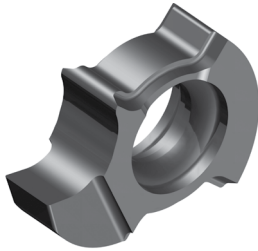
### Features

- TT8020 high toughness grade
- Suitable for low-speed and unstable machining
- Prevents sudden breakage during machining



## TMIS 8

Precise inserts for internal shallow grooving on small diameter



Designation	Feed (mm/rev)	Dimension (mm)				Grade	
		CW	RE	CDX	INSL	TT4430	TT8020 <small>new</small>
<b>TMIS 8-0.50-0.00</b>	0.01-0.03	0.50	0.00	0.70	7.8	●	●
<b>8-1.00-0.00</b>	0.01-0.03	1.00	0.00	1.50	7.8	●	●
<b>8-1.50-0.05</b>	0.01-0.03	1.50	0.05	1.50	7.8	●	●
<b>8-2.00-0.10</b>	0.01-0.03	2.00	0.10	1.50	7.8	●	●

●: Standard items

## Recommended Cutting Conditions

ISO	Material	Condition	Tensile strength (N/mm <sup>2</sup> )	Hardness HB	Material No.	Cutting speed Vc(m/min)			
						TT4430	TT8020		
P	Non-alloy steel, cast steel, free cutting steel	<0.25%C	Annealed	420	125	1	100-130	80-110	
		>=0.25%C	Annealed	650	190	2	60-90	50-80	
		<0.55%C	Quenched and tempered	850	250	3			
		>=0.55%C	Annealed	750	220	4	60-100	50-90	
			Quenched and tempered	1000	300	5			
	Low alloy steel and cast steel (less than 5% of alloying elements)	Annealed		600	200	6	60-100	40-70	
				930	275	7	70-100	40-60	
		Quenched and tempered		1000	300	8			
				1200	350	9	60-80	30-50	
	High alloy steel, cast steel and tool steel	Annealed		680	200	10	60-80	30-50	
Quenched and tempered			1100	325	11	50-70	30-40		
M	Stainless steel and cast steel	Ferritic / martensitic		680	200	12	50-110	40-80	
		Martensitic		820	240	13			
		Austenitic		600	180	14	40-110	30-80	
K	Gray cast iron (GG)	Ferritic			160	15			
		Pearlitic			250	16			
	Cast iron nodular (GGG)	Ferritic			180	17			
		Pearlitic			260	18			
	Malleable cast iron	Ferritic			130	19			
		Pearlitic			230	20			
N	Aluminum - wrought alloy	Not cureable			60	21			
		Cured			100	22			
	Aluminum-cast, alloyed	<=12% Si	Not cureable			75	23		
			Cured			90	24		
		>12% Si	High temp.			130	25		
	Copper alloys	>1% Pb	Free cutting			110	26		
			Brass			90	27		
			Electrolitic copper			100	28		
	Non-metallic		Duroplastics, fiber plastics				29		
			Hard rubber				30		
S	High temp. alloys	Fe based	Annealed			200	31	20-30	15-25
			Cured			280	32	15-25	10-15
		Ni or Co based	Annealed			250	33	15-20	10-15
			Cured			350	34	15-20	10-15
			Cast			320	35	15-20	10-15
	Titanium, Ti alloys			Rm 400		36	80-100	60-80	
		Alpha+beta alloys cured		Rm 1050		37	20-40	15-30	

■ Steel   
 ■ Stainless steel   
 ■ Cast iron   
 ■ Nonferrous   
 ■ High temp. alloys