

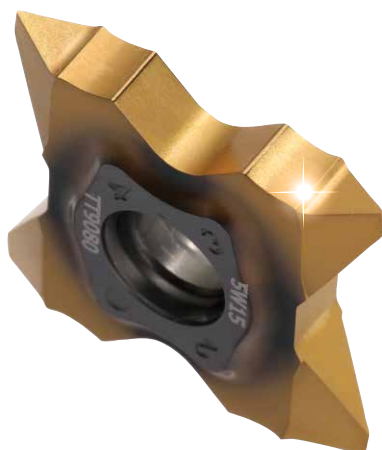
NEW PRODUCT NEWS

QUAD•RUSH

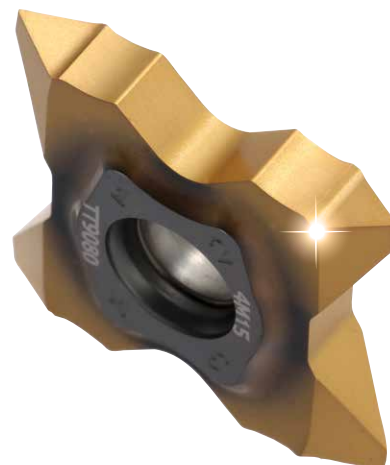


Threading Line Now Available

Partial Profile 55°



Partial Profile 60°



QUADRUSH

Threading line now available

FEATURES

- QUADRUSH line now expanded to threading applications
- Available in 60° & 55° partial profiles
- TT9080 GOLDRUSH coating grade to maximize tool life on all metals
- A multi-corner (4 cutting edges) insert is designed for economy, accuracy and surface quality
- All QUADRUSH threading inserts compatible with standard cartridges & holders (TQHR/L, TQHPR/L, TQCR/L, TQHR/L-TB)
- Additional full profile standard threading inserts will be available by the end of 2014: ISO, UN, BSW

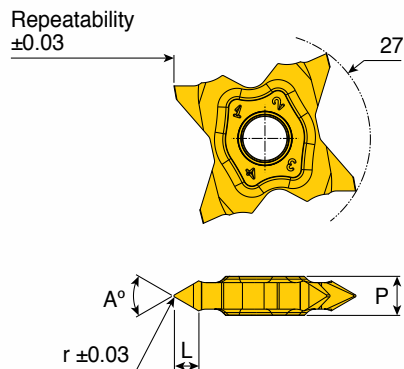
TaeguTec's QUADRUSH line, known for high accuracy and surface quality in shallow parting and grooving, is now available for external threading applications.

The QUADRUSH insert's unique, multi-corner four cutting edges has been expanded to 60° and 55° partial profiles. The new line includes the latest GOLDRUSH coating—TT9080 grade—for maximum protection against tool wear and better surface roughness.

With this expansion into threading applications, TaeguTec is providing end-users the highest productivity and economical tools already employed by end-users in parting and grooving applications.

TQS 27-MT

Partial profile 60°, external threading multi-corner insert



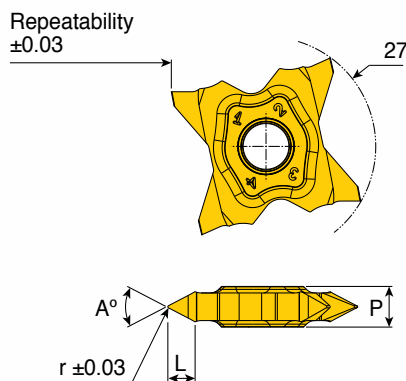
Designation	r	A°	P	L	Pitch min. (mm)	TPI max.	Grade
							TT9080
TQS 27-4MT-0.05	0.05	60	4	2.8	0.45	56	●
27-4MT-0.14	0.14	60	4	2.7	1.11	23	●
27-5MT-0.15	0.15	60	5	3.1	1.25	20	●
27-5MT-0.20	0.20	60	5	3.1	1.63	16	●
27-6MT-0.25	0.25	60	6	3.6	1.94	13	●

- Pitch max=0.175XD, TPI min=5.7/D
- D: Diameter of thread
- TPI: Thread/Inch

●: Standard item

TQS 27-WT

Partial profile 55°, external threading multi-corner insert



Designation	r	A°	P	L	TPI max.	TPI min.	Grade
							TT9080
TQS 27-4WT-0.05	0.05	55	4	2.9	54	6.4 / D	●
27-5WT-0.15	0.15	55	5	3.3	19	6.4 / D	●
27-6WT-0.25	0.25	55	6	3.9	12	6.4 / D	●

• D: Diameter of thread
• TPI: Thread/Inch

●: Standard item

Recommended cutting conditions

QUAD-RUSH

ISO	Material	Condition	Tensile strength (N/mm ²)	Hardness HB	Material No.	Cutting speed Vc(m/min)	
						TT9080	
P	Non-alloy steel, cast steel, free cutting steel	0.1-0.25 %C	Annealed	420	125	1	110-200
		0.25-0.25 %C	Annealed	650	190	2	100-180
		0.25-0.25 %C	Quenched and tempered	850	250	3	70-160
		0.55-0.80 %C	Annealed	750	220	4	80-180
		0.55-0.80 %C	Quenched and tempered	1000	300	5	60-140
	Low alloy steel and cast steel (Less than 5% of alloying elements)		Annealed	600	200	6	80-180
			Quenched and tempered	930	275	7	70-140
				1000	300	8	60-110
	High alloy steel, cast steel and tool steel		Annealed	680	200	10	50-110
			Quenched and tempered	1100	325	11	40-100
	M	Stainless steel and cast steel	Ferritic / martensitic	680	200	12	60-140
Martensitic			820	240	13	50-120	
Austenitic			600	180	14	70-140	
K	Gray cast iron (GG)	Ferritic		160	15	80-180	
		Pearlitic		250	16	70-140	
	Cast iron nodular (GGG)	Ferritic		180	17	150-240	
		Pearlitic		260	18	100-180	
Malleable cast iron	Ferritic		130	19	100-200		
	Pearlitic		230	20	80-170		
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	
Non-metallic		Electrolytic copper		100	28		
		Duroplastics, fiber plastics			29		
S	High temp. alloys	Fe based	Annealed		200	31	30-60
			Cured		280	32	25-40
		Ni or Co based	Annealed		250	33	25-35
			Cured		350	34	15-25
			Cast		320	35	15-30
	Titanium, Ti alloys		Rm 400			36	70-150
			Alpha+beta alloys cured	Rm 1050			37
H	Hardened steel	Hardened		55HRC		38	
		Hardened		60HRC		39	
	Chilled cast iron	Cast		400		40	
	Cast iron nodular	Hardened		55HRC		41	

• For more information of material groups, see the Technical Guide "material conversion table".

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

Number of cutting passes

Pitch (mm)	0.5	1.0	1.5	2.0	2.5	3.0	4.0	6.0
TPI	48	24	16	12	10	8	6	4
Number of passes	4-6	5-9	5-12	6-14	7-15	8-17	10-20	11-22