

Features of chip breaker

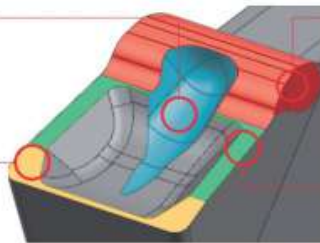
- The design of chip breaker and its bump in the back area realize better chip evacuation
- The chip breaker with negaland is used universally.

Coolant path and guide for chip evacuation

- Inner coolant holder is available
- Guide for chip evacuation

Negaland

- Applying for various workpieces
- Stable in interrupted cutting and machining with high depth of cut



The second chip breaker in the back area

- Better chip control in machining of workpiece with a bigger diameter
- Preventing damage to holder from chip evacuation

Strong land on flank

- Smaller diameter of chip curl makes better chip control
- Higher rigidity of insert

Recommended cutting conditions

Workpiece					Grade	Cutting conditions	
ISO	Workpiece	KS	AISI	ISO (DIN)*		vc (m/min)	fn (mm/rev)
P	Carbon steel	SM45C	1045	C45ww	PC5300	80-200	0.08-0.28
					PC3035	80-220	0.08-0.28
	Alloy steel	SCM440	4140	42CrMo4 (42CrMo4)*	PC5300	80-160	0.08-0.25
					PC3035	80-180	0.08-0.25
M	Stainless steel	STS304	304	X5CrNi18-9 (X2CrNi19-11)*	PC5300	80-190	0.06-0.20
		STS316	316	X5CrNiMo17-12-2	PC5300	80-190	0.06-0.20
K	Gray cast iron	GC250	No35B	250 (GG25)*	PC8110	100-220	0.10-0.28
					PC5300	100-200	0.10-0.28
	Nodular graphite cast iron	GCD500	80-55-06	450-10	PC8110	80-200	0.10-0.25
					PC5300	80-180	0.10-0.25
S	HRSA	Inconel 718	7718	15156-3	PC8110	35-65	0.05-0.15
					PC5300	25-55	0.05-0.15

Cutting edge width and T-MAX by items

⊙: First recommendation ○: Second recommendation

Shape		Cutting edge width (mm)					No. of corner	Machining				Features
		2	4	6	8	130		External diameter	Internal diameter	Cross section	Parting	
Saw Man-X new		2		6.0		125	1	○			⊙	• Self clamping • Deep grooving
MGT, KGT		1.5			8.0	28	2	⊙	○	○	○	• Various machining • Wide range of machining
TB		1.25		6.0			3	⊙			○	• Precise ground class • Optimally automatic machining
Auto tools	Blade type	0.7	2.0				2	⊙			○	• For swiss-type lathe (blade) • Small deliberate component machining
	Multi-functional type	1.0	4.0				2	⊙			○	• For swiss-type lathe (multifunctional) • Small deliberate component machining
K Notch		0.75		6.3			2	⊙				• Strong clamping system • Highly qualified cutting edge

Insert

(mm)

Application	Picture	Designation	Coated			W	r	L	Configuration
			PC3035	PC5300	PC8110				
Parting		KSP 200-020-N	●	●	●	2.0	0.20	11.0	
		300-020-N	●	●	●	3.0	0.20	12.0	
		400-025-N	●	●	●	4.0	0.25	12.5	
		500-025-N				5.0	0.25	13.5	
		600-035-N				6.0	0.35	14.5	

●: Stock item

Multi functional Tools