

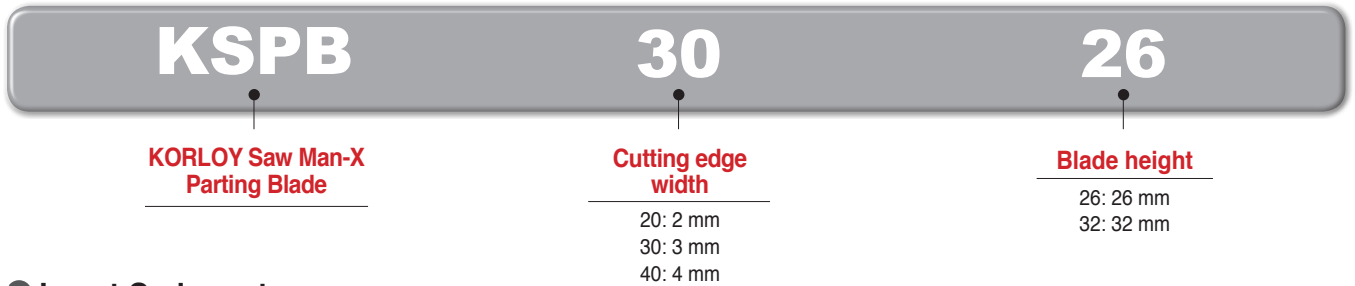
C Technical Information for Saw Man-X

A solution for parting and deep grooving

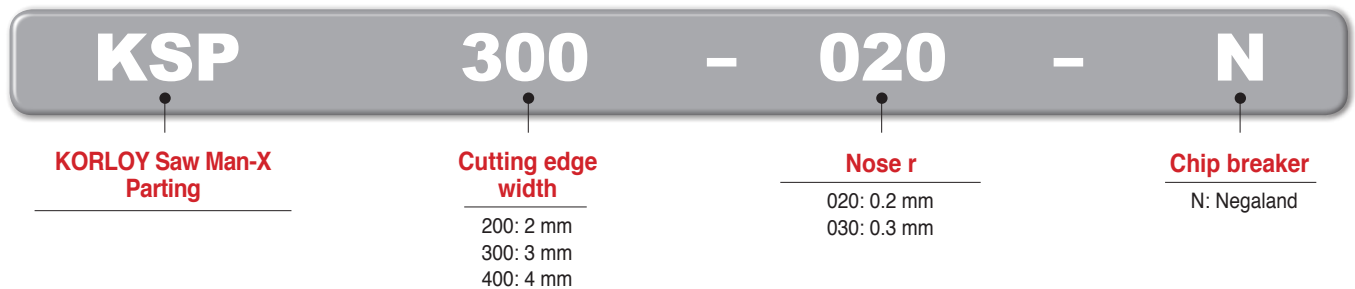
Saw Man-X

- Stable machining in deep grooving applying clamping system with strong three-way V-Rail
- Improved clamping precision and convenient replacing of inserts with using the exclusive wrench

Holder (Blade) Code system



Insert Code system

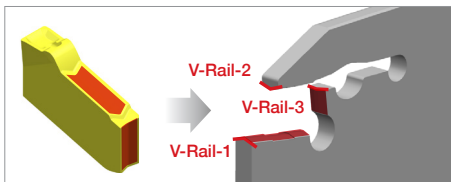


Features

- Three-way V-Rail – More stable clamping system
- New treatment on cutting edge – Better quality of machining and longer tool life
- Superior chip breaker – Better chip control
- Exclusive wrench – More convenient clamping system

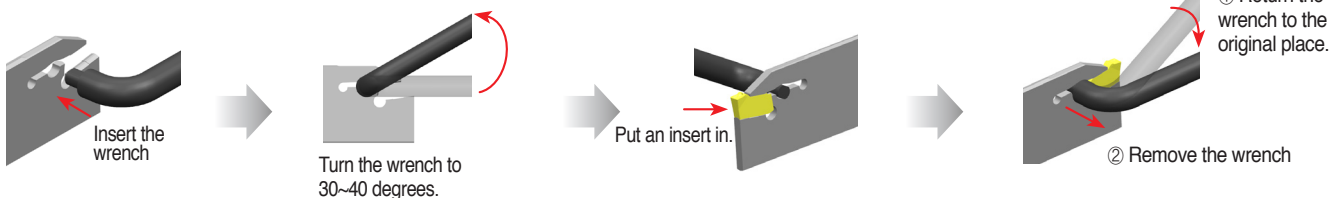
Three-way V-RAIL

- An insert is tightly clamped in the tip seat.
- Minimized vibration during the machining increases stability.
- Stable high speed, high feed and high depth of cut machining is available.



Exclusive wrench

- The exclusive wrench having the principle of CAM for the Saw Man-X
- More convenient clamping system



Special cutting edge

- Even cutting edge improves machinability
- Higher quality of machining and wear resistance

Features of chip breaker

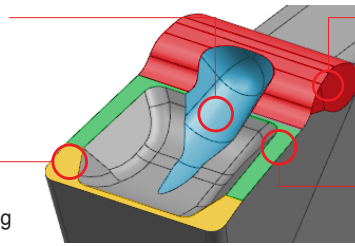
- The design of chip breaker and its bump in the back area realize better chip evacuation
- The chip breaker with negaland is used universally.

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


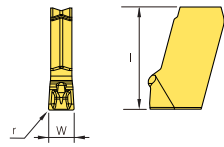
Cutting edge width and T-MAX by items

◎: First recommendation ○: Second recommendation

Shape	Cutting edge width (mm)	T-MAX (mm)					No. of corner	Machining				Features
		2	4	6	8	130		External diameter	Internal diameter	Cross section	Parting	
Saw Man-X 	2	2	6.0	125			1	○			◎	• Self clamping • Deep grooving
MGT, KGT 	1.5	1.5	8.0	28			2	◎	○	○	○	• Various machining • Wide range of machining
TB 	1.25	1.25	6.0	6.5			3	◎			○	• Precise ground class • Optimally automatic machining
Auto tools	Blade type 	0.7	2.0	8.3			2	◎			○	• For swiss-type lathe (blade) • Small deliberate component machining
	Multi-functional type 	1.0	4.0	8.5			2	◎			○	• For swiss-type lathe (multifunctional) • Small deliberate component machining
K Notch 	0.75	0.75	6.3	6.5			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	

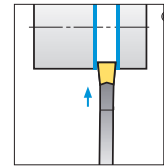
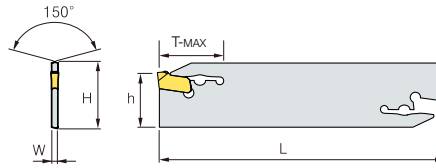
●: Stock item




KSPB (Blade) new




KSP



(mm)

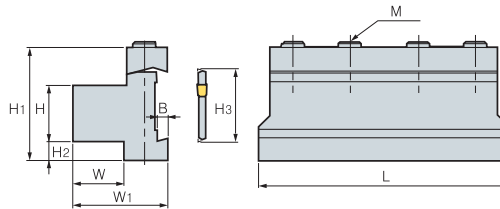
Designation		Cutting edge width	H	W	L	h	T-MAX	Wrench
KSPB	2026	2mm	26	1.6	110	21	25	 CW08
	2032	2mm	32	1.6	150	25	26	
	3026	3mm	26	2.4	110	21	36	
	3032	3mm	32	2.4	150	25	60	
	4026	4mm	26	3.2	110	21	36	
	4032	4mm	32	3.2	150	25	60	
	5026	5mm	26	4.0	110	21	40	
	5032	5mm	32	4.0	150	25	60	
	6026	6mm	26	5.2	110	21	60	
	6032	6mm	32	5.2	150	25	60	

 Applicable inserts **C63**


SMBB (Block)




KSPB□□□□
 SPB□□□(-S)
 KGTB□□□□



(mm)

Designation		H	W	H3	L	H1	H2	W	B	M	Wrench
SMBB	1626	16	12	26	86	43	13	30	5.3	3-M6	 HW50L
	2026	20	19	26	86	43	9	38	5.3	3-M6	
	2032	20	19	32	100	50	13	38	5.3	4-M6	
	2526	25	23	26	86	43	4	42	5.3	4-M6	
	2532	25	23	32	110	50	8	42	5.3	4-M6	
	3232	32	30	32	110	54	5	48	5.3	4-M6	

 Applicable inserts **C63**