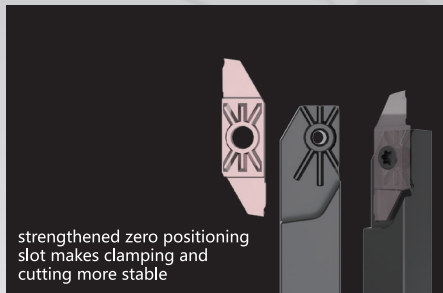
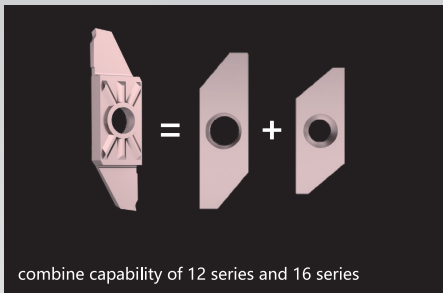


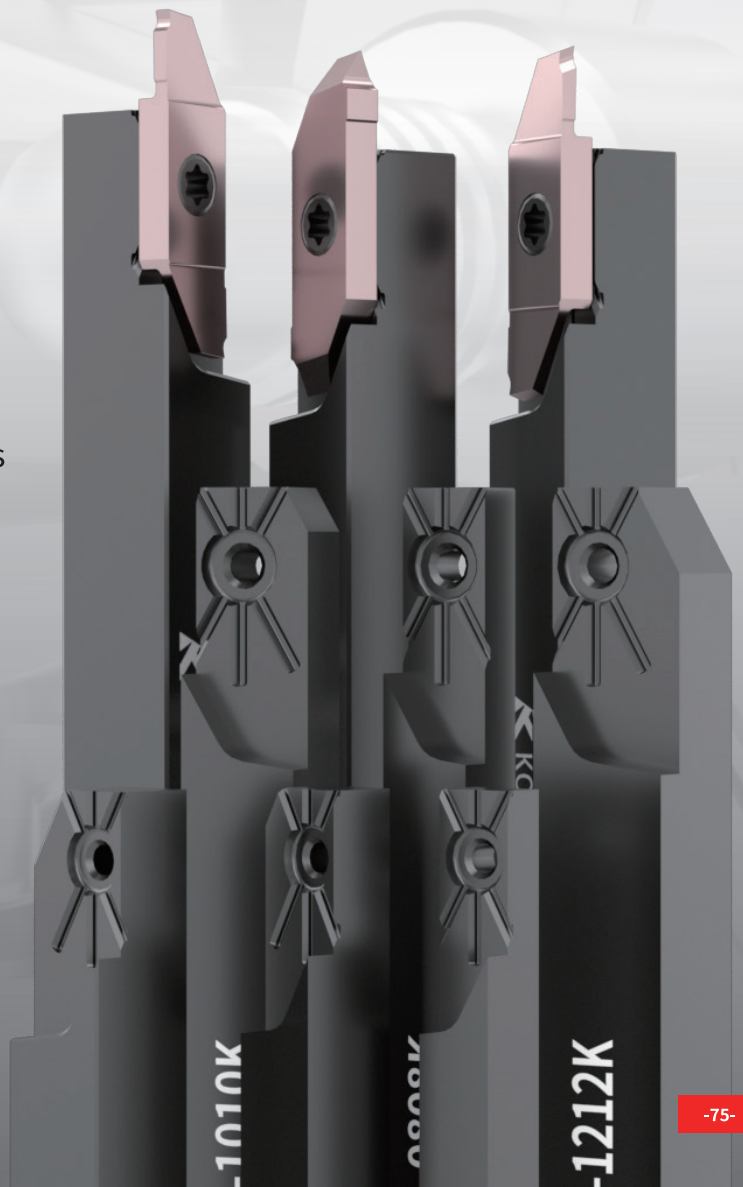


KX CNC PRECISION AUTOMATIC LATHE SPECIAL SMALL PARTS CUTTING TOOL SERIES

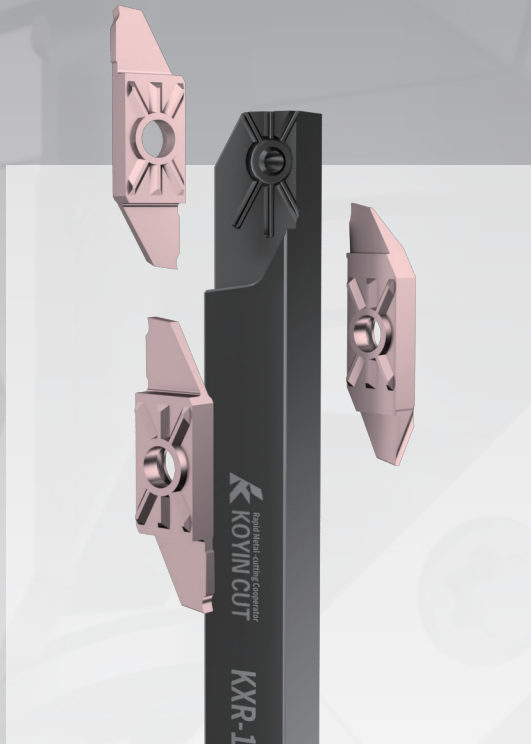


FEATURES AND ADVANTAGES

- combine capability of 12 series and 16 series
- tools with multiple purposes (parting, grooving, back-turning, threading)
- grades vary from different machined materials (stainless steel, titanium alloy, soft iron, carbide, nonferrous and etc.)
- holders with different specifications (8*8/10*10/12*12/16*16) and customization



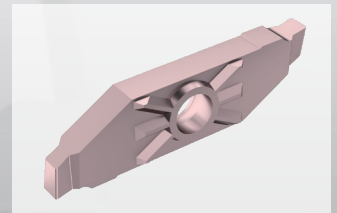
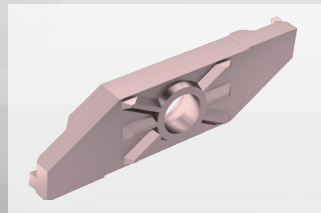
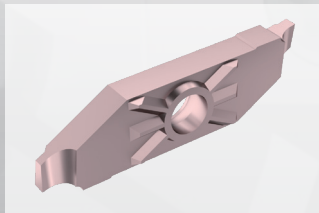
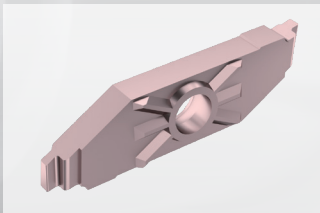
KX Tools Dedicated for Precision Small Parts



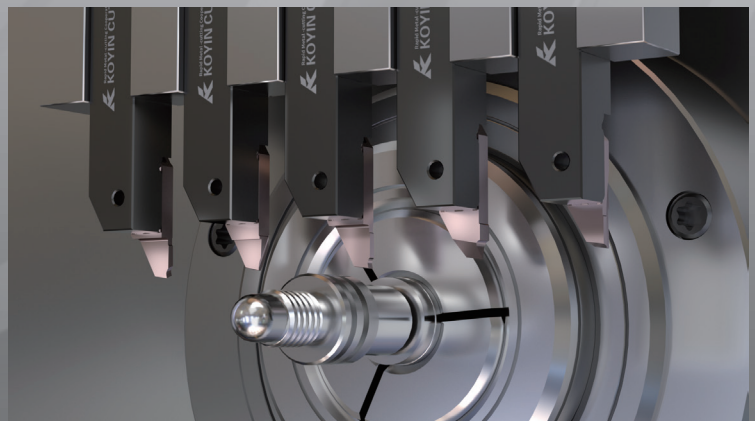
more stable cutting performance with strengthened zero positioning slot to eliminate longitudinal machining force

"precise positioning and repeatable accuracy with strengthened zero positioning slot one holder for different inserts"

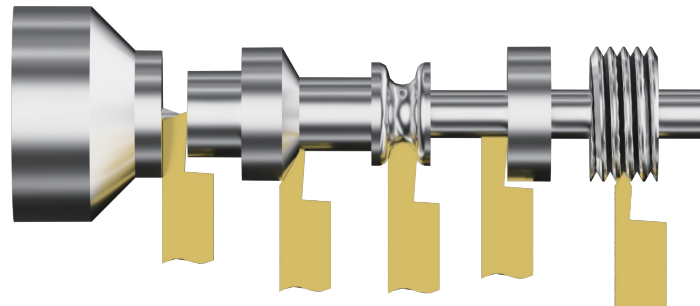
display of customized tools



simulated application scenario



Processing Application



Maximum Diameter of parting is 16mm

Parting

Back-turning

Profiling

Grooving

Threading

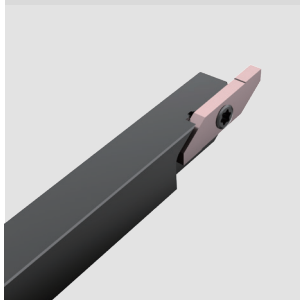
Symbols of KX Tool Holders

	N/A: Standard holders	R: Right handed				M : 150
KX: KX Series	S: halved holders	L: Left handed				JX : 120
						J : 110
						H : 100
Series	Halved holders	Direction of holders	-	Tool Height	Tool Width	Tool Length
KX	S	R	-	12	12	JX

Regular holders



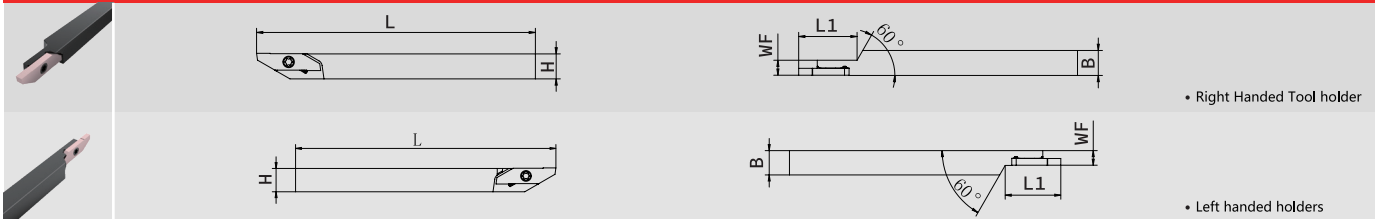
• Right Handed Tool holder



• Left handed holders

Type	Size			Accessories		Corresponding Insert
	H	B	L	Screw	Wrenth	
KX [®] /L-0808H	8	8	100	KS-3505-T	KW-T15	KX□16 [®] /L□□□
KX [®] /L-1010JX	10	10	120	KS-35065-T		
KX [®] /L-1212JX	12	12	120			
KX [®] /L-1616JX	16	16	120			
KX [®] /L-2020JX	20	20	120			
KX [®] /L-2525M	25	25	150			

Halved holders



• Right Handed Tool holder

• Left handed holders

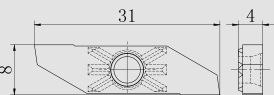
Type	Size					Accessories		Corresponding Insert
	H	B	WF	L1	L	Screw	Wrench	
KXS ⁹ / ₁₆ -0808H	8	8	7.2	26	100	KS-3504-T	KW-T15	KX□16 ⁹ / ₁₆ □□□
KXS ⁹ / ₁₆ -1010JX	10	10						
KXS ⁹ / ₁₆ -1212JX	12	12	7.2	26	120			
KXS ⁹ / ₁₆ -1616JX	16	16						

Symbols of KX grooving, circular grooving and back-turning

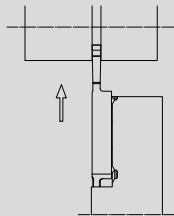
Series	Insert Type	Insert size	Insert Direction	Tip width	—	Effective cutting depth	—	Nose Radius
KX	G	16	R	125	—	400	—	R005

Insert of grooving

• Workblank



• Application Examples



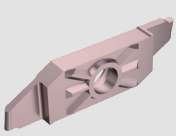
	Soft steel	Carbon steel/alloy steel	Martensitic	Austenitic	Grey Cast Iron	Ductile Cast Iron	Nonferrous	Heat Resisting Alloy	Titanium Alloy	Hardened Materials
P	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
M	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
K	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
N	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
S	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
H	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

shape Right Handed Tool	Type	Size			PVD Coated Cemented Carbide					
		W	L	R	KPM30N	KXM15S	KH10M	KMS20	KCN10D	KCN10
	KXG16 ⁹ / ₁₆ 070-300-R005	0.7	3.0	0.05	●	●	●			
	KXG16 ⁹ / ₁₆ 100-400-R005	1.0	4.0	0.05	●	●				
	KXG16 ⁹ / ₁₆ 100-400-R010			0.1	●	●				
	KXG16 ⁹ / ₁₆ 125-400-R005	1.25	4.0	0.05	●	●				
	KXG16 ⁹ / ₁₆ 125-400-R010			0.1	●	●				
	KXG16 ⁹ / ₁₆ 150-500-R005	1.5	5.0	0.05	●	●				
	KXG16 ⁹ / ₁₆ 150-500-R010			0.1	●	●				
	KXG16 ⁹ / ₁₆ 150-500-R020	1.5	5.0	0.2	●	●				
	KXG16 ⁹ / ₁₆ 200-600-R005			0.05	●	●				
	KXG16 ⁹ / ₁₆ 200-600-R010	2.0	6.0	0.1	●	●				
	KXG16 ⁹ / ₁₆ 200-600-R020			0.2	●	●				
	KXG16 ⁹ / ₁₆ 250-800-R005	2.5	8.0	0.05	●	●				
	KXG16 ⁹ / ₁₆ 250-800-R010			0.1	●	●				
	KXG16 ⁹ / ₁₆ 250-800-R020	2.5	8.0	0.2	●	●				
	KXG16 ⁹ / ₁₆ 300-800-R005			0.05	●	●				
	KXG16 ⁹ / ₁₆ 300-800-R010	3.0	8.0	0.1	●	●				
	KXG16 ⁹ / ₁₆ 300-800-R020			0.2	●	●				

Grades: ◆ Recommended ◆ Suitable ◇ Applicable ● Standard Stock

Insert of circular grooving tools

• Workblank 	• Application Examples 	P	Soft steel	◆	◇	◆				
			Carbon steel/alloy steel	◆	◇	◆				
		M	Martensitic	◇	◆	◆	◆			
			Austenitic	◆	◆	◆	◆			
		K	Grey Cast Iron			◇				
			Ductile Cast Iron			◇				
		N	Nonferrous					◆	◆	
		S	Heat Resisting Alloy		◆	◆	◆			
			Titanium Alloy		◆	◆	◆			
		H	Hardened Materials			◆				

shape Right Handed Tool	Type	Size			PVD Coated Cemented Carbide					
		W	L	R	KPM30N	KXM15S	KH10M	KMS20	KCN10D	KCN10
	KXR16 ^R /L 070-300-R035	0.7	3.0	0.35		●	●			
	KXR16 ^R /L 100-400-R050	1	4.0	0.5		●	●			
	KXR16 ^R /L 150-500-R075	1.5	5.0	0.75		●	●			
	KXR16 ^R /L 200-600-R100	2	6.0	1		●	●			
	KXR16 ^R /L 250-800-R125	2.5	8.0	1.25		●	●			
	KXR16 ^R /L 300-800-R150	3		1.5		●	●			

Insert of back-turning tools

• Workblank 	• Application Examples 	P	Soft steel	◆	◇	◆				
			Carbon steel/alloy steel	◆	◇	◆				
		M	Martensitic	◇	◆	◆	◆			
			Austenitic	◆	◆	◆	◆			
		K	Grey Cast Iron			◇				
			Ductile Cast Iron			◇				
		N	Nonferrous					◆	◆	
		S	Heat Resisting Alloy		◆	◆	◆			
			Titanium Alloy		◆	◆	◆			
		H	Hardened Materials			◆				

shape Right Handed Tool	Type	Size				PVD Coated Cemented Carbide					
		W	L	R	W1	KPM30N	KXM15S	KH10M	KMS20	KCN10D	KCN10
	KXB16 ^R /L 025-280-R005	0.25	2.8	<0.05	1.5		●	●			
	KXB16 ^R /L 030-460-R005	0.3	4.6	<0.05	2.8		●	●			
	KXB16 ^R /L 030-460-R010	0.3	4.6	<0.1	2.8		●	●			
	KXB16 ^R /L 030-460-R015	0.3	4.6	<0.15	2.8		●	●			
	KXB16 ^R /L 030-630-R005	0.3	6.3	<0.05	3		●	●			
	KXB16 ^R /L 030-630-R010	0.3	6.3	<0.1	3		●	●			
	KXB16 ^R /L 030-630-R015	0.3	6.3	<0.15	3		●	●			

Grades : ◆ Recommended ◇ Suitable ◇ Applicable ● Standard Stock

K1 Tools Dedicated for Precision Small Parts

Insert of circular grooving tools

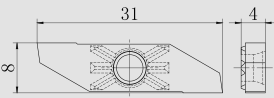
KX: KX Series		C: Parting		R: Right handed L: Left handed	050: 0.5 125: 1.25	-	S: R0.03-R0.05 P: R0.08
KX	Insert type	Insert size	Insert Direction	Tip width	-	Nose Radius	
KX	C	16	R	125	-	S	

Symbols of parting tools with lead angle

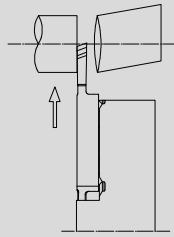
KX: KX Series		C: Parting		R: Right handed L: Left handed	050: 0.5 125: 1.25	20D: 20° 16D: 16° 11D: 11°	R: Right leaded L: Left leaded	-	N: Without chipbreaking slot and nose radius S: R0.03-R0.05 P: R0.08
KX	Insert type	Insert size	Insert Direction	Tip width	Lead angle	Lead direction	-	Nose Radius/other	
KX	C	16	R	125	16D	R	-	S	

Insert of circular grooving tools

• Workblank



• Application Examples



P	Soft steel	◆	◇	◆			
	Carbon steel/alloy steel	◆	◇	◆			
M	Martensitic	◇	◆	◆	◆		
	Austenitic	◆	◆	◆	◆		
K	Grey Cast Iron			◇			
	Ductile Cast Iron			◇			
N	Nonferrous					◆	◆
S	Heat Resisting Alloy		◆	◆	◆		
	Titanium Alloy		◆	◆	◆		
H	Hardened Materials			◆			

shape	Right Handed Tool	Type	Size				PVD Coated Cemented Carbide						cemented carbide
			W	DMax	R	D	KPM30N	KXM15S	KH510M	KMS20	KCN10D	KCN10	
• Flat		KXC16 ^{R/L} 050-S	0.5	5		0°		●	●				
		KXC16 ^{R/L} 070-S	0.7	8				●	●				
		KXC16 ^{R/L} 100-S	1	12	0.03			●	●				
		KXC16 ^{R/L} 125-S	1.25	12	I			●	●				
		KXC16 ^{R/L} 150-S	1.5	16	0.05			●	●				
• Flat strengthened edge		KXC16 ^{R/L} 200-S	2	16			●	●					
		KXC16 ^{R/L} 100-P	1	12		0°		●	●				
		KXC16 ^{R/L} 150-P	1.5	16	0.08			●	●				
		KXC16 ^{R/L} 200-P	2	16	±0.01			●	●				
KXC16 ^{R/L} 200-200-P	2	20											
• With right lead angle		KXC16 ^{R/L} 100-11DR-S	1	12	0.03	11°		●	●				
		KXC16 ^{R/L} 125-11DR-S	1.25	12	I			●	●				
		KXC16 ^{R/L} 150-11DR-S	1.5	16	0.05			●	●				
• With right lead angle strengthened edge		KXC16 ^{R/L} 100-11DR-P	1	12		11°		●	●				
		KXC16 ^{R/L} 125-11DR-P	1.25	12	0.08			●	●				
		KXC16 ^{R/L} 150-11DR-P	1.5	16	±0.01			●	●				
• With right lead angle		KXC16 ^{R/L} 050-16DR-S	0.5	5		16°		●	●				
		KXC16 ^{R/L} 070-16DR-S	0.7	8	0.03			●	●				
		KXC16 ^{R/L} 100-16DR-S	1	12	I			●	●				
		KXC16 ^{R/L} 125-16DR-S	1.25	12	0.05			●	●				
		KXC16 ^{R/L} 150-16DR-S	1.5	16				●	●				
		KXC16 ^{R/L} 200-16DR-S	2	16				●	●				
• With right lead angle strengthened edge		KXC16 ^{R/L} 100-16DR-P	1	12		16°		●	●				
		KXC16 ^{R/L} 150-16DR-P	1.5	16	0.08			●	●				
		KXC16 ^{R/L} 200-16DR-P	2	16	±0.01			●	●				
• With right lead angle without chipbreaking slot		KXC16 ^{R/L} 070-20DR-N	0.7	8		20°		●	●				
		KXC16 ^{R/L} 100-20DR-N	1	12	0			●	●				
		KXC16 ^{R/L} 150-20DR-N	1.5	16				●	●				

Grades: ◆ Recommended ◇ Suitable ◇ Applicable ● Standard Stock

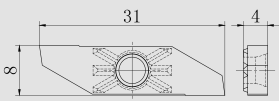
KAT Tools Dedicated for Precision Small Parts

Symbols of KX threading tools

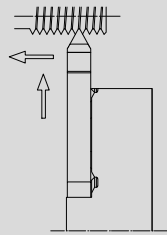
KX: KX Series	T: Screw				040: 0.4		A: Left
			R: Right handed		080: 0.8		B: Right
			L: Left handed		165: 1.65		N: Central
Series	Insert Type	Insert size	Insert Direction	Tip width	-	Blade shape	
KX	T	16	R	040	-	A	

Threading Tools

• Workblank



• Application Examples

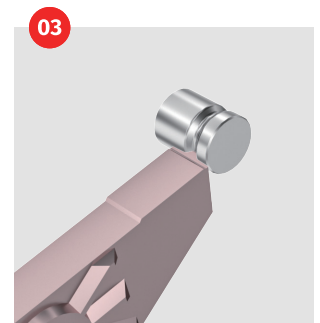
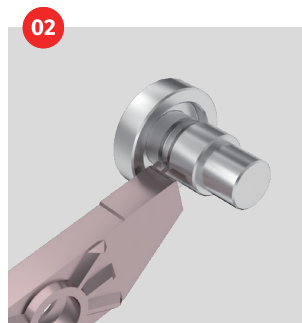
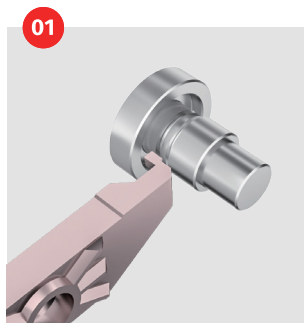


P	Soft steel	◆	◇	◆				
	Carbon steel/alloy steel	◆	◇	◆				
M	Martensitic	◇	◆	◆	◆			
	Austenitic	◆	◆	◆	◆			
K	Grey Cast Iron			◇				
	Ductile Cast Iron			◇				
N	Nonferrous						◆	◆
S	Heat Resisting Alloy		◆	◆	◆			
	Titanium Alloy		◆	◆	◆			
H	Hardened Materials							

shape Right Handed Tool	Type	Size					PVD Coated Cemented Carbide						cemented carbide
		F	A	R	Pitch (MM)	Teeth per inch (TPI)	KPM30N	KXM15S	KHS10M	KMS20	KCN10D	KCN10	
	KXT16 ^R L 040-A	0.4	60°	0.05	0.2-0.75	127-34		●	●				
	KXT16 ^R L 080-A	0.8	60°	0.05	0.4-1.25	63-21		●	●				
	KXT16 ^R L 040-B	0.4	60°	0.05	0.2-0.75	127-34		●	●				
	KXT16 ^R L 080-B	0.8	60°	0.05	0.4-1.25	63-21		●	●				
	KXT16 ^R L 165-N	1.65	60°	0.1	1.0-1.5	25-17		●	●				

Grades: ◆ Recommended ◇ Suitable ◇ Applicable ● Standard Stock

Display of customized inserts



customize according to needs
especially suitable for automotive components,
small parts of medical apparatus, watch and smartphone

FAST DELIVERY

Recommend Application Parameter

KX Series								
processing materials	Carbon Steel, Alloy Steel	Stainless Steel		Cast Iron	Heat Resisting Alloy/Titanium Alloy		Nonferrous	
Insert Grades	KPM30N	KXM15S	KHS10M	KHS10M	KXM15S	KMS20	KCN10D	KCN10
Cutting Speed Vc(m/min)	60-180	60-180	60-130	80-200	30-60	30-80	240-450	150-300
Grooving tools								
Edge width	0.7-1.25	1.5-3.0						
Feeding Speed f(mm/rev)	0.01-0.05	0.02-0.1						
Threading Tools	Type A	Type B	Type N					
Cutting Depth Ap(mm)	0.02-0.05	0.02-0.05	0.03-0.08					
Back-turning tools								
Cutting Depth Ap(mm)	0.05-6.0							
Feeding Speed f(mm/rev)	0.02-0.08							
Parting tools								
Edge width	0.5-1.0	1.25-2						
Feeding Speed f(mm/rev)	0.008-0.04	0.015-0.06						