High Performance Cutting tools R & D Manufacturer

KOYIN CUT

reddot winner 2025

The 2025 Red Dot Product Design Award Winner

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Precision Small Parts Cutting Tools
Comprehensive Product Catalog
2025

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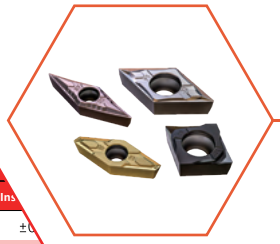
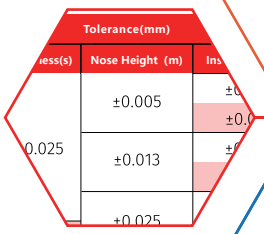
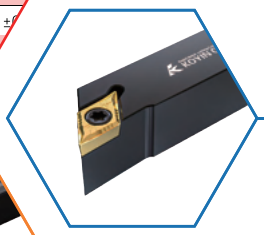


Symbols of ISO Inserts for Turning — 2–17



ISO Inserts With Precision Lapping — 06



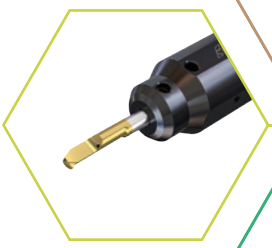
ISO Toolholders — 18–32

QCMT Quick Change Modular Turning Tools — 33–46

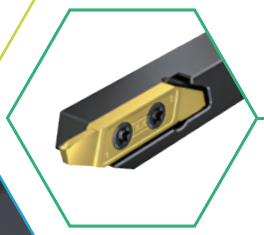
KM Enconomical Quick Change Moduar Turning Tools — 47~52

KX618/KX628 Stable Clamping Six Heads Inserts — 53~75

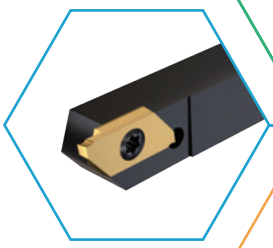
QLS Quick Lock Solid Grooving and Parting Tools — 76~83



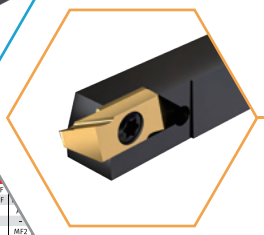
SBT Quick Coordinate Positioning Small Diameter Internal Tools — 84~94



KX116/KX216 Tools Dedicated For Precision Small Parts — 95~114



KSI12 Tools For Small Parts — 115~121



KSI16 Tools For Small Parts — 122~127

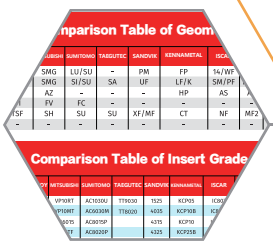
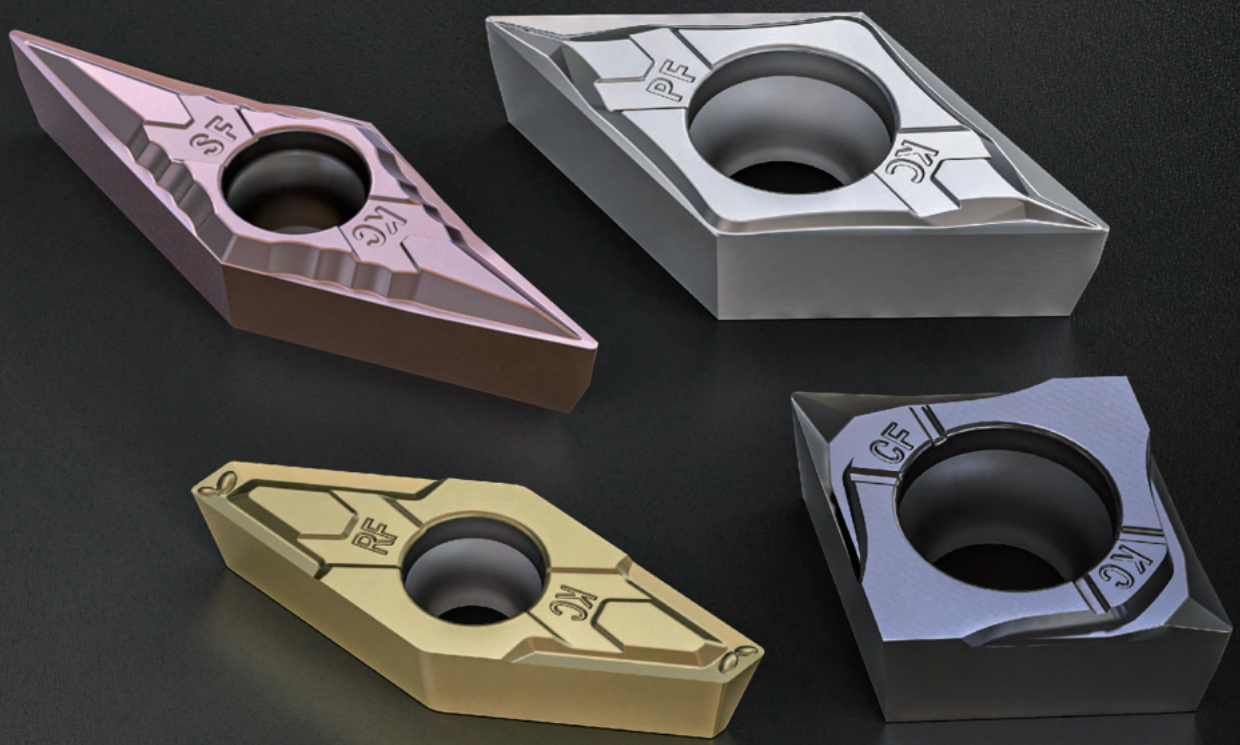


Table of Grades and Geometries — 128

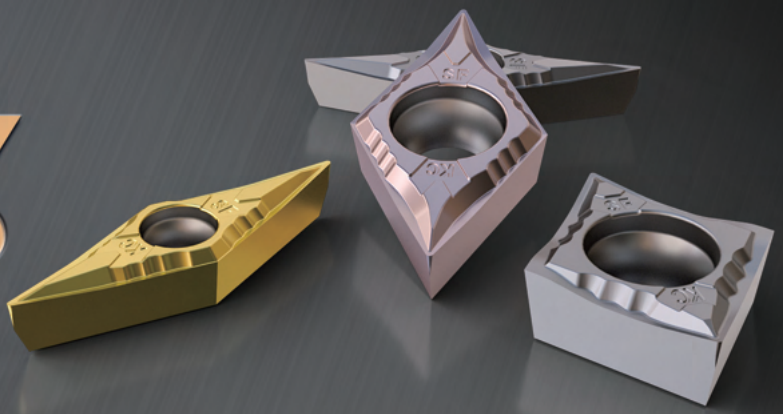
ISO INSERTS
WITH PRECISION LAPPING

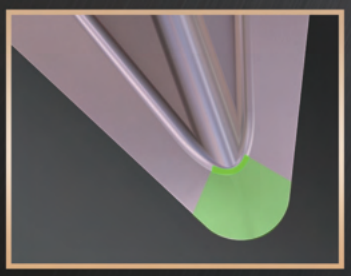


- Full lapping technology, high accuracy guarantee
- Comprehensive groove portfolio for different machining processes
- Innovated coating technology, improve tool life and stability of machining
- Strengthened edge and lapped surface to prevent welding, size accuracy and surface finish of product machined

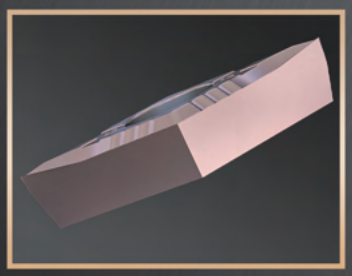
SF INSERT

MEDIUM TO SEMI-FINISH MACHINING

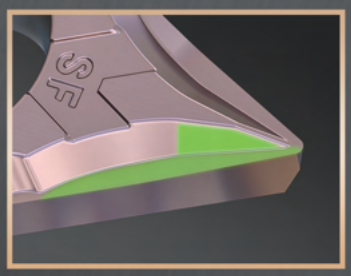




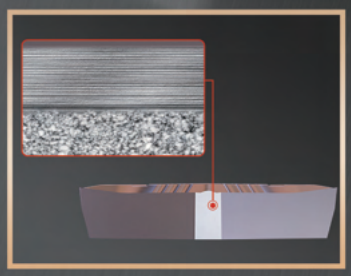
Medium to Semi-finish Machining



Precision Full Lapping Technology



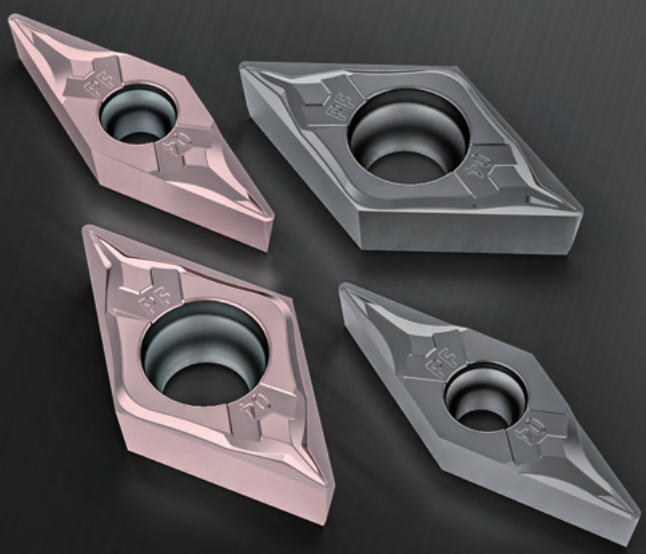
Cutting Depth 0.3-3.5MM

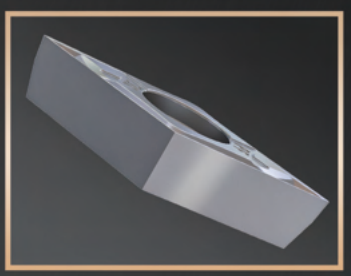


Nanometer Composite Coating

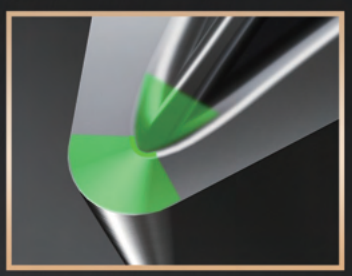
PF INSERT

3D CHIP BREAKING SLOT THAT ATTACHED IMPORTANCE TO CHIP MANAGEMENT



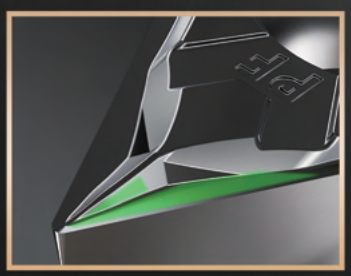


Precision Full Lapping Technology



Excellent Performance of Chip Control

Low Cutting Resistance Geometry



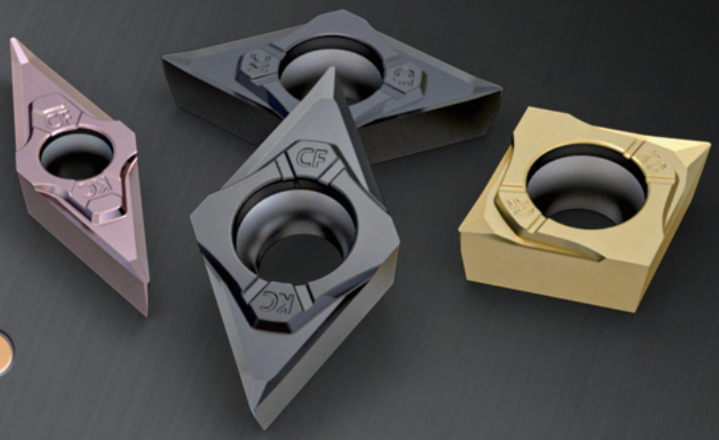
0.2-2.5mm Cutting Depth

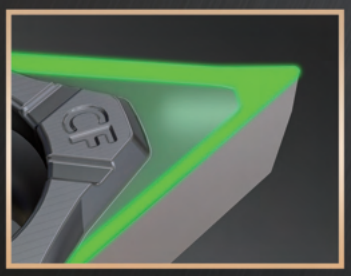
CF INSERT

HIGH SHARPNESS

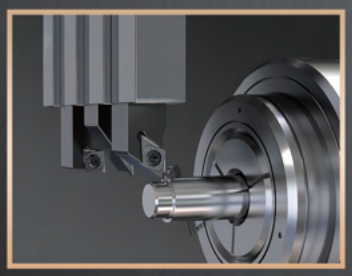
VERSATILE GEOMETRY

LOW CUTTING RESISTANCE

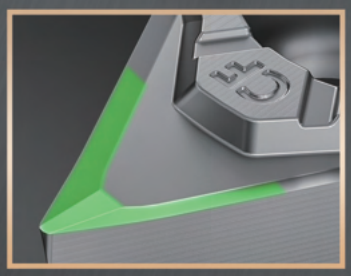




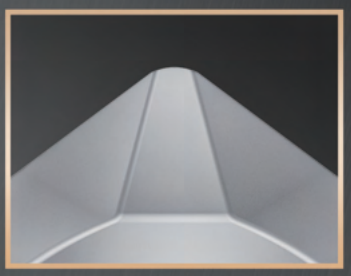
Central Dimple Chipbreaker



Big Rake Angle Design



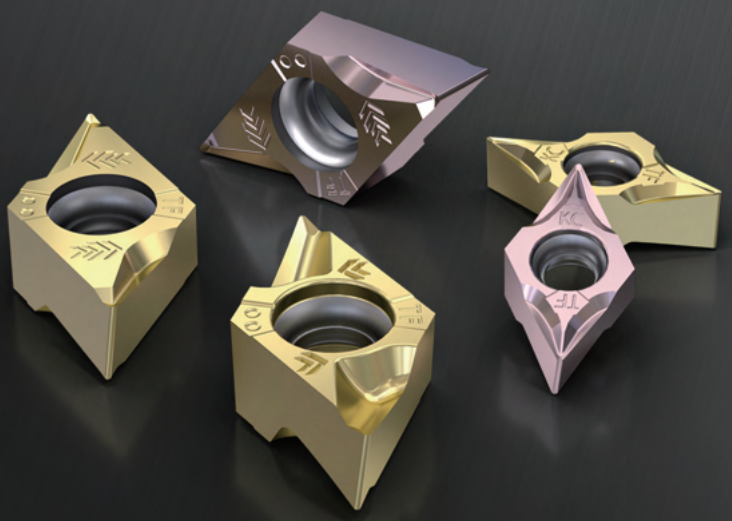
Big Cutting Depth Machining



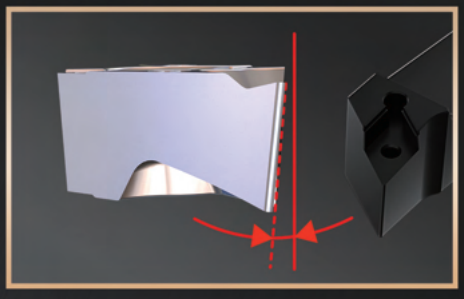
Sharp Edge

KDC

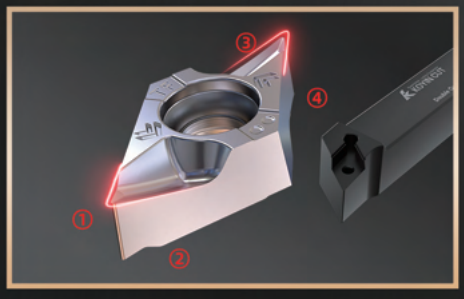
ECONOMICAL EFFICIENT DOUBLE EDGES SERIES



Closed Clamping Design



Negative Insert With Clearance Angle

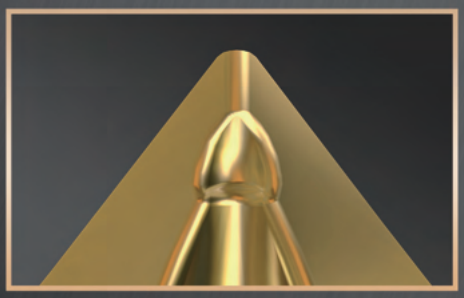


Four Cutting Edges

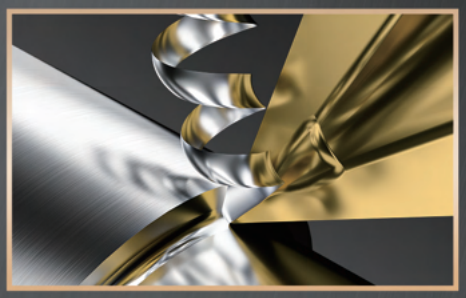
AF INSERT

ALL-PURPOSE INSERT SERIES

Precision Full Lapping Technology



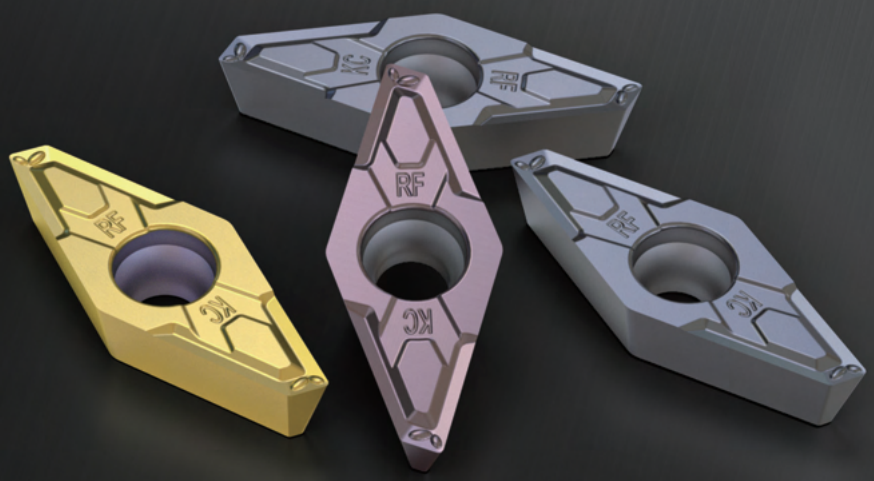
Sharp Big Rake Angle Design



Excellent Chip Breaking and Chip Evacuation

RF INSERT

ROUGHING TO FINISHING



Roughing To Finishing

Excellent chip removal performance and low cutting resistance advantage

Precision Grinding and Polishing Blade

Even with large cutting depths, excellent precision machined surfaces can be obtained

Cutting Depth 0.1-4.5mm

Applicable for a wide range machining processes

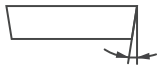
Nanocomposite Coating

Lower tip temp and longer tool life

Symbols	Shape	Tip Angle	Figure
H	Regular Hexagon	120°	
O	Regular Octagon	135°	
P	Regular Pentagon	108°	
S	Square	90°	
T	Regular Triangle	60°	
C	Rhombus	80°	
D		55°	
E		75°	
F		50°	
M		86°	
V		35°	
W	Hexagon	80°	
L	Rectangle	90°	
A	Parallelogram	85°	
B		82°	
K		55°	
R	Round	-	

① Shape

Symbols	Clearance Angle
A	3°
B	5°
C	7°
D	15°
E	20°
F	25°
G	30°
N	0°
P	11°
O	Other



② Clearance Angle

Symbols	Tolerance(mm)		
	Thickness(s)	Nose Height (m)	Inside Diameter
A	±0.025	±0.005	±0.025
F			±0.013
C		±0.013	±0.025
H			±0.013
E		±0.025	±0.025
G	±0.13		
J	±0.025	±0.005	±0.005~±0.13
K		±0.013	±0.005~±0.13
L		±0.025	
M	±0.13	±0.08~±0.18	
N	±0.025		
U	±0.13	±0.13~±0.38	±0.08~±0.25

③ Tolerance

Symbols	Hole	Hole Shape	Chip-Breaking Groove	Shape
N	Without	---	Without	
R			Single Side	
F			Double Side	
A	With	Cylinder Hole	Without	
M			Single Side	
G			Double Side	
W		"Partial Cylinder Hole One Side 40°-60° Counterbore"	Without	
T			Single Side	
Q		"Partial Cylinder Hole One Side 40°-60° Counterbore"	Without	
U			Double Side	
B		"Partial Cylinder Hole One Side 70°-90° Counterbore"	Without	
H			Single Side	
C		"Partial Cylinder Hole One Side 70°-90° Counterbore"	Without	
J			Double Side	
X			---	

④ Symbols of Chip Geometry and Hole

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩		⑪
C	C	G	T	09	T3	02	M	F	N	–	SF

⑤ Double Side

R		S		C		W		T		D		V		K		Inside Diameter (mm)
Symbols	Length	Symbols	Length	Symbols	Length	Symbols	Length	Symbols	Length	Symbols	Length	Symbols	Length	Symbols	Length	
		03	3.97	03	4.0			06	6.9	04	4.8					3.97
		04	4.76	04	4.8			08	8.2	05	5.8	08	8.3			4.76
*05	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
		05	5.56	05	5.6	03	3.8	09	9.6	06	6.8					5.56
*06	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
		06	6.35	06	6.5	04	4.3	11	11	07	7.8	11	11.2			6.35
		07	7.94	08	8.1	05	5.4	13	13.8	09	9.7					7.94
*08	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
09	9.525	09	9.525	09	9.7	06	6.5	16	16.5	11	11.6	16	16.6	16	19.7	9.525
*10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
*12	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
12	12.7	12	12.7	12	12.9	08	8.7	22	22	15	15.5	22	22.1			12.7
15	15.88	15	15.88	16	16.1	10	10.9	27	27.5	19	19.4					15.875
*16	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
19	19.05	19	19.05	19	19.3	13	13	33	33	23	23.3					19.05
*20	20	-	-	-	-	-	-	-	-	-	-	-				20
		22	22.23	22	22.6			38	38.5	27	27.1					22.225
*25	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25
25	25.4	25	25.4	25	25.8			44	44	31	31					25.4
31	31.75	31	31.75	32	32.2			55	55	38	38.8					31.75
*32	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32

Symbols	Thickness
X1	1.39
01	1.59
T1	1.98(1.79)
02	2.38
T2	2.78
03	3.18
T3	3.97
04	4.76
05	5.56
06	6.35
07	7.94
09	9.52

⑥ Thickness

Symbols	Nose Radius r(mm)
005	0.05
01	0.1
02	0.2
04	0.4
08	0.8
12	1.2
16	1.6
20	2
24	2.4
28	2.8
32	3.2

⑦ Thickness

Symbols	Illustration
M	Nose Radius (R/RE) with Negative Tolerance

⑧ Tolerance of Nose Radius(R)

Symbols	Edge Condition	Shape
F	Sharp Edge	
P	Strengthened Edge	
E	Circular Edge	
T	Negative Chamferred	
S	Composite Passivated Edge	

⑨ Symbols of Main Cutting Edge Shape

Symbols	Direction	Examples		
R	Right	L	R	N
L	Left			
N	Without			

⑩ Symbols of Insert Direction

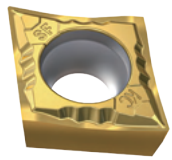
Symbols	Illustration
TF(TFX)	Roughing to Finishing
RF	Roughing to Finishing
AF	Medium to Semi-finish Machining
SF	Medium to Semi-finish Machining
PF	Medium to Semi-finish Machining
CF	Medium to Semi-finish Machining
MF	fine machining

⑪ Symbols of Geometries

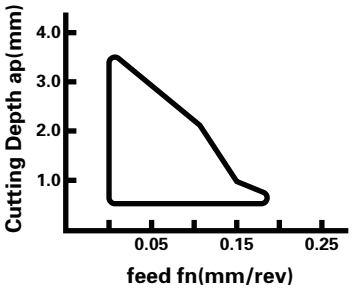
ISO Insert

◆ : Recommended
◈ : Suitable
◇ : Applicable

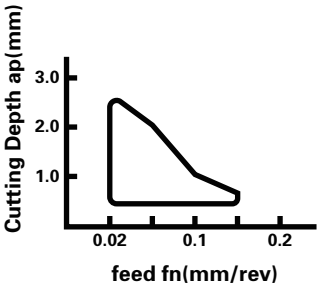
		Soft Steel	◆	◇	◈		◆	◆		◆	◆	
P		Carbon Steel/ Alloy Steel	◆	◇	◈		◈	◆		◆	◆	
M		Austenitic	◆	◆	◆	◆	◆					
		Martensitic	◇	◆	◆	◆	◆					
K		Grey Cast Iron			◇							
		Ductile Cast Iron			◇							
N		Nonferrous							◆			◆
S		Heat Resisting Alloy		◆	◈	◆	◆					
		Titanium Alloy		◆	◈	◆	◆					
H		Hardened Materials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

Shape	Type	Carbide with PVD Coating							Coating Cermet	Cermet	Carbide
		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
	CCGT 09T3005MFN-SF										
	CCGT 09T3005MPN-SF										
	CCGT 09T301MFN-SF										
	CCGT 09T301MPN-SF										
	CCGT 09T302MFN-SF										
	CCGT 09T302MPN-SF										
	CCGT 09T304MFN-SF										
	CCGT 09T304MPN-SF										
	CCGT 09T3005MFN-PF	●	●	●	●	●	●				
	CCGT 09T3005MPN-PF	●	●	●	●	●	●				
	CCGT 09T301MFN-PF	●	●	●	●	●	●				
	CCGT 09T301MPN-PF	●	●	●	●	●	●				
	CCGT 09T302MFN-PF	●	●	●	●	●	●				
	CCGT 09T302MPN-PF	●	●	●	●	●	●				
	CCGT 09T304MFN-PF										
	CCGT 09T304MPN-PF										
	CCGT 09T3005MFN-CF										
	CCGT 09T3005MPN-CF										
	CCGT 09T301MFN-CF										
	CCGT 09T301MPN-CF										
	CCGT 09T302MFN-CF										
	CCGT 09T302MPN-CF										
	CCGT 09T304MFN-CF										
	CCGT 09T304MPN-CF										

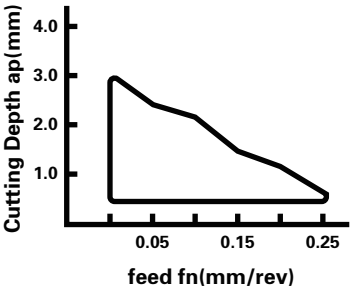
● Standard Stock



SF application of chipbreaker



PF application of chipbreaker

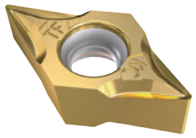


CF application of chipbreaker

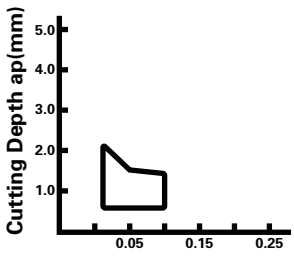
ISO Insert

◆ : Recommended
◆ : Suitable
◇ : Applicable

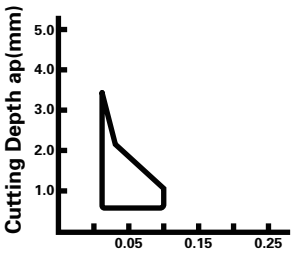
P	Soft Steel	◆	◇	◆		◆	◆		◆	◆	
	Carbon Steel/ Alloy Steel	◆	◇	◆		◆	◆		◆	◆	
M	Austenitic	◆	◆	◆	◆	◆					
	Martensitic	◇	◆	◆	◆	◆					
K	Grey Cast Iron			◇							
	Ductile Cast Iron			◇							
N	Nonferrous							◆			◆
S	Heat Resisting Alloy		◆	◆	◆	◆					
	Titanium Alloy		◆	◆	◆	◆					
H	Hardened Materials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

Shape Right Handed Tool	Type	Carbide with PVD Coating							Coating Cermet	Cermet	Carbide
		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
	DXGU	0703005MFR-TF									
		0703005MPR-TF									
		070301MFR-TF	●	●	●	●	●	●			
		070301MPR-TF	●	●	●	●	●	●			
		070302MFR-TF	●	●	●	●	●	●			
		070302MPR-TF	●	●	●	●	●	●			
		070304MFR-TF	●	●	●	●	●	●			
		070304MPR-TF	●	●	●	●	●	●			
	DXGU	1104005MFR-TF									
		1104005MPR-TF									
		110401MFR-TF	●	●	●	●	●	●			
		110401MPR-TF	●	●	●	●	●	●			
		110402MFR-TF	●	●	●	●	●	●			
		110402MPR-TF	●	●	●	●	●	●			
		110404MFR-TF									
		110404MPR-TF									
	DXGU	1104005MFR-TFX									
		1104005MPR-TFX									
		110401MFR-TFX	●	●	●	●	●	●			
		110401MPR-TFX	●	●	●	●	●	●			
		110402MFR-TFX	●	●	●	●	●	●			
		110402MPR-TFX	●	●	●	●	●	●			
		110404MFR-TFX									
		110404MPR-TFX									

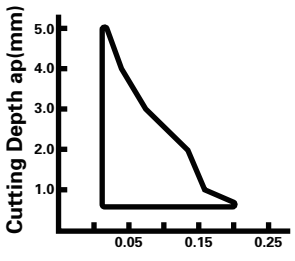
● **Standard Stock**



TF07 centered tools



TF11 centered tools

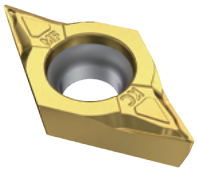
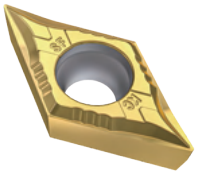
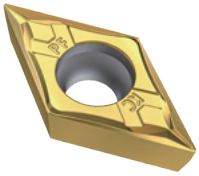


TFX centered tools

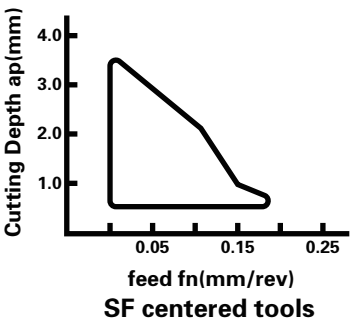
ISO Insert

◆ : Recommended
◈ : Suitable
◇ : Applicable

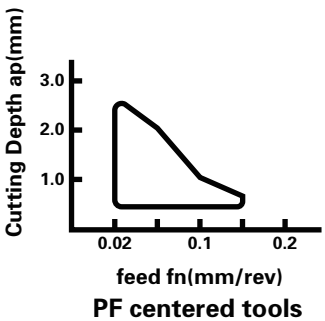
		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
P	Soft Steel	◆	◇	◈		◆	◆		◆	◆	
P	Carbon Steel/ Alloy Steel	◆	◇	◈		◈	◆		◆	◆	
M	Austenitic	◆	◆	◆	◆	◆					
M	Martensitic	◇	◆	◆	◆	◆					
K	Grey Cast Iron			◇							
K	Ductile Cast Iron			◇							
N	Nonferrous							◆			◆
S	Heat Resisting Alloy		◆	◈	◆	◆					
S	Titanium Alloy		◆	◈	◆	◆					
H	Hardened Materials			◈							

Shape	Type		Carbide with PVD Coating							Coating Cermet	Cermet	Carbide
			KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
	DCGT	11T301MFN-MF										
		11T301MPN-MF										
		11T302MFN-MF										
		11T302MPN-MF										
	DCGT	11T3005MFN-SF										
		11T3005MPN-SF										
		11T301MFN-SF	●	●	●	●	●	●				
		11T301MPN-SF	●	●	●	●	●	●				
		11T302MFN-SF	●	●	●	●	●	●				
		11T302MPN-SF	●	●	●	●	●	●				
		11T304MFN-SF										
		11T304MPN-SF										
	DCGT	11T3005MFN-PF	●	●	●	●	●	●				
		11T3005MPN-PF	●	●	●	●	●	●				
		11T301MFN-PF	●	●	●	●	●	●				
		11T301MPN-PF	●	●	●	●	●	●				
		11T301MN-PF								●		
		11T302MFN-PF	●	●	●	●	●	●				
		11T302MPN-PF	●	●	●	●	●	●				
		11T302MN-PF								●		
		11T304MFN-PF	●	●	●	●	●	●				
		11T304MPN-PF	●	●	●	●	●	●				

● **Standard Stock**



SF centered tools

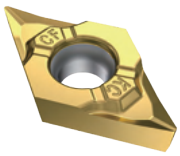
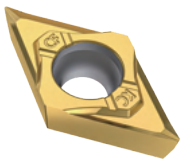


PF centered tools

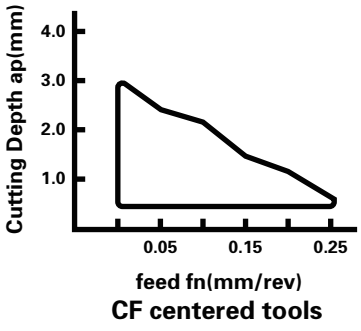
ISO Insert

◆ : Recommended
⬙ : Suitable
◇ : Applicable

		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
P	Soft Steel	◆	◇	⬙		◆	◆		◆	◆	
	Carbon Steel/ Alloy Steel	◆	◇	⬙		⬙	◆		◆	◆	
M	Austenitic	◆	◆	◆	◆	◆					
	Martensitic	◇	◆	◆	◆	◆					
K	Grey Cast Iron			◇							
	Ductile Cast Iron			◇							
N	Nonferrous							◆			◆
S	Heat Resisting Alloy		◆	⬙	◆	◆					
	Titanium Alloy		◆	⬙	◆	◆					
H	Hardened Materials			⬙							

Shape	Type	Carbide with PVD Coating							Coating Cermet	Cermet	Carbide
		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
	DCGT										
	0702005MFN-CF	●	●	●	●	●	●				
	0702005MPN-CF	●	●	●	●	●	●				
	070201MFN-CF	●	●	●	●	●	●				
	070201MPN-CF	●	●	●	●	●	●				
	070202MFN-CF	●	●	●	●	●	●				
	070202MPN-CF	●	●	●	●	●	●				
	070204MFN-CF	●	●	●	●	●	●				
	070204MPN-CF	●	●	●	●	●	●				
	DCGT										
	11T3005MFN-CF	●	●	●	●	●	●				
	11T3005MPN-CF	●	●	●	●	●	●				
	11T301MFN-CF	●	●	●	●	●	●				
	11T301MPN-CF	●	●	●	●	●	●				
	11T301MN-CF								●		
	11T302MFN-CF	●	●	●	●	●	●				
	11T302MPN-CF	●	●	●	●	●	●				
	11T302MN-CF								●		
	11T304MFN-CF	●	●	●	●	●	●				
	11T304MPN-CF	●	●	●	●	●	●				

● **Standard Stock**

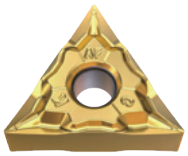
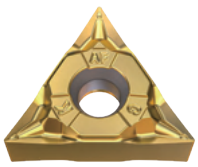


CF centered tools

ISO Insert

◆ : Recommended
◆ : Suitable
◇ : Applicable

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

Shape	Type	Carbide with PVD Coating							Coating Cermet	Cermet	Carbide
		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
	TNGG										
	1604005MFN-AF										
	1604005MPN-AF										
	160401MFN-AF	●	●	●	●	●	●				
	160401MPN-AF	●	●	●	●	●	●				
	160402MFN-AF	●	●	●	●	●	●				
	160402MPN-AF	●	●	●	●	●	●				
	160404MFN-AF	●	●	●	●	●	●				
	160404MPN-AF	●	●	●	●	●	●				
	TNGU										
	1604005MFN-AF										
	1604005MPN-AF										
	160401MFN-AF										
	160401MPN-AF										
	160402MFN-AF										
	160402MPN-AF										
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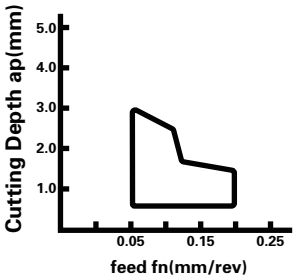
	160404MPN-AF										

● **Standard Stock**

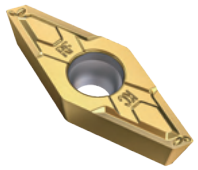


AF application of chipbreaker

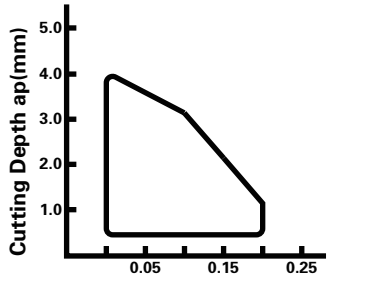
ISO Insert

◆ : Recommended
◆ : Suitable
◇ : Applicable

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

Shape Right Handed Tool	Type	Carbide with PVD Coating							Coating Cermet	Cermet	Carbide
		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
	VBGT	1103008MFR-RF									
		1103008MPR-RF									
		110301MFR-RF									
		110301MPR-RF									
		110302MFR-RF									
		110302MPR-RF									
	VCGT	1103008MFR-RF									
		1103008MPR-RF									
		110301MFR-RF	●	●	●	●	●	●			
		110301MPR-RF	●	●	●	●	●	●			
		110302MFR-RF	●	●	●	●	●	●			
		110302MPR-RF	●	●	●	●	●	●			
	VPGT	1103008MFR-RF									
		1103008MPR-RF									
		110301MFR-RF	●	●	●	●	●	●			
		110301MPR-RF	●	●	●	●	●	●			
		110302MFR-RF	●	●	●	●	●	●			
		110302MPR-RF	●	●	●	●	●	●			

● **Standard Stock**

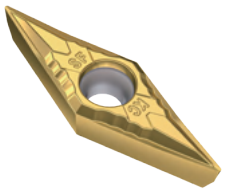


RF application of chipbreaker

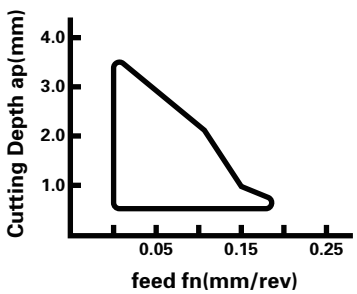
ISO Insert

◆ : Recommended
⬙ : Suitable
◇ : Applicable

		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
		Carbide with PVD Coating							Coating Cermet	Cermet	Carbide
P	Soft Steel	◆	◇	⬙		◆	◆		◆	◆	
P	Carbon Steel/ Alloy Steel	◆	◇	⬙		⬙	◆		◆	◆	
M	Austenitic	◆	◆	◆	◆	◆					
M	Martensitic	◇	◆	◆	◆	◆					
K	Grey Cast Iron			◇							
K	Ductile Cast Iron			◇							
N	Nonferrous							◆			◆
S	Heat Resisting Alloy		◆	⬙	◆	◆					
S	Titanium Alloy		◆	⬙	◆	◆					
H	Hardened Materials			⬙							

Shape	Type		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
	VBGT	1103005MFN-SF										
		1103005MPN-SF										
		110301MFN-SF	●	●	●	●	●	●				
		110301MPN-SF	●	●	●	●	●	●				
		110302MFN-SF	●	●	●	●	●	●				
		110302MPN-SF	●	●	●	●	●	●				
		110304MFN-SF	●	●	●	●	●	●				
		110304MPN-SF	●	●	●	●	●	●				
	VCGT	1103005MFN-SF										
		1103005MPN-SF										
		110301MFN-SF	●	●	●	●	●	●				
		110301MPN-SF	●	●	●	●	●	●				
		110302MFN-SF	●	●	●	●	●	●				
		110302MPN-SF	●	●	●	●	●	●				
		110304MFN-SF	●	●	●	●	●	●				
		110304MPN-SF	●	●	●	●	●	●				
	VPGT	1103005MFN-SF										
		1103005MPN-SF										
		110301MFN-SF	●	●	●	●	●	●				
		110301MPN-SF	●	●	●	●	●	●				
		110302MFN-SF	●	●	●	●	●	●				
		110302MPN-SF	●	●	●	●	●	●				
		110304MFN-SF										
		110304MPN-SF										

● **Standard Stock**

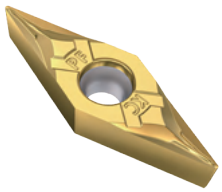


SF application of chipbreaker

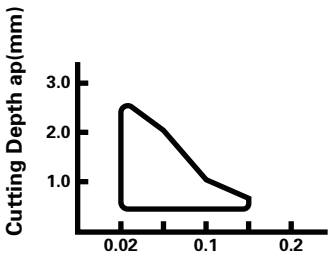
ISO Insert

◆ : Recommended
⬙ : Suitable
◇ : Applicable

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

Shape	Type		Carbide with PVD Coating							Coating Cermet	Cermet	Carbide
			KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
	VBGT	1103005MFN-PF										
		1103005MPN-PF										
		110301MFN-PF	●	●	●	●	●	●				
		110301MPN-PF	●	●	●	●	●	●				
		110301MN-PF								●		
		110302MFN-PF	●	●	●	●	●	●				
		110302MPN-PF	●	●	●	●	●	●				
		110302MN-PF								●		
		110304MFN-PF	●	●	●	●	●	●				
		110304MPN-PF	●	●	●	●	●	●				
	VCGT	1103005MFN-PF										
		1103005MPN-PF										
		110301MFN-PF	●	●	●	●	●	●				
		110301MPN-PF	●	●	●	●	●	●				
		110301MN-PF								●		
		110302MFN-PF	●	●	●	●	●	●				
		110302MPN-PF	●	●	●	●	●	●				
		110302MN-PF								●		
		110304MFN-PF	●	●	●	●	●	●				
		110304MPN-PF	●	●	●	●	●	●				
	VPGT	1103005MFN-PF										
		1103005MPN-PF										
		110301MFN-PF	●	●	●	●	●	●				
		110301MPN-PF	●	●	●	●	●	●				
		110302MFN-PF	●	●	●	●	●	●				
		110302MPN-PF	●	●	●	●	●	●				
		110304MFN-PF	●	●	●	●	●	●				
		110304MPN-PF	●	●	●	●	●	●				

● Standard Stock

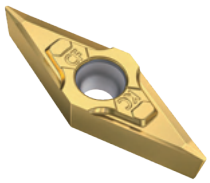


PF application of chipbreaker

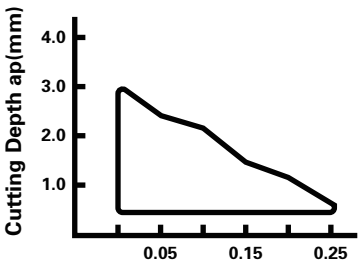
ISO Insert

◆ : Recommended
⬙ : Suitable
◇ : Applicable

		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
		Carbide with PVD Coating							Coating Cermet	Cermet	Carbide
P	Soft Steel	◆	◇	⬙		◆	◆		◆	◆	
P	Carbon Steel/ Alloy Steel	◆	◇	⬙		⬙	◆		◆	◆	
M	Austenitic	◆	◆	◆	◆	◆					
M	Martensitic	◇	◆	◆	◆	◆					
K	Grey Cast Iron			◇							
K	Ductile Cast Iron			◇							
N	Nonferrous							◆			◆
S	Heat Resisting Alloy		◆	⬙	◆	◆					
S	Titanium Alloy		◆	⬙	◆	◆					
H	Hardened Materials			⬙							

Shape	Type		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
	VBGT	1103005MFN-CF										
		1103005MPN-CF										
		110301MFN-CF										
		110301MPN-CF										
		110302MFN-CF										
		110302MPN-CF										
		110304MFN-CF										
		110304MPN-CF										
	VCGT	1103005MFN-CF										
		1103005MPN-CF										
		110301MFN-CF	●	●	●	●	●	●				
		110301MPN-CF	●	●	●	●	●	●				
		110302MFN-CF	●	●	●	●	●	●				
		110302MPN-CF	●	●	●	●	●	●				
		110304MFN-CF	●	●	●	●	●	●				
		110304MPN-CF	●	●	●	●	●	●				
	VPGT	1103005MFN-CF										
		1103005MPN-CF										
		110301MFN-CF	●	●	●	●	●	●				
		110301MPN-CF	●	●	●	●	●	●				
		110302MFN-CF	●	●	●	●	●	●				
		110302MPN-CF	●	●	●	●	●	●				
		110304MFN-CF										
		110304MPN-CF										

● **Standard Stock**

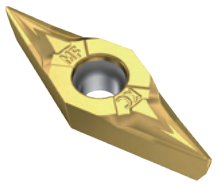


CF application of chipbreaker

ISO Insert

◆ : Recommended
⬙ : Suitable
◇ : Applicable

		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
P	Soft Steel	◆	◇	⬙		◆	◆		◆	◆	
	Carbon Steel/ Alloy Steel	◆	◇	⬙		⬙	◆		◆	◆	
M	Austenitic	◆	◆	◆	◆	◆					
	Martensitic	◇	◆	◆	◆	◆					
K	Grey Cast Iron			◇							
	Ductile Cast Iron			◇							
N	Nonferrous							◆			◆
S	Heat Resisting Alloy		◆	⬙	◆	◆					
	Titanium Alloy		◆	⬙	◆	◆					
H	Hardened Materials			⬙							

Shape	Type	Carbide with PVD Coating							Coating Cermet	Cermet	Carbide
		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCC30T	KCC10	KCN10
	VBGT	110301MFN-MF									
		110301MPN-MF									
		110302MFN-MF									
		110302MPN-MF									
	VCGT	110301MFN-MF									
		110301MPN-MF									
		110302MFN-MF									
		110302MPN-MF									
	VPGT	110301MFN-MF									
		110301MPN-MF									
		110302MFN-MF									
		110302MPN-MF									

● **Standard Stock**

Insert Grades

Grades	Symbols of Grades	Machinable Materials
P-Type First Choice	KPM30N	Soft iron、Low Carbon Steel、Alloy Steel、Stainless Steel、Copper
	KCP10P	Soft iron、Low Carbon Steel
	KCC30T	Soft iron、Low Carbon Steel
	KCC10	Soft iron、Low Carbon Steel
M-Type First Choice	KXM15S	Austenitic、Martensitic、Titanium Alloy、Heat Resisting Alloy、Carbide
M-Type First Choice	KMS15C	Martensitic、Carbide、Titanium Alloy、Heat Resisting Alloy
Versatile	KHS10M	Soft iron、Low Carbon Steel、Alloy Steel、Stainless Steel、Titanium Alloy、Heat Resisting Alloy、Hardened Materials、Cast Iron
S-Type First Choice	KMS20	Titanium Alloy、Heat Resisting Alloy、Austenitic、Martensitic
N-Type First Choice	KCN10D(DLC Coated)	Copper、Aluminum、Magnesium、Zinc
	KCN10(without Coating)	Copper、Aluminum、Magnesium、Zinc

Recommend Application Parameter

	Material	VC (m/min)									
		Symbols of Grades									
		KPM30N	KCP10P	KCC30T (Cermet Coating)	KCC10 (Cermet Coating)	KXM15S	KMS15C	KHS10M	KMS20	KCN10D (DLC Coating)	KCN10 (cemented carbide without Coating)
P Steel	Soft Steel		60-180	240-340	180-300		60-180	60-100			
	Carbon Steel		60-180	240-340	180-300		60-180	60-100			
	Alloy Steel	60-180				60-180	60-180	60-100			
M Stainless Steel	Austenitic	60-150				60-180	60-150	60-130	60-130		
	Martensitic	60-120				60-180	60-150	60-130	60-130		
K Cast Iron	Grey Cast Iron							80-200			
	Ductile Cast Iron							80-200			
S Heat Resisting Alloy	Titanium Alloy					30-70	30-60	20-40	30-90		
	Heat Resisting Alloy					30-70	30-60	20-40	30-90		
H High-hardness Steel	High-hardness steel							30-80			
N Nonferrous Metal	Copper									240-450	150-300
	Aluminum									240-450	150-300
	Magnesium									240-450	150-300

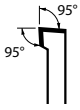
Symbols of External Toolholders

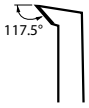
Clamping	Insert Shape	Holder Direction	Holder Height	Holder Width	others
A: Back Fastening	C: 80°Rhombus	R: Right Handed Holders	Holder Height (mm)	Holder Width (mm)	N: Centered Tools
M: Clamp Locking	D: 55°Rhombus	L: Left Handed Holders			N/A: offset Tools
D: Double Locking	R: Round	N: Versatile Holders			
M : Strengthened Clamping Method	S: Square				
P: Latch Locking	T: Triangle				
S: Screw Clamping	V: 35°Rhombus				
W: Wedge Clamping	W: Hexagon				

S	C	L	C	R	-	12	12	JX	-	09	-	N

Entering Angle

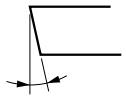
A	B	D	F
			

G	J	K	L
			

N	P	S	T
			

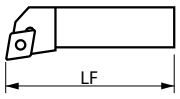
V


Clearance Angle



B: 5°Positive
C: 7°Positive
N: 0°Negative
P: 11°Positive

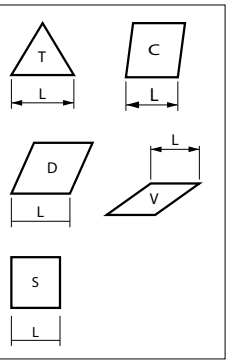
Tool Length



(mm)

F: 80	M: 150
H: 100	P: 170
J: 110	Q: 180
JX: 120	R: 200
K: 125	X: Special

Edge Length



Symbols of ISO Special Toolholders

Insert Type	Clamping	Insert Shape	Holder Direction	Holder Height	Holder Width	other
Y: Y-axis Tools	A: Back Fastening	C: 80°Rhombus	R: Right Handed Holders	Holder Height (mm)	Holder Width (mm)	User Defined Symbols
KDC: KDC Tools	C: Clamp Locking	D: 55°Rhombus	L: Left Handed Holders			
S: Shift Tools	D: Double Locking	R: Round	N: Versatile Holders			
ST: Strengthened Tools	M: Strengthened Clamping Method	S: Square				
	P: Latch Locking	T: Triangle				
	S: Screw Clamping	V: 35°Rhombus				
	W: Wedge Clamping	W: Hexagon				

Y	-	S	D	J	C	R	-	12	12	JX	-	11	-	F05

Entering Angle

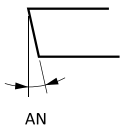
A	B	D	F
90°	75°	45°	90°

G	J	K	L
90°	93°	75°	95° / 95°

N	P	S	T
62.5°	117.5°	45°	60°

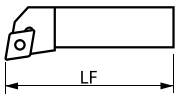
V
72.5°

Clearance Angle



B: 5°Positive
C: 7°Positive
N: 0°Negative
P: 11°Positive
X: other

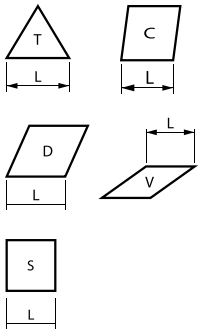
Tool Length



(mm)

F: 80	M: 150
H: 100	P: 170
J: 110	Q: 180
JX: 120	R: 200
K: 125	X: Special

Edge Length



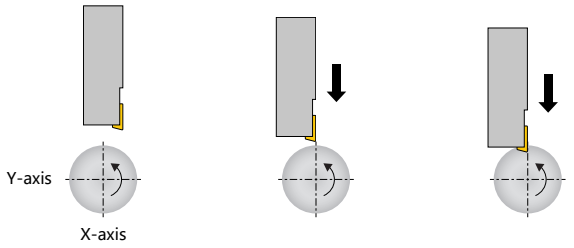
Y-axis Toolholders

Cautions When Using Y-axis Tools

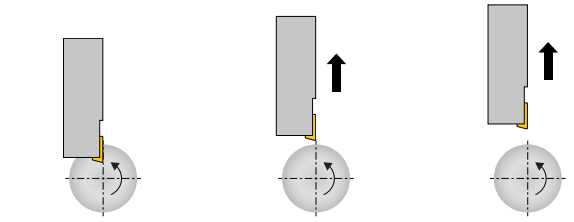
● Machining Procedures

Conventional X-axis Machining

① Tool selection ② Move to start position ③ Commence od turning



④ OD turning ⑤ Return to start position ⑥ Retract

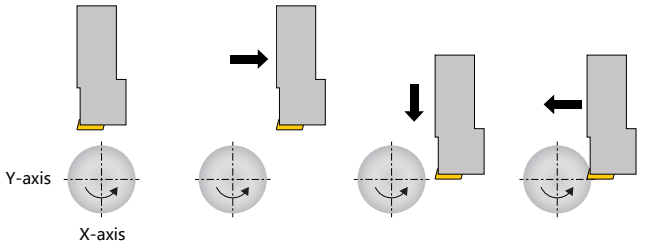


Programming sample

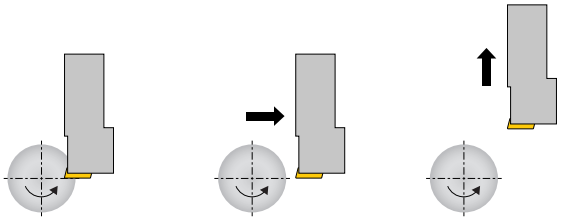
① T0200	·····	Tool selection
② G00 X13.0 Z0	·····	Move to start position
③ G01 X10.0 F0.1	·····	Commence OD turning
④ Z5.0 F0.05	·····	OD turning
⑤ X13.0	·····	Return to start position
⑥ G00X20.0	·····	Tool exit

Y-axis Machining

① Tool selection ② Moves along with the Y-axis ③ Move to Start position ④ Commence od turning



⑤ OD turning ⑥ Return to start position ⑦ Retract

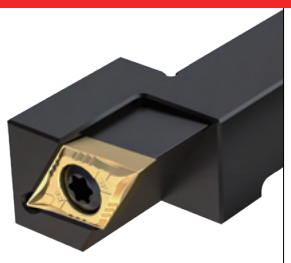


Programming sample

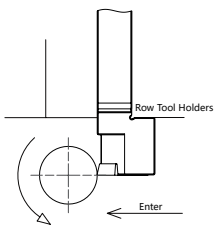
① T0200	·····	Programming sample
② G00 Y13.0 Z0 T2	·····	Move the Y-axis
③ X0	·····	Move to start position
④ G01 Y10.0 F0.1	·····	Commence OD turning
⑤ Z5.0 F0.05	·····	OD turning
⑥ Y13.0	·····	Return to start position
⑦ G00X20.0	·····	Tool exit

Note) Ensure to first move ②Y-axis before ③ moving to the start position.

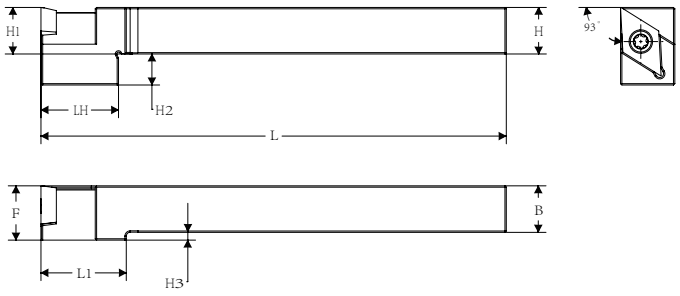
Y-axis Toolholders



• Y-SDJC(External)

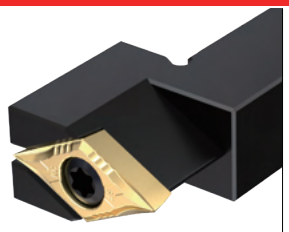


• Application Examples

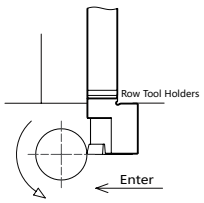


Type	Size (mm)								Accessaries		Corresponding Insert
	H(H1)	B	F	LH	L	L1	H2	H3	Screw	Wrenth	
Y-SDJCR-1010H-07	10	10	10	10	100	0	5	0	KS-2503-T	KW-T8	DC□□0702□□
Y-SDJCR-1212JX-07	12	12	12	10	120	0	3	0	KS-2503-T	KW-T8	DC□□0702□□
Y-SDJCR-1212JX-11	12	12	14	20	120	22	8	2	KS-4008-T	KW-T15	DC□□11T3□□
Y-SDJCR-1616JX-11	16	16	16	25	120	0	0	0	KS-4008-T	KW-T15	DC□□11T3□□

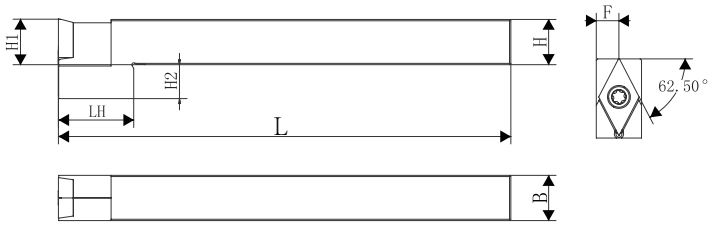
Y-axis Centered Toolholders



• Y-SDNCN(External)

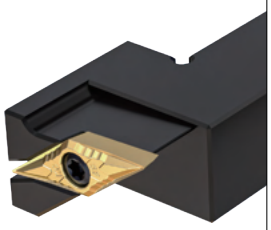


• Application Examples

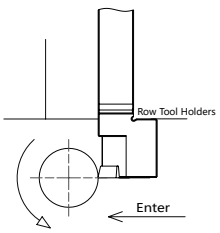


Type	Size (mm)						Accessaries		Corresponding Insert
	H(H1)	B	F	LH	L	H2	Screw	Wrenth	
Y-SDNCN-1010H-07	10	10	5	10	100	5	KS-2503-T	KW-T8	DC□□0702□□
Y-SDNCN-1212JX-07	12	12	6	10	120	3	KS-2503-T	KW-T8	DC□□0702□□
Y-SDNCN-1212JX-11	12	12	6	20	120	9	KS-4008-T	KW-T15	DC□□11T3□□
Y-SDNCN-1616JX-11	16	16	8	20	120	5	KS-4008-T	KW-T15	DC□□11T3□□

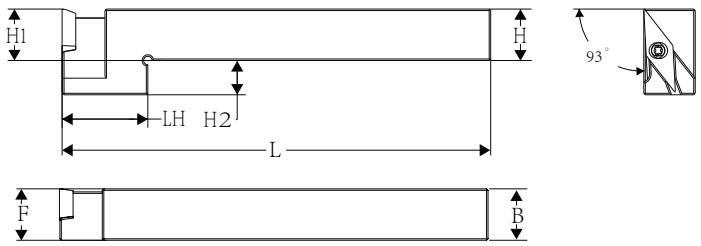
Y-axis Toolholders



• Y-SVJC(External)



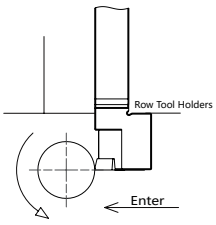
• Application Examples



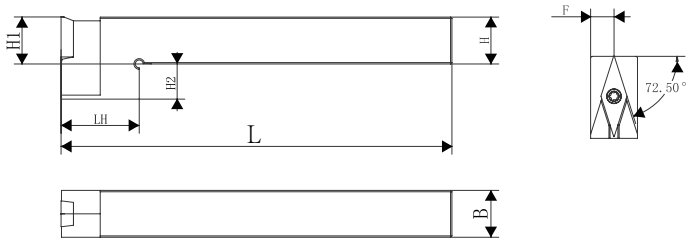
Type	Size (mm)						Accessaries		Corresponding Insert
	H(H1)	B	F	LH	L	H2	Screw	Wrenth	
Y-SVJCR-1212H-11	12	12	12	20	100	8	KS-2503-T	KW-T8	VC□□1103□□
Y-SVJCR-1616JX-11	16	16	16	25	120	4	KS-2503-T	KW-T8	VC□□1103□□

Y-axis Centered Toolholders

• Y-SVVCN(External)



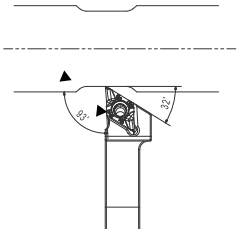
• Application Examples



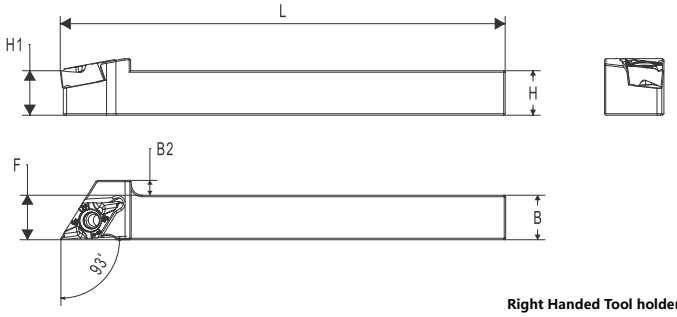
Type	Size (mm)						Accessaries		Corresponding Insert
	H(H1)	B	F	LH	L	H2	Screw	Wrenth	
Y-SVVCN-1212JX-11	12	12	6	20	120	9	KS-2503-T	KW-T8	VC□□1103□□
Y-SVVCN-1616JX-11	16	16	8	20	120	5	KS-2503-T	KW-T8	VC□□1103□□

KDC Toolholders

• KDC-SDJX(External)



• Application Examples

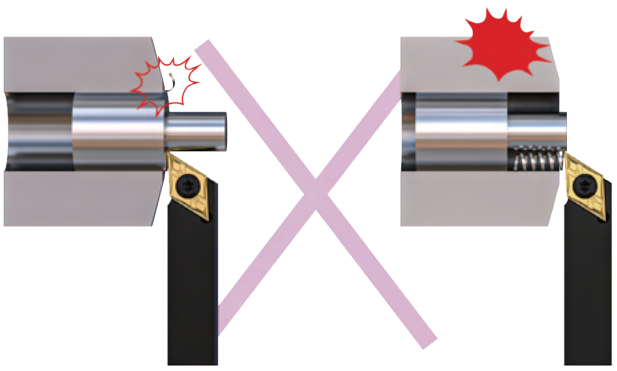


Right Handed Tool holder (R)

Type	Size (mm)					Accessaries		Corresponding Insert
	H(H1)	B	F	B2	L	Screw	Wrenth	
KDC-SDJXR-0808H-07	8	8	8	2	100	KS-2504-T	KW-T8	DXGU 0703□□R□□
KDC-SDJXR-1010J-07	10	10	10	0	110	KS-2504-T	KW-T8	DXGU 0703□□R□□
KDC-SDJXR-1212J-07	12	12	12	0	110	KS-2504-T	KW-T8	DXGU 1104□□R□□
KDC-SDJXR-1010J-11	10	10	10	6	110	KS-4008-T	KW-T15	DXGU 1104□□R□□
KDC-SDJXR-1212JX-11	12	12	12	4	120	KS-4008-T	KW-T15	DXGU 1104□□R□□
KDC-SDJXR-1616JX-11	16	16	16	0	120	KS-4008-T	KW-T15	DXGU 1104□□R□□

Clearance Shank Toolholders

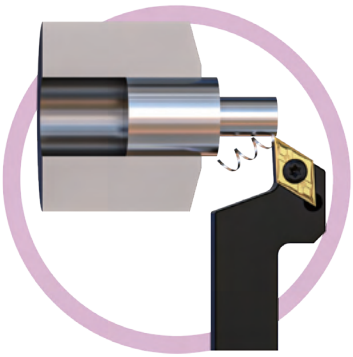
Problems of Old Tools



When Workpiece Returns,
Burrs of Roughing Scratch Guide Bushing

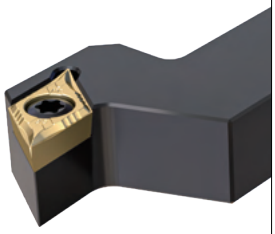
When Workpiece Comes off from Guide Bushing,
Chips may Enwind and Return to Guide Bushing

Clearance Shank Toolholders

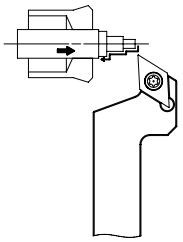


Finishing without Returning to Guide Bushing!
Good Chips Evacuationing!

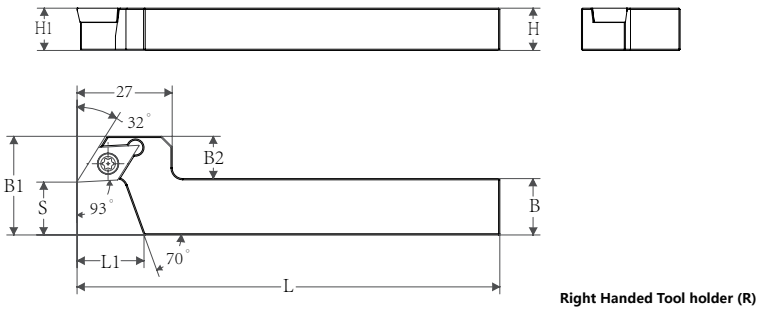
Clearance Shank Toolholders



• SDJC(External)



• Application Examples

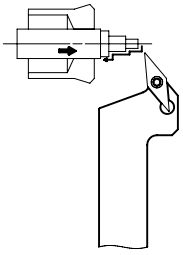


Right Handed Tool holder (R)

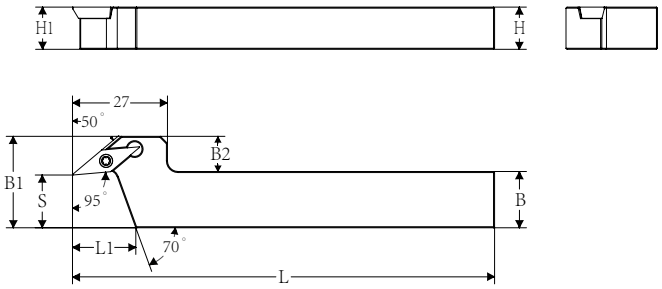
Type	Size (mm)							Accessaries		Corresponding Insert
	H(H1)	B	B1	B2	L	L1	S	Screw	Wrenth	
S-SDJCR-1216JX-11-F05	12	16	18	2	120	15.4	5	KS-4008-T	KW-T15	DC□□11T3□□
S-SDJCR-1216JX-11-F15	12	16	28	12	120	19	15	KS-4008-T	KW-T15	DC□□11T3□□
S-SDJCR-1620JX-11-F05	16	20	20	0	120	15.4	5	KS-4008-T	KW-T15	DC□□11T3□□
S-SDJCR-1620JX-11-F15	16	20	28	8	120	19	15	KS-4008-T	KW-T15	DC□□11T3□□

Clearance Shank Toolholders

• SVLC/P(External)



• Application Examples

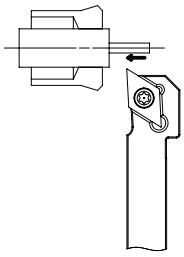


Right Handed Tool holder (R)

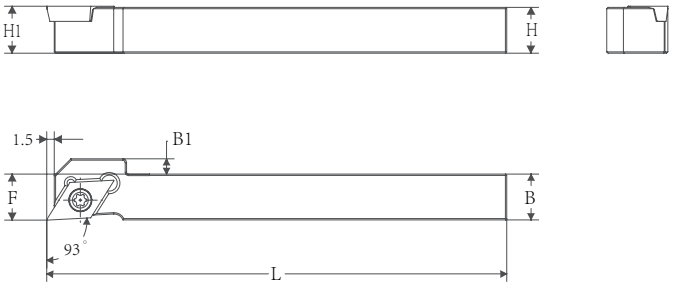
Type	Size (mm)							Accessaries		Corresponding Insert
	H(H1)	B	B1	B2	L	L1	S	Screw	Wrenth	
S-SVLCR-1216JX-11-F15	12	16	26	10	120	18	15	KS-2503-T	KW-T8	VC□□1103□□
S-SVLCR-1620JX-11-F15	16	20	26	6	120	18	15	KS-2503-T	KW-T8	VC□□1103□□
S-SVLPR-1216JX-11-F15	12	16	26	10	120	18	15	KS-2503-T	KW-T8	VP□□1103□□
S-SVLPR-1620JX-11-F15	16	20	26	6	120	18	15	KS-2503-T	KW-T8	VP□□1103□□

Strengthened Toolholders

• SDJC(External)



• Application Examples

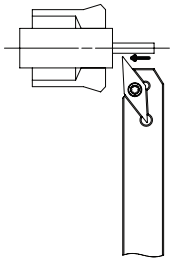


Right Handed Tool holder (R)

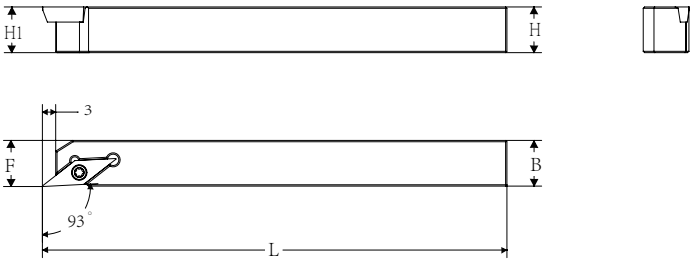
Type	Size (mm)					Accessaries		Corresponding Insert
	H(H1)	B	B1	F	L	Screw	Wrenth	
ST-SDJCR/L-1212JX-11	12	12	4	12	120	KS-4008-T	KW-T15	DC□□11T3□□
ST-SDJCR/L-1616JX-11	16	16	0	16	120	KS-4008-T	KW-T15	DC□□11T3□□
ST-SDJCR/L-2020JX-11	20	20	0	20	120	KS-4008-T	KW-T15	DC□□11T3□□

Strengthened Toolholders

• SVJB/C/P(External)



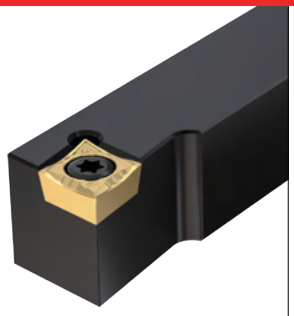
• Application Examples



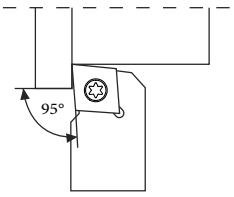
Right Handed Tool holder (R)

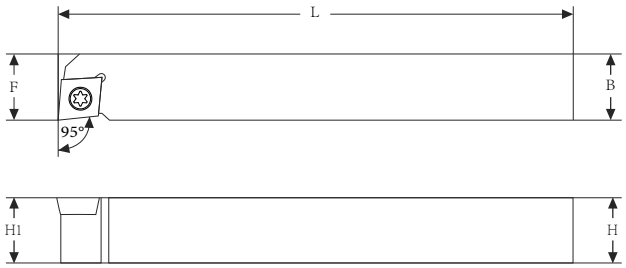
Type	Size (mm)				Accessaries		Corresponding Insert
	H(H1)	B	F	L	Screw	Wrenth	
ST-SVJB□L-1010JX-11	10	10	10	120	KS-2503-T	KW-T8	VB□□1103 □□
ST-SVJB□L-1212JX-11	12	12	12	120	KS-2503-T	KW-T8	VB□□1103 □□
ST-SVJB□L-1616JX-11	16	16	16	120	KS-2503-T	KW-T8	VB□□1103 □□
ST-SVJB□L-2020JX-11	20	20	20	120	KS-2503-T	KW-T8	VB□□1103 □□
ST-SVJC□L-1010JX-11	10	10	10	120	KS-2503-T	KW-T8	VC□□1103 □□
ST-SVJC□L-1212JX-11	12	12	12	120	KS-2503-T	KW-T8	VC□□1103 □□
ST-SVJC□L-1616JX-11	16	16	16	120	KS-2503-T	KW-T8	VC□□1103 □□
ST-SVJC□L-2020JX-11	20	20	20	120	KS-2503-T	KW-T8	VC□□1103 □□
ST-SVJP□L-1010JX-11	10	10	10	120	KS-2503-T	KW-T8	VP□□1103 □□
ST-SVJP□L-1212JX-11	12	12	12	120	KS-2503-T	KW-T8	VP□□1103 □□
ST-SVJP□L-1616JX-11	16	16	16	120	KS-2503-T	KW-T8	VP□□1103 □□
ST-SVJP□L-2020JX-11	20	20	20	120	KS-2503-T	KW-T8	VP□□1103 □□

SCLC Toolholders



• SCLS-N(External/Face Machining)



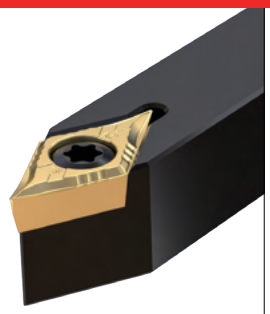


• Application Examples

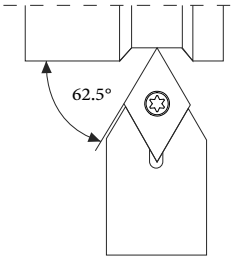
Right Handed Tool holder (R)

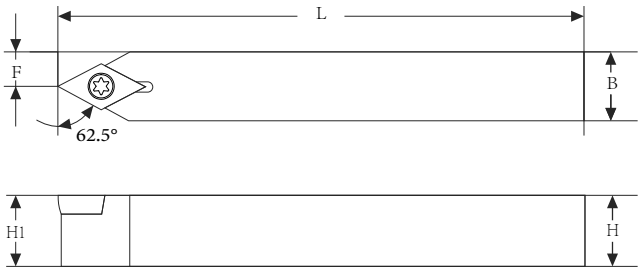
Type	Size (mm)				Accessaries		Corresponding Insert
	H(H1)	B	F	L	Screw	Wrenth	
SCLCR/L -0808H-06-N	8	8	8	100	KS-2503-T	KW-T8	CC□□0602□□
SCLCR/L -1010H-06-N	10	10	10	100	KS-2503-T	KW-T8	CC□□0602□□
SCLCR/L -1212H-09-N	12	12	12	100	KS-4008-T	KW-T15	CC□□09T3□□
SCLCR/L -1616K-09-N	16	16	16	125	KS-4008-T	KW-T15	CC□□09T3□□
SCLCR/L -2020K-09-N	20	20	20	125	KS-4008-T	KW-T15	CC□□09T3□□
SCLCR/L -2525M-09-N	25	25	25	150	KS-4008-T	KW-T15	CC□□09T3□□

SDNCN Toolholders



• SDNCN(External/Profiling)



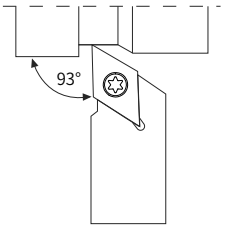


• Application Examples

Type	Size (mm)				Accessaries		Corresponding Insert
	H(H1)	B	F	L	Screw	Wrenth	
SDNCN-1010H-07	10	10	5	100	KS-2503-T	KW-T8	DC□□0702□□
SDNCN-1212H-07	12	12	6	100	KS-2503-T	KW-T8	DC□□0702□□
SDNCN-1616K-07	16	16	8	125	KS-2503-T	KW-T8	DC□□0702□□
SDNCN-1212H-11	12	12	6	100	KS-4008-T	KW-T15	DC□□11T3□□
SDNCN-1616K-11	16	16	8	125	KS-4008-T	KW-T15	DC□□11T3□□
SDNCN-2020K-11	20	20	10	125	KS-4008-T	KW-T15	DC□□11T3□□
SDNCN-2525M-11	25	25	12.5	150	KS-4008-T	KW-T15	DC□□11T3□□

SDJC Toolholders

• SDJC-N(External/Profiling)



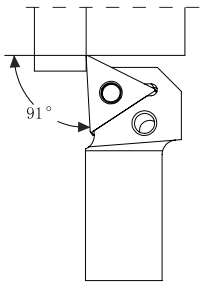
• Application Examples

Right Handed Tool holder (R)

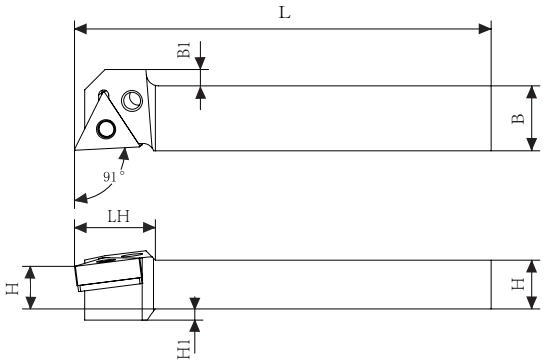
Type	Size (mm)				Accessaries		Corresponding Insert
	H(H1)	B	F	L	Screw	Wrenth	
SDJC R/L -0808H-07-N	8	8	8	100	KS-2503-T	KW-T8	DC□□0702□□
SDJC R/L -1010H-07-N	10	10	10	100	KS-2503-T	KW-T8	DC□□0702□□
SDJC R/L -1212H-07-N	12	12	12	100	KS-2503-T	KW-T8	DC□□0702□□
SDJC R/L -1616K-07-N	16	16	16	125	KS-2503-T	KW-T8	DC□□0702□□
SDJC R/L -2020K-07-N	20	20	20	125	KS-2503-T	KW-T8	DC□□0702□□
SDJC R/L -2525M-07-N	25	25	25	150	KS-2503-T	KW-T8	DC□□0702□□
SDJC R/L -1010H-11-N	10	10	10	100	KS-4008-T	KW-T15	DC□□11T3□□
SDJC R/L -1212H-11-N	12	12	12	100	KS-4008-T	KW-T15	DC□□11T3□□
SDJC R/L -1616K-11-N	16	16	16	125	KS-4008-T	KW-T15	DC□□11T3□□
SDJC R/L -2020K-11-N	20	20	20	125	KS-4008-T	KW-T15	DC□□11T3□□
SDJC R/L -2525M-11-N	25	25	25	150	KS-4008-T	KW-T15	DC□□11T3□□
SDJC R/L -3232P-11-N	32	32	32	170	KS-4008-T	KW-T15	DC□□11T3□□

PTGN Toolholders

• PTGN(External/Face Machining)



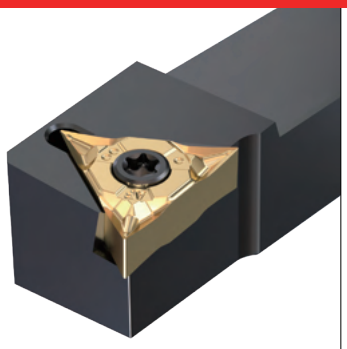
• Application Examples



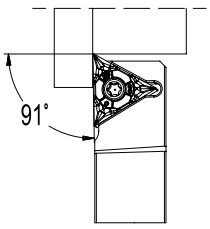
Right Handed Tool holder (R)

Type	Size (mm)						Accessaries					Corresponding Insert
	H	H1	B	B1	L	LH	Screw	Level	Shim	Metal Pin	Wrenth	
PTGN[R/L]-1216H-16	12	3.8	16	4	100	21						TNGG 1604□□ TNGU 1604□□

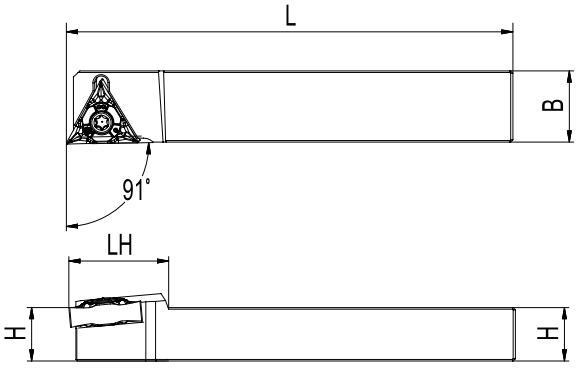
STGN Toolholders



• STGN(External/Face Machining)



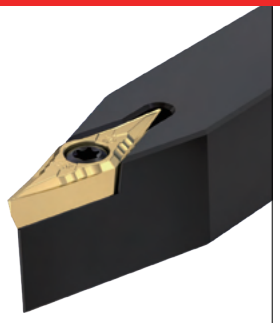
• Application Examples



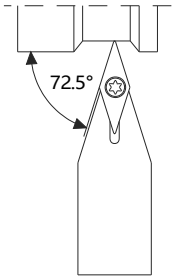
Right Handed Tool holder (R)

Type	Size (mm)				Accessaries		Corresponding Insert
	H	B	L	LH	Screw	Wrenth	
STGN[R/L]-1216H-16	12	16	100	21	KS-35065-T	KW-T15	TNGU 1604□□

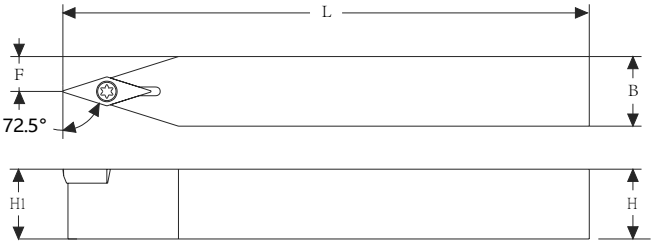
SVVCN Toolholders



• SVVCN(External/Profiling)

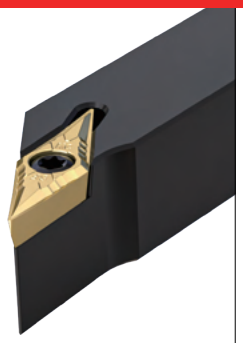


• Application Examples

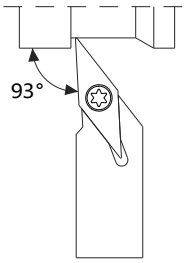


Type	Size (mm)				Accessaries		Corresponding Insert
	H(H1)	B	F	L	Screw	Wrenth	
SVVCN-1010H-11	10	10	5	100	KS-2503-T	KW-T8	VC □□1103 □□
SVVCN-1212H-11	12	12	6	100	KS-2503-T	KW-T8	VC □□1103 □□
SVVCN-1616K-11	16	16	8	125	KS-2503-T	KW-T8	VC □□1103 □□
SVVCN-2020K-11	20	20	10	125	KS-2503-T	KW-T8	VC □□1103 □□
SVVCN-1616K-16	16	16	8	125	KS-4008-T	KW-T15	VC □□1604□□
SVVCN-2020K-16	20	20	10	150	KS-4008-T	KW-T15	VC □□1604□□
SVVCN-2525M-16	25	25	12.5	150	KS-4008-T	KW-T15	VC □□1604□□

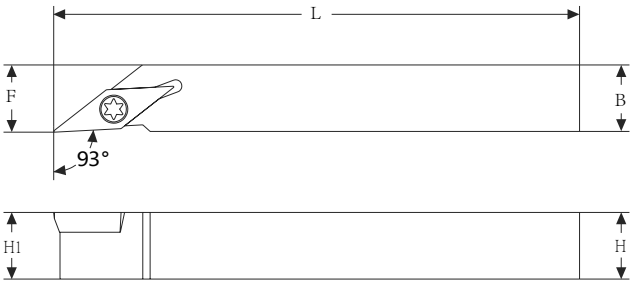
SVJC Toolholders



• SVJC-N(External/Profiling)



• Application Examples

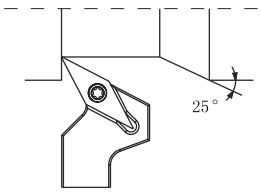


Right Handed Tool holder (R)

Type	Size (mm)				Accessaries		Corresponding Insert
	H(H1)	B	F	L	Screw	Wrenth	
SVJC□L -1010H-11-N	10	10	10	100	KS-2503-T	KW-T8	VC □□1103 □□
SVJC□L -1212H-11-N	12	12	12	100	KS-2503-T	KW-T8	VC □□1103 □□
SVJC□L -1616K-11-N	16	16	16	125	KS-2503-T	KW-T8	VC □□1103 □□
SVJC□L -2020K-11-N	20	20	20	125	KS-2503-T	KW-T8	VC □□1103 □□
SVJC□L -1616K-16-N	16	16	16	125	KS-4008-T	KW-T15	VC □□1604□□
SVJC□L -2020K-16-N	20	20	20	125	KS-4008-T	KW-T15	VC □□1604□□
SVJC□L -2525M-16-N	25	25	25	150	KS-4008-T	KW-T15	VC □□1604□□

SVPC Toolholders

• SVPC-N
(External/Profiling/Face Machining/)

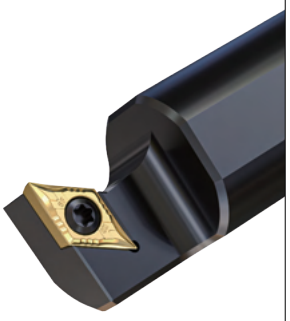


• Application Examples

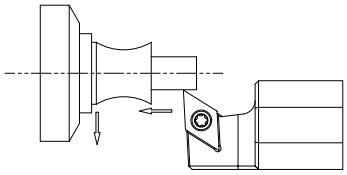
Right Handed Tool holder (R)

Type	Size (mm)						Accessaries		Corresponding Insert
	H(H1)	B	B1	F	L	L1	Screw	Wrenth	
SVPCR-1010JX-11-N	10	10	8	10	120	16	KS-2503-T	KW-T8	VC □□1103 □□
SVPCR-1212JX-11-N	12	12	6	12	120	16	KS-2503-T	KW-T8	VC □□1103 □□
SVPCR-1616JX-11-N	16	16	2	16	120	20	KS-2503-T	KW-T8	VC □□1103 □□

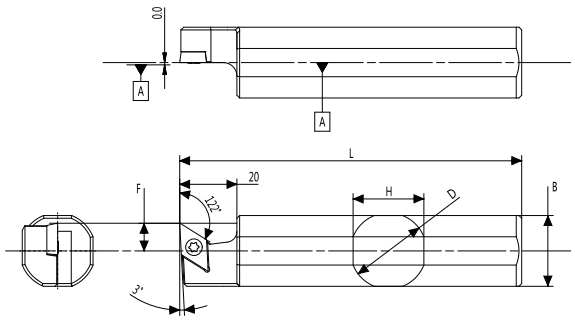
DS-SDUCL Toolholders



• DS-SDUCL
(excircle of sub-spindle/Face Machining)



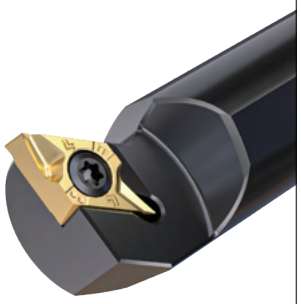
• Application Examples



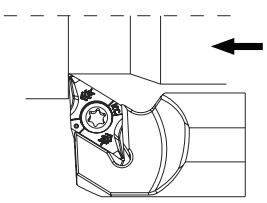
left handed holders (L)

Type	Size (mm)					Accessaries		Corresponding Insert
	D	H	B	L	F	Screw	Wrenth	
DS-SDUCL-14F07	14	13	13	80	6.0	KS-2503-T	KW-T8	DC□□0702□□
DS-SDUCL-15.875H07	15.875	15	15	100	6.0			
DS-SDUCL-16F07	16	15	15	80	6.0			
DS-SDUCL-16X07	16	15	15	95	6.0			
DS-SDUCL-19.05K07	19.05	18	18	125	6.0			
DS-SDUCL-20X07	20	19	19	95	6.0			
DS-SDUCL-20K07	20	19	19	125	6.0			
DS-SDUCL-22K07	22	21	21	125	6.0			
DS-SDUCL-14F11	14	13	13	80	6.0	KS-4008-T	KW-T15	DC□□11T3 □□
DS-SDUCL-16F11	16	15	15	80	6.0			
DS-SDUCL-19.05K11	19.05	18	18	125	6.0			
DS-SDUCL-19.05M11	19.05	18	18	150	6.0			
DS-SDUCL-20X11	20	19	19	95	11.0			
DS-SDUCL-20K11	20	19	19	125	10			
DS-SDUCL-22K11	22	21	21	125	10			
DS-SDUCL-25K11	25	25	25	125	10			
DS-SDUCL-25.4M11	25.4	25.4	25.4	150	10			

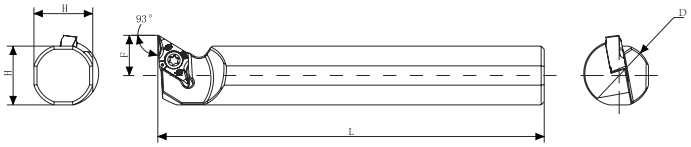
KDC-SDUX Toolholders



• KDC-SDUX
(excircle of sub-spindle/Face Machining)



• Application Examples

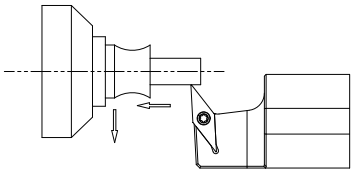


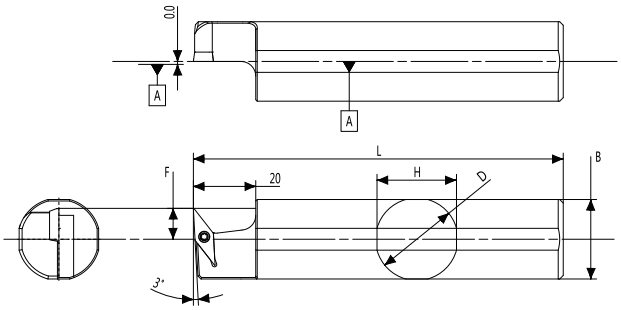
left handed holders (L)

Type	Size (mm)				Accessaries		Corresponding Insert
	D	F	H	L	Screw	Wrenth	
KDC-S19M-SDUXL-11	19.05	13	18	150	KS-4008-T	KW-T15	DXGU 1104□□R-TF(TFX)
KDC-S20K-SDUXL-11	20	13	19	125	KS-4008-T	KW-T15	DXGU 1104□□R-TF(TFX)
KDC-S25M-SDUXL-11	25	16	24	150	KS-4008-T	KW-T15	DXGU 1104□□R-TF(TFX)

DS-SVUB(C)L Type

• DS-SVUB(C)L
(excircle of sub-spindle/Face Machining)





• Application Examples

left handed holders (L)

Type	Size (mm)					Accessaries		Corresponding Insert
	D	H	B	L	F	Screw	Wrenth	
DS-SVUBL-19.05G11	19.05	18	18	90	10.5	KS-2503-T	KW-T8	VB □□1103 □□
DS-SVUBL-19.05K11	19.05	18	18	125	10.5			
DS-SVUBL-20G11	20	19	19	90	10.5			
DS-SVUBL-20K11	20	19	19	125	10.5			
DS-SVUBL-22K11	22	21	21	125	10.5			
DS-SVUBL-25M11	25	24	24	150	10.5			
DS-SVUBL-25.4M11	25.4	24	24	150	10.5			
DS-SVUCL-19.05G11	19.05	18	18	90	10.5	KS-2503-T	KW-T8	VC □□1103 □□
DS-SVUCL-19.05K11	19.05	18	18	125	10.5			
DS-SVUCL-20G11	20	19	19	90	10.5			
DS-SVUCL-20K11	20	19	19	125	10.5			
DS-SVUCL-22K11	22	21	21	125	10.5			
DS-SVUCL-25M11	25	24	24	150	10.5			
DS-SVUCL-25.4M11	25.4	24	24	150	10.5			

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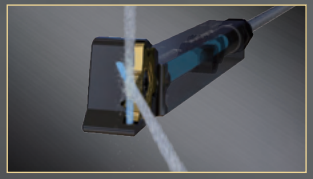


Strong Inner Cooling System

Symbols of QCMT and KM Toolholders

	10: 10 Shank						
KM: KM Series	12: 12 Shank				F: 80		JCT: Inner Cooling
QCMT: QCMT Series	16: 16 Shank				H: 100		Without Inner Cooling
Series	**Tool Size**	**-**	**Tool Height**	**Tool Width**	**Tool Length**	**-**	**With Inner Cooling**
QCMT	12	-	12	12	F	-	JCT

Symbols of ISO Standard Cutting Heads

						B: 5°						
	10: 10 Shank				N: 62.5°	C: 7°	R: Right Handed Holders					
KM: KM Series	12: 12 Shank			D: 55°Rhombic	V: 72.5°	P: 11°	L: Left Handed Holders			JCT: Inner Cooling		
QCMT: QCMT Series	16: 16 Shank			V: 35°Rhombic	J: 93°	X: others	N: Versatile Holders			Without Inner Cooling		
Series	**Head Size**	**-**	**Screw Clamping**	**Insert Shape**	**Entering Angle**	**Clearance Angle**	**Insert Direction**	**Edge Length**	**-**	**With Inner Cooling**	**-**	**others**
QCMT	12	-	S	V	J	C	R	11	-	JCT	-	P

Symbols of ISO Y-axis Cutting Heads

							B: 5°							
	10: 10 Shank					N: 62.5°	C: 7°	R: Right Handed Holders						
KM: KM Series	12: 12 Shank				D: 55°Rhombic	V: 72.5°	P: 11°	L: Left Handed Holders			JCT: Inner Cooling			
QCMT: QCMT Series	16: 16 Shank				V: 35°Rhombic	J: 93°	X: others	N: Versatile Holders			Without Inner Cooling			
Series	**Head Size**	**-**	**Y axis**	**-**	**Screw Clamping**	**Insert Shape**	**Entering Angle**	**Clearance Angle**	**Insert Direction**	**Edge Length**	**-**	**With Inner Cooling**	**-**	**others**
QCMT	12	-	Y	-	S	V	J	C	R	11	-	JCT	-	P

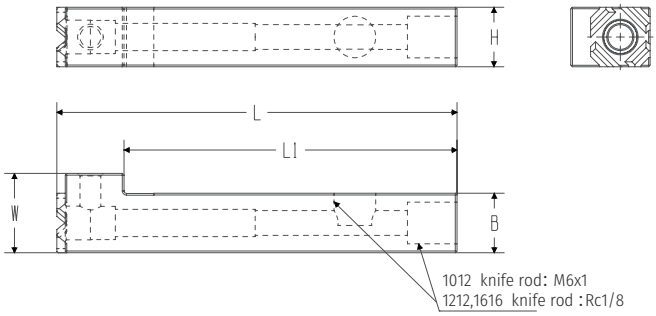
Symbols of KX618 Cutting Heads

	10: 10 Shank							
KM: KM Series	12: 12 Shank					JCT: Inner Cooling		
QCMT: QCMT Series	16: 16 Shank			R: Right Handed Holders		Without Inner Cooling		
Series	**Head Size**	**-**	**KX618 Insert**	**Cutting Heads Direction**	**-**	**With Inner Cooling**	**-**	**others**
QCMT	12	-	KX618	R	-	JCT	-	P

Symbols of KSI12 Cutting Heads

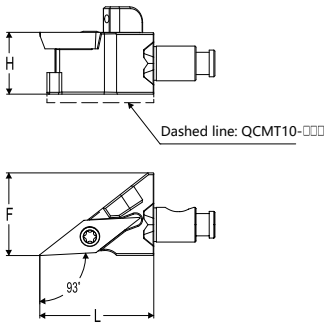
	10: 10 Shank							
KM: KM Series	12: 12 Shank			R: Right Handed Holders		JCT: Inner Cooling		
QCMT: QCMT Series	16: 16 Shank			L: Left Handed Holders		Without Inner Cooling		
Series	**Head Size**	**-**	**KST12 Insert**	**Cutting Heads Direction**	**-**	**With Inner Cooling**	**-**	**others**
QCMT	12	-	KSI12	R	-	JCT	-	P

Turning-Modular Toolholders with JCT

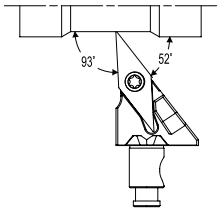


Type	Size					Accessaries		With Inner Cooling
	H	B	W	L	L1	Screw	Wrenth	
QCMT10-1012F-JCT	10	12	16	80	67	KS-5007-TS-IP	KW-IP10	
QCMT12-1212F-JCT	12	12	16	80	67	KS-5007-TS-IP	KW-IP10	
QCMT12-1212H-JCT	12	12	16	100	87	KS-5007-TS-IP	KW-IP10	
QCMT16-1616F-JCT	16	16	19	80	67	KS-6009-HS-P0.75	KW-LH3	
QCMT16-1616H-JCT	16	16	19	100	87	KS-6009-HS-P0.75	KW-LH3	
QCMT10-1012F	10	12	16	80	67	KS-5007-TS-IP	KW-IP10	
QCMT12-1212F	12	12	16	80	67	KS-5007-TS-IP	KW-IP10	
QCMT12-1212H	12	12	16	100	87	KS-5007-TS-IP	KW-IP10	
QCMT16-1616F	16	16	19	80	67	KS-6009-HS-P0.75	KW-LH3	
QCMT16-1616H	16	16	19	100	87	KS-6009-HS-P0.75	KW-LH3	

V-shape Cutting Heads

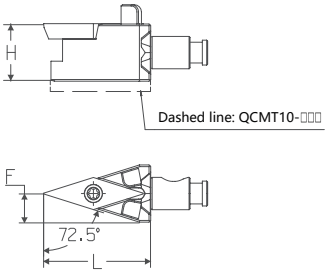


Processing Application



Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT10-SVJB[R/L] 11-JCT-P	22	10	16	KS-2503-T	KW-T8	VB□□1103□□	
QCMT12-SVJB[R/L] 11-JCT-P	22	12	16	KS-2503-T	KW-T8	VB□□1103□□	
QCMT16-SVJB[R/L] 11-JCT-P	23	16	19	KS-2503-T	KW-T8	VB□□1103□□	
QCMT10-SVJC[R/L] 11-JCT-P	22	10	16	KS-2503-T	KW-T8	VC□□1103□□	
QCMT12-SVJC[R/L] 11-JCT-P	22	12	16	KS-2503-T	KW-T8	VC□□1103□□	
QCMT16-SVJC[R/L] 11-JCT-P	23	16	19	KS-2503-T	KW-T8	VC□□1103□□	
QCMT10-SVJP[R/L] 11-JCT-P	22	10	16	KS-2503-T	KW-T8	VP□□1103□□	
QCMT12-SVJP[R/L] 11-JCT-P	22	12	16	KS-2503-T	KW-T8	VP□□1103□□	
QCMT16-SVJP[R/L] 11-JCT-P	23	16	19	KS-2503-T	KW-T8	VP□□1103□□	
QCMT10-SVJB[R/L] -11	22	10	16	KS-2503-T	KW-T8	VB□□1103□□	
QCMT12-SVJB[R/L] -11	22	12	16	KS-2503-T	KW-T8	VB□□1103□□	
QCMT16-SVJB[R/L] -11	23	16	19	KS-2503-T	KW-T8	VB□□1103□□	
QCMT10-SVJC[R/L] -11	22	10	16	KS-2503-T	KW-T8	VC□□1103□□	
QCMT12-SVJC[R/L] -11	22	12	16	KS-2503-T	KW-T8	VC□□1103□□	
QCMT16-SVJC[R/L] -11	23	16	19	KS-2503-T	KW-T8	VC□□1103□□	
QCMT10-SVJP[R/L] -11	22	10	16	KS-2503-T	KW-T8	VP□□1103□□	
QCMT12-SVJP[R/L] -11	22	12	16	KS-2503-T	KW-T8	VP□□1103□□	
QCMT16-SVJP[R/L] -11	23	16	19	KS-2503-T	KW-T8	VP□□1103□□	

V-shape Cutting Heads



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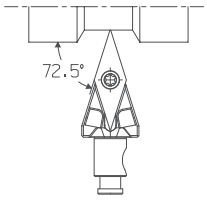
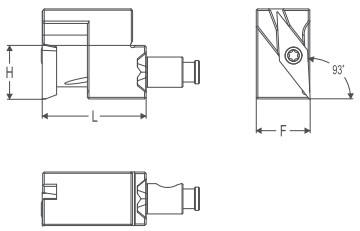


Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT10-SVVBN11-JCT-P	22	10	5	KS-2503-T	KW-T8	VB□□1103□□	
QCMT12-SVVBN11-JCT-P	22	12	6	KS-2503-T	KW-T8	VB□□1103□□	
QCMT16-SVVBN11-JCP-P	23	16	8	KS-2503-T	KW-T8	VB□□1103□□	
QCMT10-SVVCN11-JCT-P	22	10	5	KS-2503-T	KW-T8	VC□□1103□□	
QCMT12-SVVCN11-JCT-P	22	12	6	KS-2503-T	KW-T8	VC□□1103□□	
QCMT16-SVVCN11-JCP-P	23	16	8	KS-2503-T	KW-T8	VC□□1103□□	
QCMT10-SVVBN-11	22	10	5	KS-2503-T	KW-T8	VB□□1103□□	
QCMT12-SVVBN-11	22	12	6	KS-2503-T	KW-T8	VB□□1103□□	
QCMT16-SVVBN-11	23	16	8	KS-2503-T	KW-T8	VB□□1103□□	
QCMT10-SVVCN-11	22	10	5	KS-2503-T	KW-T8	VC□□1103□□	
QCMT12-SVVCN-11	22	12	6	KS-2503-T	KW-T8	VC□□1103□□	
QCMT16-SVVCN-11	23	16	8	KS-2503-T	KW-T8	VC□□1103□□	

V-shape Y-axis Cutting Heads



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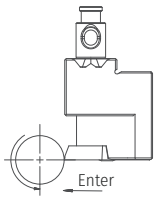
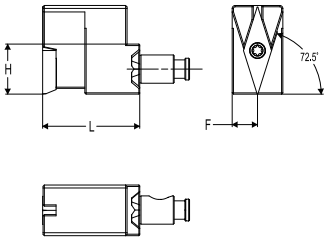


Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT10-Y-SVJCR11-JCT-P	23	10	16	KS-2503-T	KW-T8	VC□□1103□□	
QCMT12-Y-SVJCR11-JCT-P	23	12	16	KS-2503-T	KW-T8	VC□□1103□□	
QCMT16-Y-SVJCR11-JCT-P	23	16	19	KS-2503-T	KW-T8	VC□□1103□□	
QCMT10-Y-SVJCR-11	23	10	16	KS-2503-T	KW-T8	VC□□1103□□	
QCMT12-Y-SVJCR-11	23	12	16	KS-2503-T	KW-T8	VC□□1103□□	
QCMT16-Y-SVJCR-11	23	16	19	KS-2503-T	KW-T8	VC□□1103□□	

V-shape Y-axis Cutting Heads



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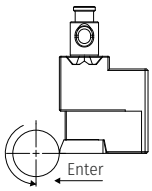
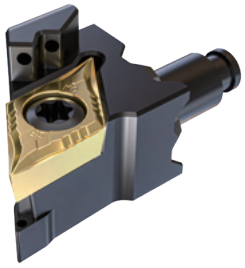
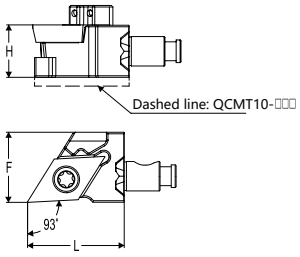


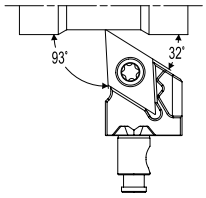
Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT10-Y-SVVCN11-JCT-P	23	10	5	KS-2503-T	KW-T8	VC□□1103□□	
QCMT12-Y-SVVCN11-JCT-P	23	12	6	KS-2503-T	KW-T8	VC□□1103□□	
QCMT16-Y-SVVCN11-JCT-P	23	16	8	KS-2503-T	KW-T8	VC□□1103□□	
QCMT10-Y-SVVCN-11	23	10	5	KS-2503-T	KW-T8	VC□□1103□□	
QCMT12-Y-SVVCN-11	23	12	6	KS-2503-T	KW-T8	VC□□1103□□	
QCMT16-Y-SVVCN-11	23	16	8	KS-2503-T	KW-T8	VC□□1103□□	

D-shape Cutting Heads



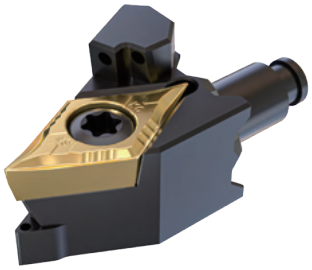


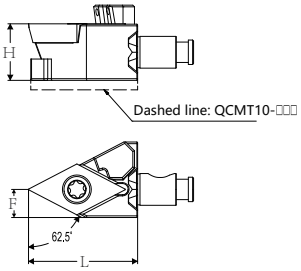
Processing Application



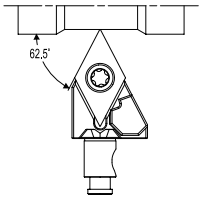
Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT10-SDJC[R/L] 11-JCT-P	22	10	16	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT12-SDJC[R/L] 11-JCT-P	22	12	16	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT16-SDJC[R/L] 11-JCT-P	23	16	19	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT10-SDJC[R/L] -11	22	10	16	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT12-SDJC[R/L] -11	22	12	16	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT16-SDJC[R/L] -11	23	16	19	KS-4008-T	KW-T15	DC□□11T3□□	

D-shape Cutting Heads



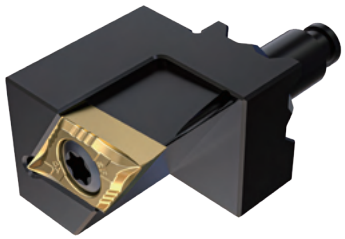


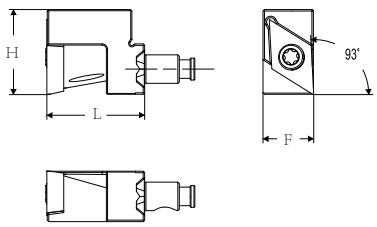
Processing Application



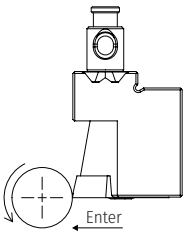
Type	Size			Accessaries		Corresponding Insert	Wth Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT10-SDNCN11-JCT-P	22	10	5	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT12-SDNCN11-JCT-P	22	12	6	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT16-SDNCN11-JCT-P	23	16	8	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT10-SDNCN-11	22	10	5	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT12-SDNCN-11	22	12	6	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT16-SDNCN-11	23	16	8	KS-4008-T	KW-T15	DC□□11T3□□	

D-shape Y-axis Cutting Heads



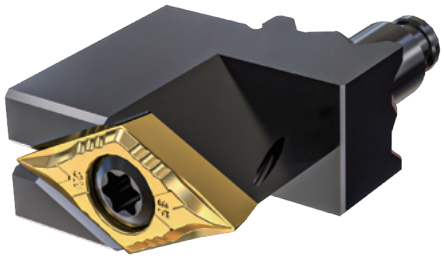


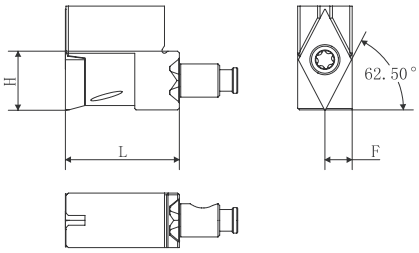
Processing Application



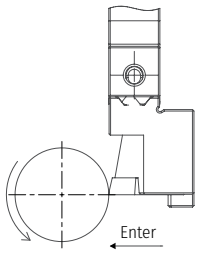
Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT10-Y-SDJCR07-JCT-P	23	10	16	KS-2503-T	KW-T8	DC□□0702□□	
QCMT10-Y-SDJCR11-JCT-P	23	10	16	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT12-Y-SDJCR07-JCT-P	23	12	16	KS-2503-T	KW-T8	DC□□0702□□	
QCMT12-Y-SDJCR11-JCT-P	23	12	16	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT16-Y-SDJCR11-JCT-P	23	16	19	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT10-Y-SDJCR-07	23	10	16	KS-2503-T	KW-T8	DC□□0702□□	
QCMT10-Y-SDJCR-11	23	10	16	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT12-Y-SDJCR-07	23	12	16	KS-2503-T	KW-T8	DC□□0702□□	
QCMT12-Y-SDJCR-11	23	12	16	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT16-Y-SDJCR-11	23	16	19	KS-4008-T	KW-T15	DC□□11T3□□	

D-shape Y-axis Centered Tool Series



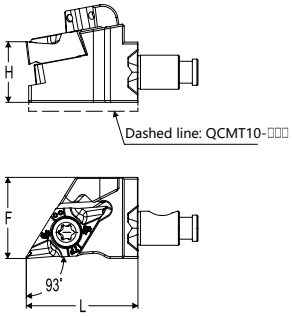


Processing Application

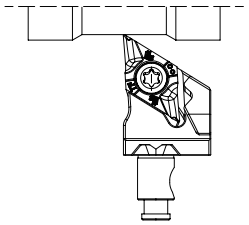


Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT10-Y-SDNCN07-JCT-P	23	10	5	KS-2503-T	KW-T8	DC□□0702□□	
QCMT10-Y-SDNCN11-JCT-P	23	10	5	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT12-Y-SDNCN07-JCT-P	23	12	6	KS-2503-T	KW-T8	DC□□0702□□	
QCMT12-Y-SDNCN11-JCT-P	23	12	6	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT16-Y-SDNCN11-JCT-P	23	16	8	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT10-Y-SDNCN-07	23	10	5	KS-2503-T	KW-T8	DC□□0702□□	
QCMT10-Y-SDNCN-11	23	10	5	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT12-Y-SDNCN-07	23	12	6	KS-2503-T	KW-T8	DC□□0702□□	
QCMT12-Y-SDNCN-11	23	12	6	KS-4008-T	KW-T15	DC□□11T3□□	
QCMT16-Y-SDNCN-11	23	16	8	KS-4008-T	KW-T15	DC□□11T3□□	

KDC Cutting Heads

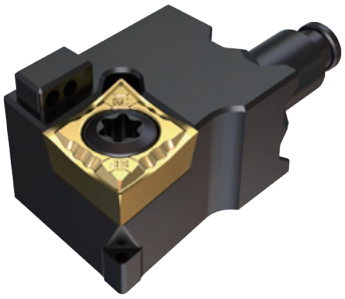


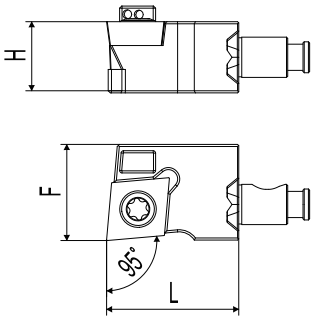
Processing Application



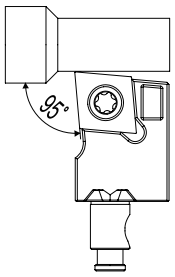
Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT10-SDJXR07-JCT-P	22	10	16	KS-2504-T	KW-T8	DXGU 0703□□ R-TF	
QCMT12-SDJXR07-JCT-P	22	12	16	KS-2504-T	KW-T8	DXGU 0703□□ R-TF	
QCMT16-SDJXR07-JCT-P	23	16	19	KS-2504-T	KW-T8	DXGU 0703□□ R-TF	
QCMT10-SDJXR11-JCT-P	22	10	16	KS-4008-T	KW-T15	DXGU 1104□□R-TF(TFX)	
QCMT12-SDJXR11-JCT-P	22	12	16	KS-4008-T	KW-T15	DXGU 1104□□R-TF(TFX)	
QCMT16-SDJXR11-JCT-P	23	16	19	KS-4008-T	KW-T15	DXGU 1104□□R-TF(TFX)	
QCMT10-SDJXR-07	22	10	16	KS-2504-T	KW-T8	DXGU 0703□□ R-TF	
QCMT12-SDJXR-07	22	12	16	KS-2504-T	KW-T8	DXGU 0703□□ R-TF	
QCMT16-SDJXR-07	23	16	19	KS-2504-T	KW-T8	DXGU 0703□□ R-TF	
QCMT10-SDJXR-11	22	10	16	KS-4008-T	KW-T15	DXGU 1104□□R-TF(TFX)	
QCMT12-SDJXR-11	22	12	16	KS-4008-T	KW-T15	DXGU 1104□□R-TF(TFX)	
QCMT16-SDJXR-11	23	16	19	KS-4008-T	KW-T15	DXGU 1104□□R-TF(TFX)	

C-shape Cutting Heads



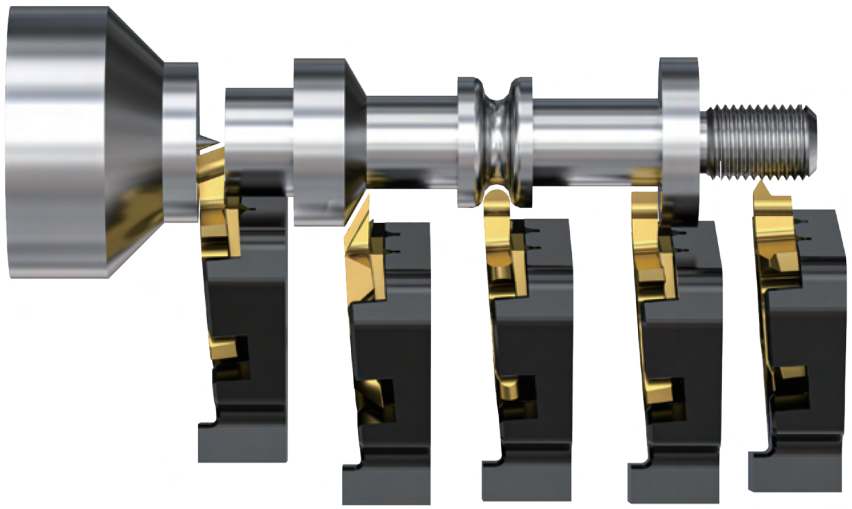


Processing Application



Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT10-SCLC[R/L] 09-JCT-P	22	10	16	KS-4008-T	KW-T15	CC□□09T3□□	
QCMT12-SCLC[R/L] 09-JCT-P	22	12	16	KS-4008-T	KW-T15	CC□□09T3□□	
QCMT16-SCLC[R/L] 09-JCT-P	23	16	19	KS-4008-T	KW-T15	CC□□09T3□□	
QCMT10-SCLC[R/L] -09	22	10	16	KS-4008-T	KW-T15	CC□□09T3□□	
QCMT12-SCLC[R/L] -09	22	12	16	KS-4008-T	KW-T15	CC□□09T3□□	
QCMT16-SCLC[R/L] -09	23	16	19	KS-4008-T	KW-T15	CC□□09T3□□	

Processing Application of KX618

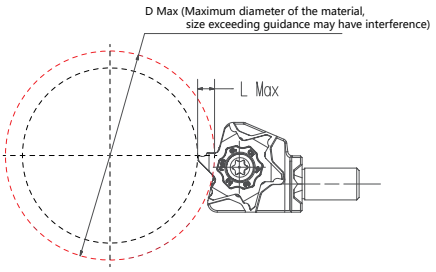


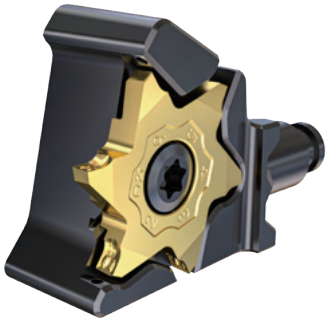
Parting Back-turning Profiling Grooving Threading

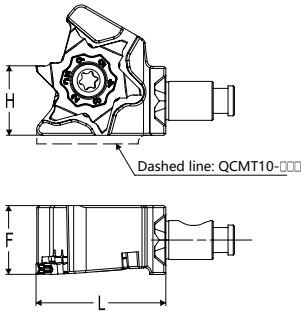
● Notice

1. Maximum diameter of parting is 7mm
2. Maximum groove depth is 3.5mm, groove depth varies according to the diameter of the material, please refer to the figure below

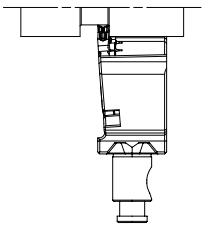
Dmax	32	42	51	65	100
Lmax	3.5	3.3	3.2	3.0	2.5





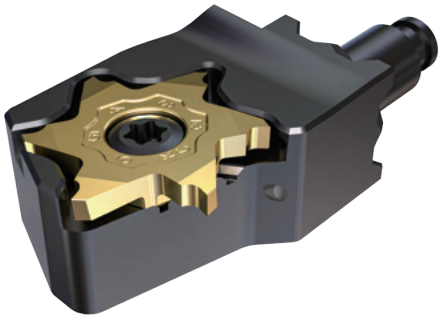


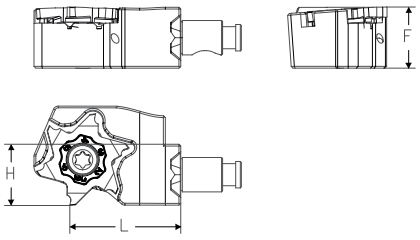
Processing Application



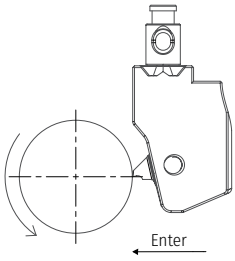
Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT10-KX618R-JCT-P	22	10	16	KS-4008-T	KW-T15	KX618□R□□	
QCMT12-KX618R-JCT-P	22	12	16	KS-4008-T	KW-T15	KX618□R□□	
QCMT16-KX618R-JCT-P	23	16	19	KS-4008-T	KW-T15	KX618□R□□	
QCMT10-KX618R	22	10	16	KS-4008-T	KW-T15	KX618□R□□	
QCMT12-KX618R	22	12	16	KS-4008-T	KW-T15	KX618□R□□	
QCMT16-KX618R	23	16	19	KS-4008-T	KW-T15	KX618□R□□	

KX618-Y axis Cutting Heads



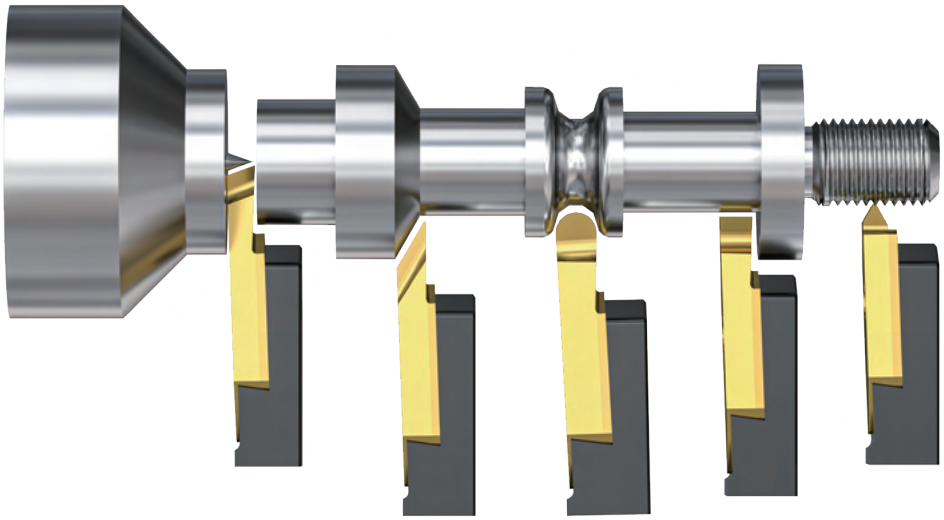


Processing Application



Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT12-Y-KX618R-JCT-P	19.5	12	16	KS-4008-T	KW-T15	KX618□R□□	
QCMT12-Y-KX618R	19.5	12	16	KS-4008-T	KW-T15	KX618□R□□	

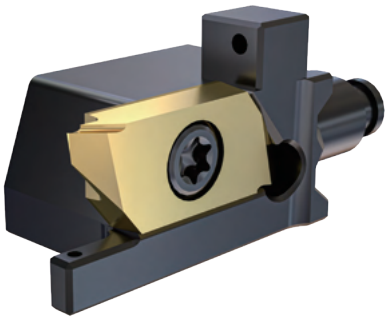
Processing Application of KSI 12 Series

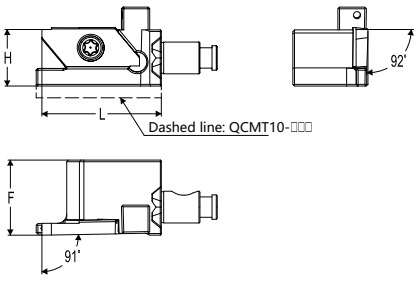


Parting | Back-turning | Profiling | Grooving | Threading

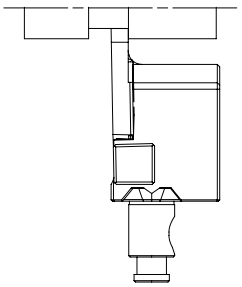
Maximum Diameter of parting is 12mm

KSI 12 Cutting Heads



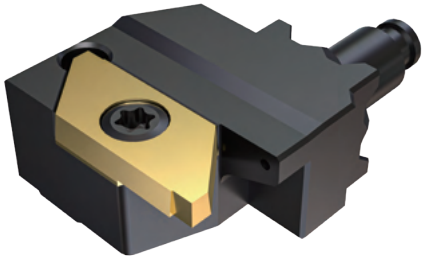


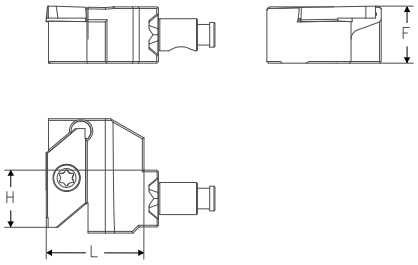
Processing Application



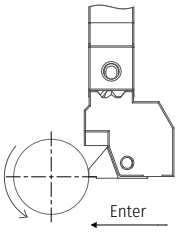
Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT10-KSI12R/L -JCT-P	25	10	16	KS-35065-T	KW-T15	KSI□12R/L□□	
QCMT12-KSI12R/L -JCT-P	25	12	16	KS-35065-T	KW-T15	KSI□12R/L□□	
QCMT16-KSI12R/L -JCT-P	25	16	19	KS-35065-T	KW-T15	KSI□12R/L□□	
QCMT10-KSI12R/L	25	10	16	KS-35065-T	KW-T15	KSI□12R/L□□	
QCMT12-KSI12R/L	25	12	16	KS-35065-T	KW-T15	KSI□12R/L□□	
QCMT16-KSI12R/L	25	16	19	KS-35065-T	KW-T15	KSI□12R/L□□	

KSI 12 Y-axis Cutting Heads





Processing Application



Type	Size			Accessaries		Corresponding Insert	With Inner Cooling
	L	H	F	Screw	Wrenth		
QCMT12-Y-KSI12R/L -JCT-P	20	12	16	KS-35065-T	KW-T15	KSI□12R/L□□	
QCMT12-Y-KSI12R/L	20	12	16	KS-35065-T	KW-T15	KSI□12R/L□□	

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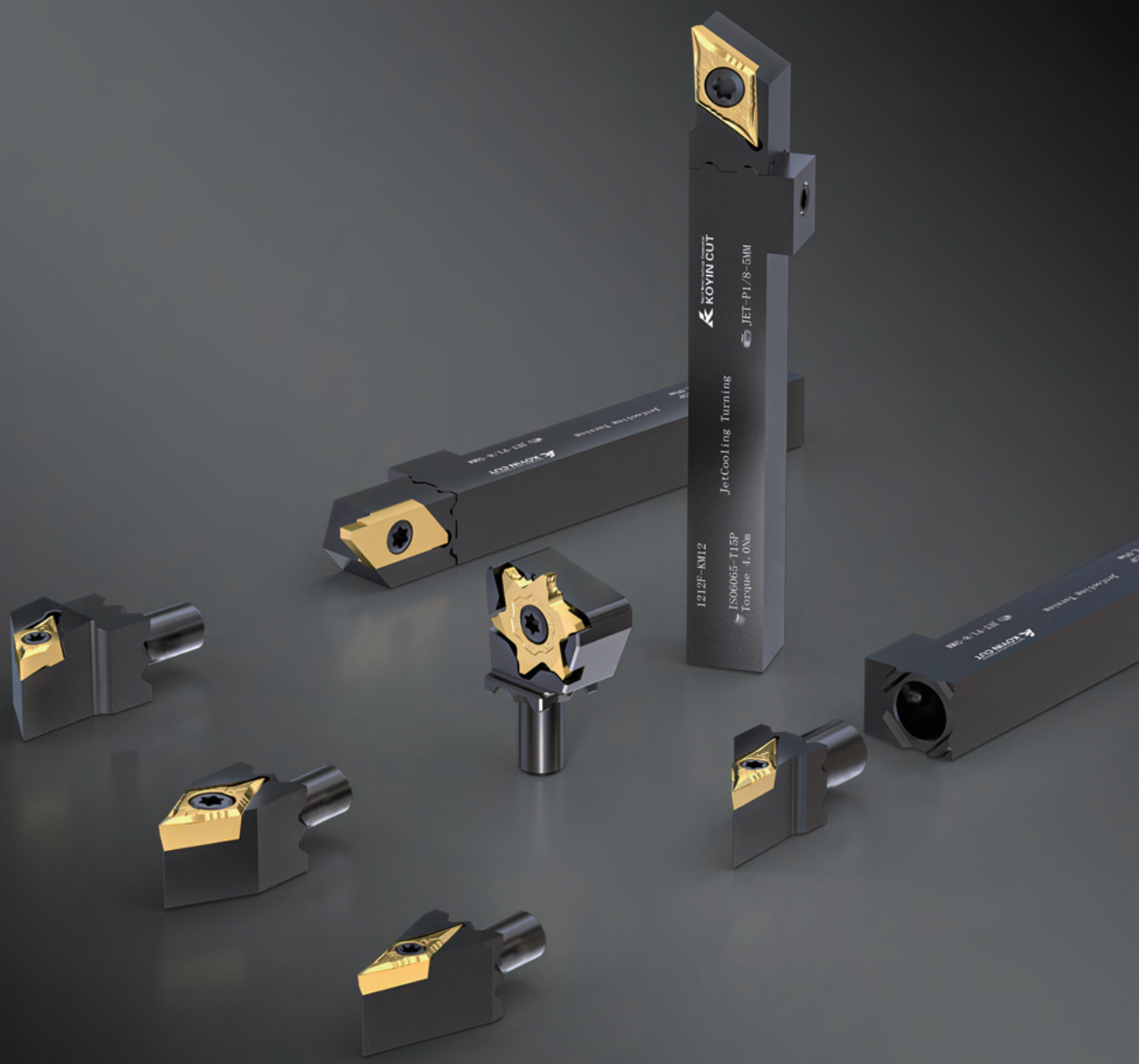
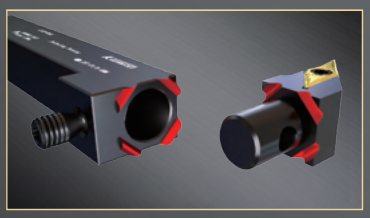


FEATURES AND ADVANTAGES

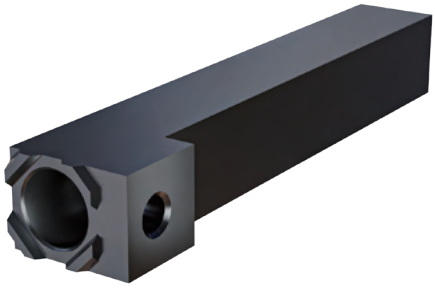
- By spliting the head and holder, one holder for multiple cutting heads according to need becomes possible
- Self-alignment and positioning, fast changeover and assembly

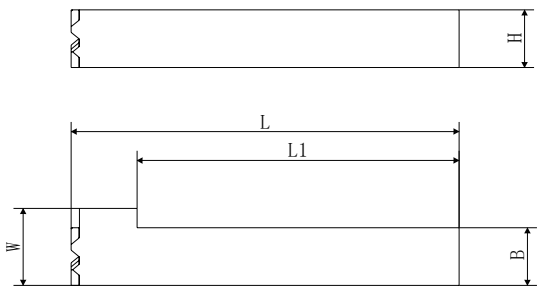
Splitted Structure Design



V-shape Locating Slots

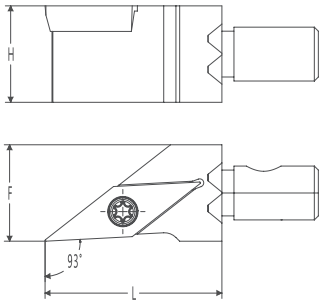
Turning-Modular Tool Holders



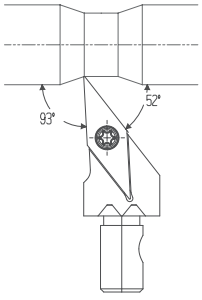


Type	Size					Accessaries	
	H	B	W	L	L1	Screw	Wrenth
KM10-1012F	10	12	16	80	67	KS-5007-TS-IP	KW-IP10
KM12-1212F	12	12	16	80	67	KS-5007-TS-IP	KW-IP10
KM12-1212H	12	12	16	100	87	KS-5007-TS-IP	KW-IP10
KM16-1616F	16	16	19	80	67	KS-6009-HS-P0.75	KW-LH3
KM16-1616H	16	16	19	100	87	KS-6009-HS-P0.75	KW-LH3

V-shape Cutting Heads

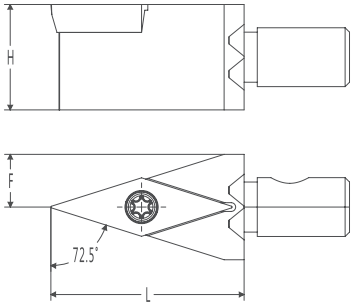


Processing Application

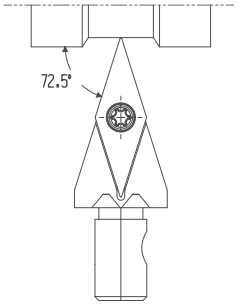


Type	Size			Accessaries		Corresponding Insert
	L	H	F	Screw	Wrenth	
KM10-SVJB$^{R}_{L}$ -11	22	10	12	KS-2503-T	KW-T8	VB□□1103□□
KM12-SVJB$^{R}_{L}$ -11	22	12	12	KS-2503-T	KW-T8	VB□□1103□□
KM16-SVJB$^{R}_{L}$ -11	23	16	19	KS-2503-T	KW-T8	VB□□1103□□
KM10-SVJC$^{R}_{L}$ -11	22	10	12	KS-2503-T	KW-T8	VC□□1103□□
KM12-SVJC$^{R}_{L}$ -11	22	12	12	KS-2503-T	KW-T8	VC□□1103□□
KM16-SVJC$^{R}_{L}$ -11	23	16	19	KS-2503-T	KW-T8	VC□□1103□□
KM10-SVJP$^{R}_{L}$ -11	22	10	12	KS-2503-T	KW-T8	VP□□1103□□
KM12-SVJP$^{R}_{L}$ -11	22	12	12	KS-2503-T	KW-T8	VP□□1103□□
KM16-SVJP$^{R}_{L}$ -11	23	16	19	KS-2503-T	KW-T8	VP□□1103□□

V-shape Cutting Heads

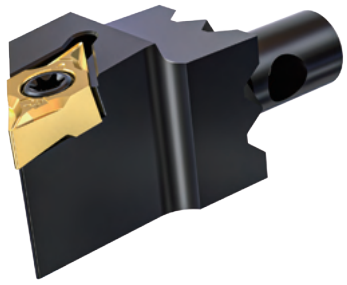


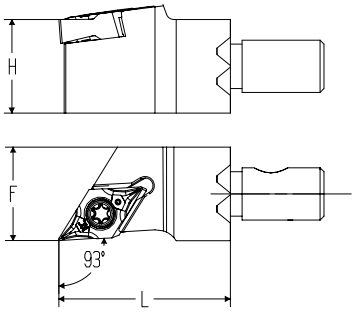
Processing Application



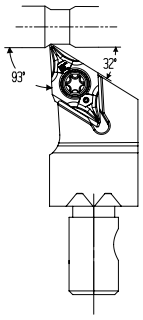
Type	Size			Accessaries		Corresponding Insert
	L	H	F	Screw	Wrenth	
KM10-SVVBN-11	22	10	6	KS-2503-T	KW-T8	VB□□1103□□
KM12-SVVBN-11	22	12	6	KS-2503-T	KW-T8	VB□□1103□□
KM16-SVVBN-11	23	16	8	KS-2503-T	KW-T8	VB□□1103□□
KM10-SVVCN-11	22	10	6	KS-2503-T	KW-T8	VC□□1103□□
KM12-SVVCN-11	22	12	6	KS-2503-T	KW-T8	VC□□1103□□
KM16-SVVCN-11	23	16	8	KS-2503-T	KW-T8	VC□□1103□□

KDC Cutting Heads



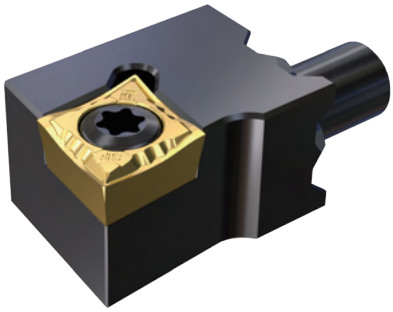


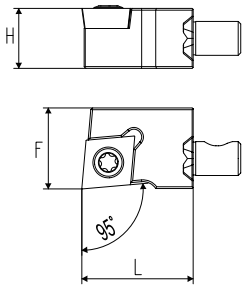
Processing Application



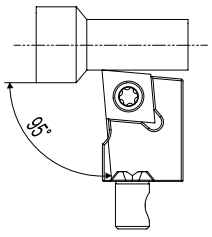
Type	Size			Accessaries		Corresponding Insert
	L	H	F	Screw	Wrenth	
KM10-SDJXR-07	22	10	12	KS-2504-T	KW-T8	DXGU 0703□□R-TF
KM12-SDJXR-07	22	12	12	KS-2504-T	KW-T8	DXGU 0703□□R-TF
KM16-SDJXR-07	23	16	19	KS-2504-T	KW-T8	DXGU 0703□□R-TF

D-shape Cutting Heads



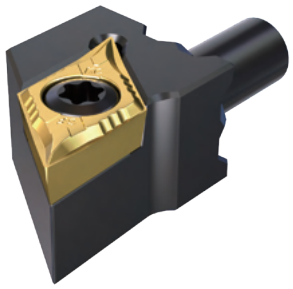


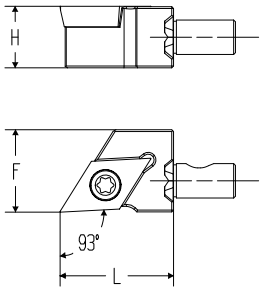
Processing Application



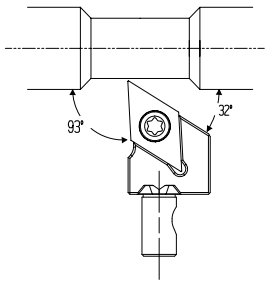
Type	Size			Accessaries		Corresponding Insert
	L	H	F	Screw	Wrenth	
KM10-SCLC$^{R}_{L}$ -09	22	10	16	KS-4008-T	KW-T15	CC□□09T3□□
KM12-SCLC$^{R}_{L}$ -09	22	12	16	KS-4008-T	KW-T15	CC□□09T3□□
KM16-SCLC$^{R}_{L}$ -09	23	16	19	KS-4008-T	KW-T15	CC□□09T3□□

D-shape Cutting Heads



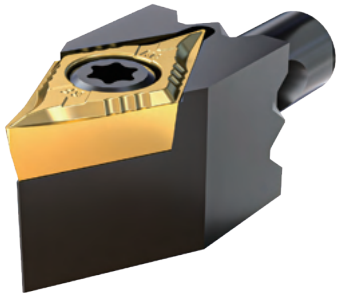


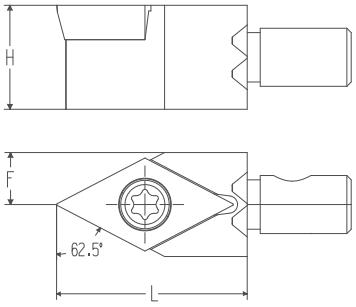
Processing Application



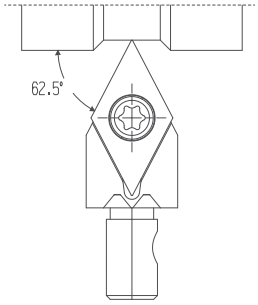
Type	Size			Accessaries		Corresponding Insert
	L	H	F	Screw	Wrenth	
KM10-SDJC$^{R}_{L}$ -11	22	10	16	KS-4008-T	KW-T15	DC□□11T3□□
KM12-SDJC$^{R}_{L}$ -11	22	12	16	KS-4008-T	KW-T15	DC□□11T3□□
KM16-SDJC$^{R}_{L}$ -11	23	16	19	KS-4008-T	KW-T15	DC□□11T3□□

D-shape Cutting Heads



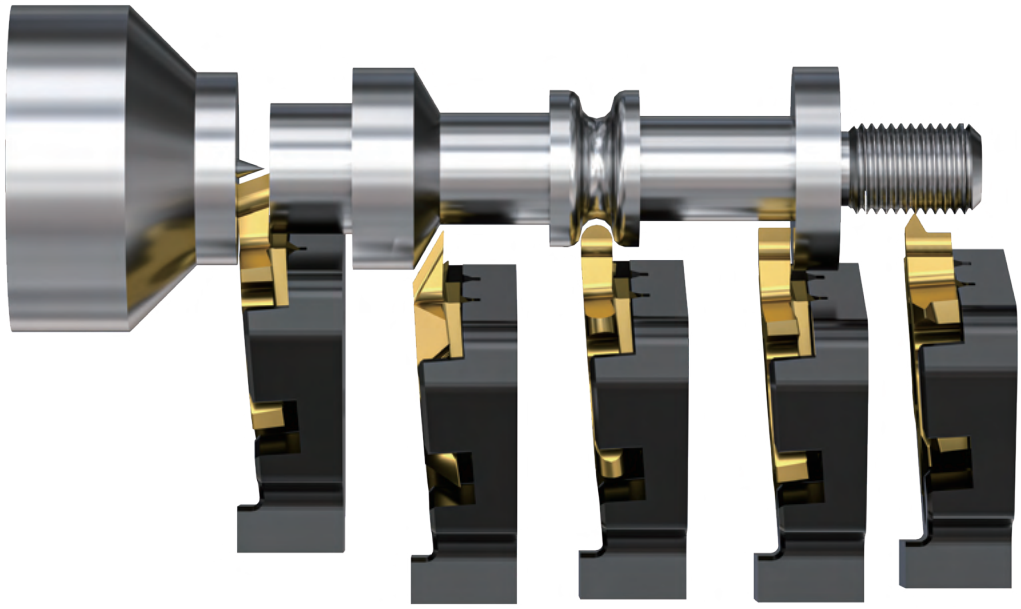


Processing Application



Type	Size			Accessaries		Corresponding Insert
	L	H	F	Screw	Wrenth	
KM10-SDNCN -11	22	10	6	KS-4008-T	KW-T15	DC□□11T3□□
KM12-SDNCN -11	22	12	6	KS-4008-T	KW-T15	DC□□11T3□□
KM16-SDNCN -11	23	16	8	KS-4008-T	KW-T15	DC□□11T3□□

Processing Application of KX618

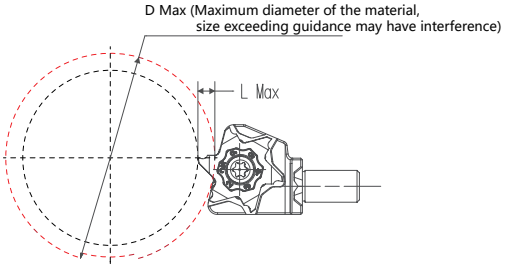


Parting | Back-turning | Profiling | Grooving | Threading

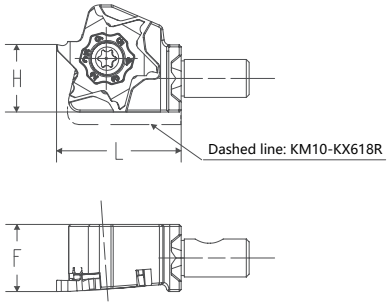
● **Notice**

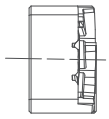
1. Maximum diameter of parting is 7mm
2. Maximum groove depth is 3.5mm, groove depth varies according to the diameter of the material, please refer to the figure below

Dmax	32	42	51	65	100
Lmax	3.5	3.3	3.2	3.0	2.5



KX618 Cutting Heads





Type	Size			Accessaries		Corresponding Insert
	L	H	F	Screw	Wrenth	
KM10-KX618R	22	10	12	KS-4008-T	KW-T15	KX618□R□□
KM12-KX618R	22	12	12	KS-4008-T	KW-T15	KX618□R□□
KM16-KX618R	23	19	16	KS-4008-T	KW-T15	KX618□R□□

High Performance Cutting tools R & D Manufacturer

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reddot winner 2025

The 2025 German Red Dot Product Design Award Winner

KX6 STABLE CLAMPING SIX HEADS INSERTS

- Six effective cutting edges are more economical
- Embedded positioning slot installation is more stable
- A wide variety of tool types (grooving, parting, back turning, threading, interpolating)
- Multiple functional insert types can be fitted in with the same toolholder

KX618

Stable clamping 6 heads series

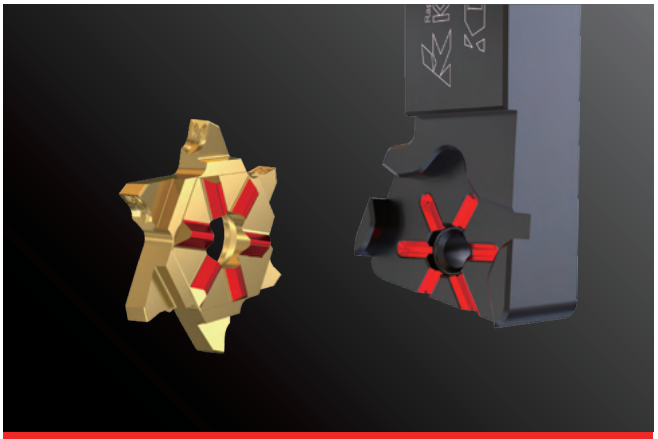
FEATURES AND ADVANTAGES

6 Cutting Edges

Much economical as its cutting edges are as twice as triangular inserts

Multiple Tools for Different Purposes

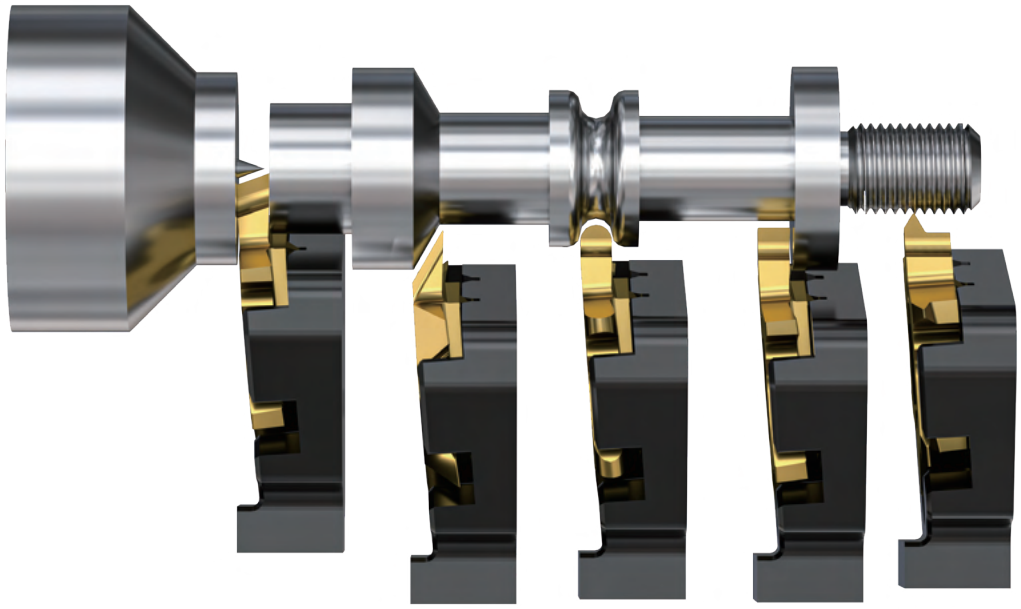
Available with grooving, threading, back-turning, parting, arc grooving and etc



Strengthened Zero-point Locating Slot Design

"*" Shape locating slots make the clamping the machining more stable

Processing Application



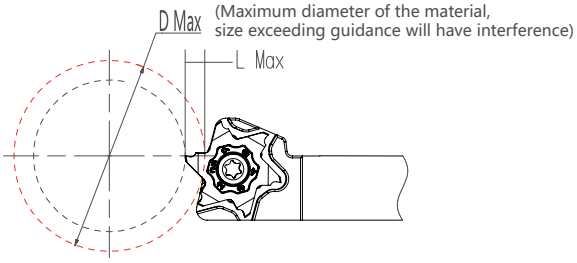
Parting | Back-turning | Profiling | Grooving | Threading

● Notice

1.Maximum diameter of parting is 7MM

2.Maximum groove depth is 3.5mm, groove depth varies according to the diameter of the material, please refer to the figure below

Dmax	32	42	51	65	100
Lmax	3.5	3.3	3.2	3.0	2.5



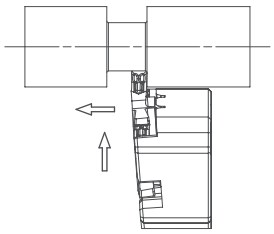
Symbols of KX618 Grooving Tools

Series	Insert Type	Insert Direction	Edge Width	Effective Cutting Depth	Nose Radius	Edge Treatments	
	GT: Side Grooving Tools		025：0.25	250: 2.5	035: R0.35	N/A: Strengthened Edge F: Sharpened Edge	
KX618: KX618 Series	G: Grooving Tools	R: Right Handed	125：1.25	300: 3.0	005: R0.05	E: Passivated Edge	GM：Groove Profile
KX618	G	R	125	300	005	F	GM

GM Super Cutter

New

Application Examples

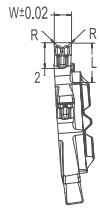


◆ Recommended

◈ Suitable

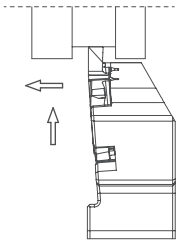
◇ Applicable

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

Shape Right Handed Tool		Type	Size			Carbide with PVD Coating							Carbide
			W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX618GTR 150-350-005-GM	1.5	3.5	0.05		●	●					
		KX618GTR 150-350-010-GM	1.5	3.5	0.1		●	●					
		KX618GTR 150-350-020-GM	1.5	3.5	0.2		●	●					
		KX618GTR 200-350-010-GM	2	3.5	0.1		●	●					
		KX618GTR 200-350-020-GM	2	3.5	0.2		●	●					

GTR Side Grooving Tools

Application Examples

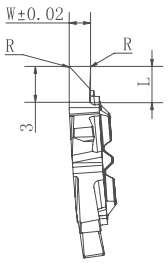


◆ Recommended

◈ Suitable

◇ Applicable

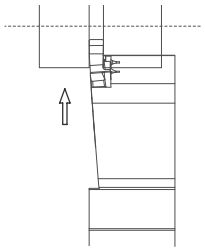
P	Soft Steel	◆	◇	◈		◆	◆		
	Carbon Steel/ Alloy Steel	◆	◇	◈		◈	◆		
M	Austenitic	◆	◆	◆	◆	◆			
	Martensitic	◇	◆	◆	◆	◆			
K	Grey Cast Iron			◇					
	Ductile Cast Iron			◇					
N	Nonferrous							◆	◆
S	Heat Resisting Alloy		◆	◈	◆	◆			
	Titanium Alloy		◆	◈	◆	◆			
H	Hardened Materials			◈					

Shape Right Handed Tool		Type	Size			Carbide with PVD Coating							Carbide
			W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX618GTR 100-250-005	1	2.5	0.05		●	●					
		KX618GTR 100-250-010	1	2.5	0.1		●	●					
		KX618GTR 125-300-010	1.25	3	0.1		●	●					
		KX618GTR 150-350-010	1.5	3.5	0.1		●	●					
		KX618GTR 150-350-020	1.5	3.5	0.2		●	●					
		KX618GTR 175-350-010	1.75	3.5	0.1		●	●					
		KX618GTR 175-350-020	1.75	3.5	0.2		●	●					
		KX618GTR 200-350-010	2	3.5	0.1		●	●					
		KX618GTR 200-350-020	2	3.5	0.2		●	●					

Grades: ◆Recommended ◈Suitable ◇Applicable ●Standard Stock

GR Grooving Tools

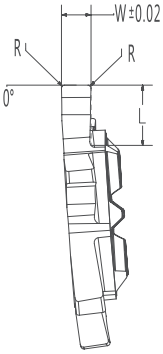
Application Examples



◆ Recommended
◈ Suitable
◇ Applicable

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

Shape
Right Handed Tool

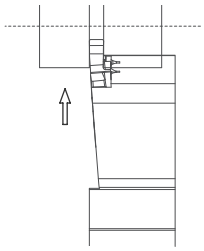


Type	Size			Carbide with PVD Coating							Carbide
	W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
KX618GR 050-150-005	0.5	1.5	0.05		●	●					
KX618GR 060-150-005	0.6	1.5	0.05		●	●					
KX618GR 070-150-005	0.7	1.5	0.05		●	●					
KX618GR 075-150-005	0.75	1.5	0.05		●	●					
KX618GR 070-200-005	0.7	2.0	0.05		●	●					
KX618GR 075-200-005	0.75	2.0	0.05		●	●					
KX618GR 080-200-005	0.8	2.0	0.05		●	●					
KX618GR 090-200-005	0.9	2.0	0.05		●	●					
KX618GR 100-200-005	1.0	2.0	0.05		●	●					
KX618GR 100-200-010	1.0	2.0	0.1		●	●					
KX618GR 110-200-005	1.1	2.0	0.05		●	●					
KX618GR 110-200-010	1.1	2.0	0.1		●	●					
KX618GR 120-200-005	1.2	2.0	0.05		●	●					
KX618GR 120-200-010	1.2	2.0	0.1		●	●					
KX618GR 125-200-005	1.25	2.0	0.05		●	●					
KX618GR 125-200-005F New	1.25	2.0	0.05		●	●					
KX618GR 125-200-010	1.25	2.0	0.1		●	●					
KX618GR 130-200-010	1.3	2.0	0.1		●	●					
KX618GR 130-200-020	1.3	2.0	0.2		●	●					
KX618GR 140-200-010	1.4	2.0	0.1		●	●					
KX618GR 140-200-020	1.4	2.0	0.2		●	●					
KX618GR 150-200-010	1.5	2.0	0.1		●	●					
KX618GR 150-200-010F New	1.5	2.0	0.1		●	●					
KX618GR 150-200-020	1.5	2.0	0.2		●	●					
KX618GR 160-200-010	1.6	2.0	0.1		●	●					
KX618GR 160-200-020	1.6	2.0	0.2		●	●					
KX618GR 170-200-010	1.7	2.0	0.1		●	●					
KX618GR 170-200-020	1.7	2.0	0.2		●	●					
KX618GR 175-200-010	1.75	2.0	0.1		●	●					
KX618GR 175-200-010F New	1.75	2.0	0.1		●	●					
KX618GR 175-200-020	1.75	2.0	0.2		●	●					
KX618GR 100-300-005	1.0	3.0	0.05		●	●					
KX618GR 100-300-005F New	1.0	3.0	0.05		●	●					
KX618GR 100-300-010	1.0	3.0	0.1		●	●					
KX618GR 100-300-010E New	1.0	3.0	0.1		●	●					
KX618GR 110-300-005	1.1	3.0	0.05		●	●					
KX618GR 110-300-010	1.1	3.0	0.1		●	●					
KX618GR 120-300-005	1.2	3.0	0.05		●	●					
KX618GR 120-300-010	1.2	3.0	0.1		●	●					
KX618GR 125-300-005	1.25	3.0	0.05		●	●					
KX618GR 125-300-005F New	1.25	3.0	0.05		●	●					
KX618GR 125-300-010	1.25	3.0	0.1		●	●					
KX618GR 125-300-010E New	1.25	3.0	0.1		●	●					
KX618GR 130-300-010	1.3	3.0	0.1		●	●					
KX618GR 130-300-020	1.3	3.0	0.2		●	●					
KX618GR 140-300-010	1.4	3.0	0.1		●	●					
KX618GR 140-300-020	1.4	3.0	0.2		●	●					
KX618GR 150-300-010	1.5	3.0	0.1		●	●					
KX618GR 150-300-010F New	1.5	3.0	0.1		●	●					
KX618GR 150-300-020	1.5	3.0	0.2		●	●					
KX618GR 150-300-020E New	1.5	3.0	0.2		●	●					
KX618GR 160-300-010	1.6	3.0	0.1		●	●					
KX618GR 160-300-020	1.6	3.0	0.2		●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

GR Grooving Tools

Application Examples



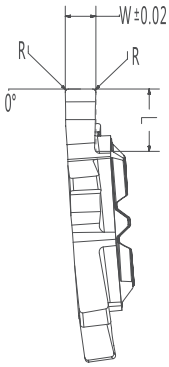
◆ Recommended

◈ Suitable

◇ Applicable

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

Shape
Right Handed Tool



Type	Size W	L	R	Carbide with PVD Coating KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	Carbide KCN10
KX618GR 170-300-010	1.7	3.0	0.1		●	●					
KX618GR 170-300-020	1.7	3.0	0.2		●	●					
KX618GR 175-300-010	1.75	3.0	0.1		●	●					
KX618GR 175-300-010F New	1.75	3.0	0.1		●	●					
KX618GR 175-300-010E New	1.75	3.0	0.1		●	●					
KX618GR 175-300-020	1.75	3.0	0.2		●	●					
KX618GR 180-300-010	1.8	3.0	0.1		●	●					
KX618GR 180-300-020	1.8	3.0	0.2		●	●					
KX618GR 190-300-010	1.9	3.0	0.1		●	●					
KX618GR 190-300-020	1.9	3.0	0.2		●	●					
KX618GR 200-300-010	2.0	3.0	0.1		●	●					
KX618GR 200-300-010F New	2.0	3.0	0.1		●	●					
KX618GR 200-300-020	2.0	3.0	0.2		●	●					
KX618GR 200-300-020E New	2.0	3.0	0.2		●	●					
KX618GR 210-300-010	2.1	3.0	0.1		●	●					
KX618GR 210-300-020	2.1	3.0	0.2		●	●					
KX618GR 220-300-010	2.2	3.0	0.1		●	●					
KX618GR 220-300-020	2.2	3.0	0.2		●	●					
KX618GR 230-300-010	2.3	3.0	0.1		●	●					
KX618GR 230-300-020	2.3	3.0	0.2		●	●					
KX618GR 240-300-010	2.4	3.0	0.1		●	●					
KX618GR 240-300-020	2.4	3.0	0.2		●	●					
KX618GR 250-300-010	2.5	3.0	0.1		●	●					
KX618GR 250-300-010F New	2.5	3.0	0.1		●	●					
KX618GR 250-300-020	2.5	3.0	0.2		●	●					
KX618GR 150-350-010	1.5	3.5	0.1		●	●					
KX618GR 150-350-010F New	1.5	3.5	0.1		●	●					
KX618GR 150-350-020	1.5	3.5	0.2		●	●					
KX618GR 150-350-020E New	1.5	3.5	0.2		●	●					
KX618GR 160-350-010	1.6	3.5	0.1		●	●					
KX618GR 160-350-020	1.6	3.5	0.2		●	●					
KX618GR 170-350-010	1.7	3.5	0.1		●	●					
KX618GR 170-350-020	1.7	3.5	0.2		●	●					
KX618GR 175-350-010	1.75	3.5	0.1		●	●					
KX618GR 175-350-010F New	1.75	3.5	0.1		●	●					
KX618GR 175-350-020	1.75	3.5	0.2		●	●					
KX618GR 175-350-020E New	1.75	3.5	0.2		●	●					
KX618GR 180-350-010	1.8	3.5	0.1		●	●					
KX618GR 180-350-020	1.8	3.5	0.2		●	●					
KX618GR 190-350-010	1.9	3.5	0.1		●	●					
KX618GR 190-350-020	1.9	3.5	0.2		●	●					
KX618GR 200-350-010	2.0	3.5	0.1		●	●					
KX618GR 200-350-010F New	2.0	3.5	0.1		●	●					
KX618GR 200-350-020	2.0	3.5	0.2		●	●					
KX618GR 200-350-020E New	2.0	3.5	0.2		●	●					
KX618GR 210-350-010	2.1	3.5	0.1		●	●					
KX618GR 210-350-020	2.1	3.5	0.2		●	●					
KX618GR 220-350-010	2.2	3.5	0.1		●	●					
KX618GR 220-350-020	2.2	3.5	0.2		●	●					
KX618GR 230-350-010	2.3	3.5	0.1		●	●					
KX618GR 230-350-020	2.3	3.5	0.2		●	●					
KX618GR 240-350-010	2.4	3.5	0.1		●	●					
KX618GR 240-350-020	2.4	3.5	0.2		●	●					
KX618GR 250-350-010	2.5	3.5	0.1		●	●					
KX618GR 250-350-010F New	2.5	3.5	0.1		●	●					
KX618GR 250-350-020	2.5	3.5	0.2		●	●					
KX618GR 250-350-020E New	2.5	3.5	0.2		●	●					

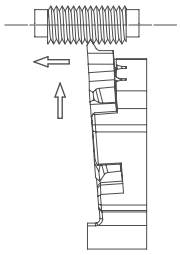
Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

Symbols of KX618 Threading Tools

			040: 0.4	A: Left				005: R0.05
			080: 0.8	B: Right		55: 55°		010: R0.1
KX618: KX618 Series	T: Threading Tools	R: Right Handed	125: 1.25	N: Central		60: 60°		020: R0.2
Series	**Insert Type**	**Insert Direction**	**Tip Width**	**Blade Shape**	**-**	**Thread Angle**	**-**	**Nose Radius**
KX618	T	R	125	A	-	60	-	005

TR Threading Tools

Application Examples

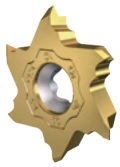
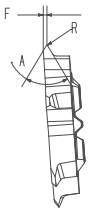
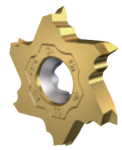
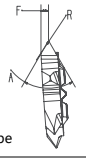


◆ Recommended

◆ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size					Carbide with PVD Coating							Carbide
			F	A	R	Pitch (mm)	Teeth /inch	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
	 A Type	KX618TR 040-A-60-005	0.4	60°	0.05	0.2~0.75	127~34		●	●					
		KX618TR 040-A-60-010	0.4	60°	0.1	0.2~0.75	127~34		●	●					
		KX618TR 040-A-60-020	0.4	60°	0.2	0.2~0.75	127~34		●	●					
		KX618TR 080-A-60-005	0.8	60°	0.05	0.4~1.25	63~21		●	●					
		KX618TR 080-A-60-010	0.8	60°	0.1	0.4~1.25	63~21		●	●					
		KX618TR 080-A-60-020	0.8	60°	0.2	0.4~1.25	63~21		●	●					
		KX618TR 080-A-55-005	0.8	55°	0.05		40~16		●	●					
		KX618TR 080-A-55-010	0.8	55°	0.1		24~20		●	●					
	 B Type	KX618TR 040-B-60-005	0.4	60°	0.05	0.2~0.75	127~34		●	●					
		KX618TR 040-B-60-010	0.4	60°	0.1	0.2~0.75	127~34		●	●					
		KX618TR 040-B-60-020	0.4	60°	0.2	0.2~0.75	127~34		●	●					
		KX618TR 080-B-60-005	0.8	60°	0.05	0.4~1.25	63~21		●	●					
		KX618TR 080-B-60-010	0.8	60°	0.1	0.4~1.25	63~21		●	●					
		KX618TR 080-B-60-020	0.8	60°	0.2	0.4~1.25	63~21		●	●					
		KX618TR 080-B-55-005	0.8	55°	0.05		40~16		●	●					
		KX618TR 080-B-55-010	0.8	55°	0.1		24~20		●	●					
	 N Type	KX618TR 125-N-60-015	1.25	60°	0.15	1.0~1.25	25~17		●	●					
		KX618TR 125-N-60-020	1.25	60°	0.2	1.0~1.25	25~17		●	●					
		KX618TR 125-N-55-015	1.25	55°	0.15		20-11		●	●					

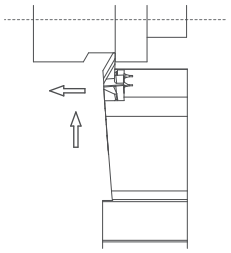
Grades: ◆ Recommended ◆ Suitable ◇ Applicable ● Standard Stock

Symbols of KX618 Back-turning Tools

Series	Insert Type	Insert Direction	Nose Radius	With Chipbreaking Slot	Edge Treatments
KX618: KX618 Series	B: Back-turning	R: Right Handed	005: R0.05 010: R0.1 015: R0.15		N/A: Strengthened Edge F: Sharpened Edge E: Passivated Edge
KX618	B	R	005	S	F

TB Back-turnning Tools

Application Examples

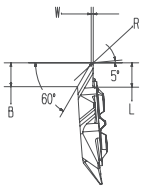


◆ Recommended

◈ Suitable

◇ Applicable

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

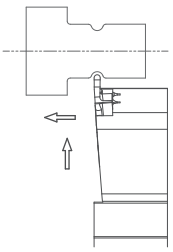
Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	L	R	B	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX618BR 005-S	0.3	3.5	<0.05	3.5		●	●					
		KX618BR 010-S	0.3	3.5	<0.1	3.5		●	●					
		KX618BR 015-S	0.3	3.5	<0.15	3.5		●	●					
		KX618BR 020-SE New	0.3	3.5	<0.2	3.5		●	●					

Symbols of KX618 Circular Grooving Tools

			050: R0.5		150: 1.5
			125: R1.25		200: 2.0
KX618: KX618 Series	R: Circular Grooving Tools	R: Right Handed			350: 3.5
Series	**Insert Type**	**Insert Direction**	**Nose Radius**	**-**	**Effective Cutting Depth**
KX618	R	R	050	-	200

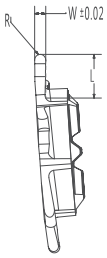
RR Circular Grooving Tools

Application Examples



◆ Recommended
◈ Suitable
◇ Applicable

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

Shape Right Handed Tool		Type	Size			Carbide with PVD Coating							Carbide
			W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX618RR 035-150	0.7	1.5	0.35		●	●					
		KX618RR 050-200	1.0	2.0	0.5		●	●					
		KX618RR 060-200	1.2	2.0	0.6		●	●					
		KX618RR 075-350	1.5	3.5	0.75		●	●					
		KX618RR 100-350	2.0	3.5	1.0		●	●					
		KX618RR 125-350	2.5	3.5	1.25		●	●					

Grades: ◆Recommended ◈Suitable ◇Applicable ●Standard Stock

Symbols of KX618 Flat Parting Tools

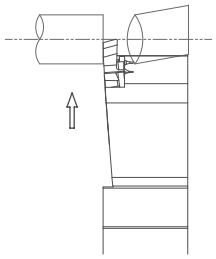
			050: 0.5		S: R0.03-R0.05	N/A: Strengthened Edge F: Sharpened Edge
KX618: KX618 Series	C: Parting Tools	R: Right Handed	125: 1.25		P: R0.08	E: Passivated Edge
Series	**Parting Tools**	**Insert Direction**	**Edge Width**	**-**	**Nose Radius**	**Edge Treatments**
KX618	C	R	125	-	S	F

Symbols of KX618 Parting Tools With Lead Angle

				20D: 20°		N: Without Chipbreaking Slot and Nose Radius	N/A: Strengthened Edge
			050: 0.5	16D: 16°	R: With Right Tead Angle	S: R0.03-R0.05	F: Sharpened Edge
KX618: KX618 Series	C: Parting Tools	R: Right Handed	125: 1.25	11D: 11°	L: With Left Lead Angle	P: R0.08	E: Passivated Edge
Series	**Insert Type**	**Insert Direction**	**Edge Width**	**Lead Angle**	**Lead Direction**	**Nose Radius/other**	**Edge Treatments**
KX618	C	R	125	16D	R	S	F

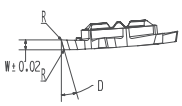
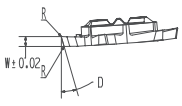
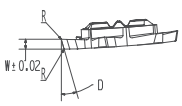
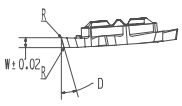
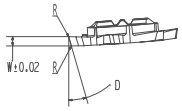
CR Parting Tools

Application Examples



◆ Recommended
◈ Suitable
◇ Applicable

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

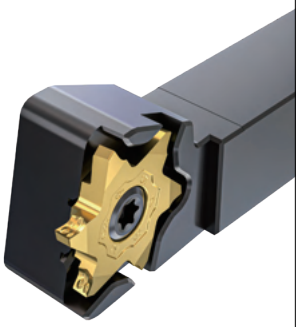
Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	Maximum Diameter of parting (DMax)	R	D	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
 flat		KX618CR 050-S	0.5	7	0.03-0.05	0°		●	●					
		KX618CR 070-S	0.7	7	0.03-0.05	0°		●	●					
		KX618CR 100-S	1.0	7	0.03-0.05	0°		●	●					
		KX618CR 125-S	1.25	7	0.03-0.05	0°		●	●					
		KX618CR 125-SE New	1.25	7	0.03-0.05	0°		●	●					
		KX618CR 150-S	1.5	7	0.03-0.05	0°		●	●					
		KX618CR 150-SE New	1.5	7	0.03-0.05	0°		●	●					
 flat strengthened edge		KX618CR 100-P	1.0	3	0.08±0.01	0°		●	●					
		KX618CR 125-P	1.25	7	0.08±0.01	0°		●	●					
		KX618CR 125-PE New	1.25	7	0.08±0.01	0°		●	●					
		KX618CR 150-P	1.5	7	0.08±0.01	0°		●	●					
		KX618CR 150-PE New	1.5	7	0.08±0.01	0°		●	●					
 with right lead angle		KX618CR 100-11DR-S	1.0	3	0.03-0.05	11°		●	●					
		KX618CR 125-11DR-S	1.25	7	0.03-0.05	11°		●	●					
		KX618CR 150-11DR-S	1.5	7	0.03-0.05	11°		●	●					
 with right lead angle strengthened edge		KX618CR 100-11DR-P	1.0	3	0.08±0.01	11°		●	●					
		KX618CR 125-11DR-P	1.25	7	0.08±0.01	11°		●	●					
		KX618CR 150-11DR-P	1.5	7	0.08±0.01	11°		●	●					
 with right lead angle		KX618CR 050-16DR-S	0.5	3	0.03-0.05	16°		●	●					
		KX618CR 070-16DR-S	0.7	3	0.03-0.05	16°		●	●					
		KX618CR 100-16DR-S	1.0	3	0.03-0.05	16°		●	●					
		KX618CR 125-16DR-S	1.25	7	0.03-0.05	16°		●	●					
		KX618CR 150-16DR-S	1.5	7	0.03-0.05	16°		●	●					
 with right lead angle strengthened edge		KX618CR 100-16DR-P	1.0	3	0.08±0.01	16°		●	●					
		KX618CR 125-16DR-P	1.25	7	0.08±0.01	16°		●	●					
		KX618CR 150-16DR-P	1.5	7	0.08±0.01	16°		●	●					
 with right lead angle without chipbreaking slot		KX618CR 070-20DR-N	0.7	3	0	20°		●	●					
		KX618CR 100-20DR-N	1.0	7	0	20°		●	●					
		KX618CR 125-20DR-N	1.25	7	0	20°		●	●					
		KX618CR 150-20DR-N	1.5	7	0	20°		●	●					

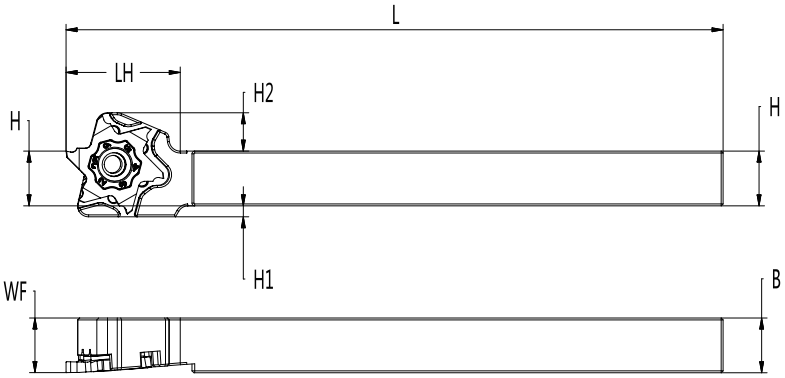
Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

Symbols of KX618 Tool Holders

					M: 150
					JX: 120
					J: 110
KX618: KX618 Series	R: Right Handed				H: 100
Series	**Holder Direction**	**-**	**Tool Height**	**Tool Width**	**Tool Length**
KX618	R	-	12	12	JX

KX618 Holders





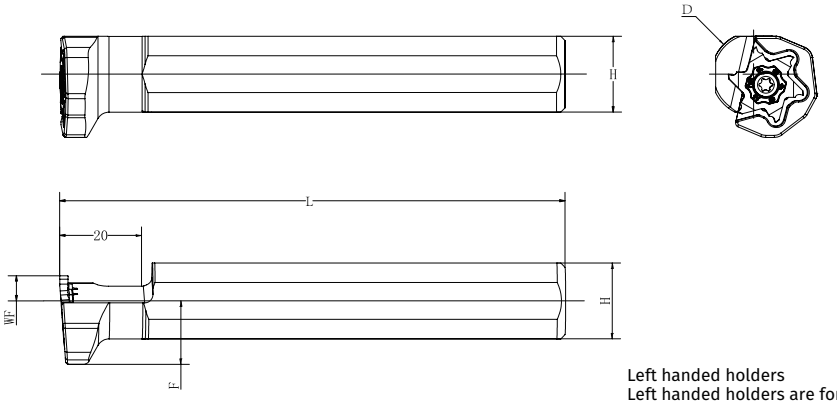
Right Handed Tool holder (R)

Type	Size(mm)							Accessaries		Corresponding Insert
	H	B	L	LH	WF	H1	H2	Screw	Wrenth	
KX618R -1010JX	10	10	120	20	10	2	7	KS-4008-T	KW-T15	KX618□R □□□
KX618R -1212JX	12	12	120	20	12	0	7	KS-4008-T	KW-T15	KX618□R □□□
KX618R -1616JX	16	16	120	20	16	0	7	KS-4008-T	KW-T15	KX618□R □□□
KX618R -2020JX	20	20	120	20	20	0	7	KS-4008-T	KW-T15	KX618□R □□□
KX618R -2525M	25	25	150	20	25	0	7	KS-4008-T	KW-T15	KX618□R □□□

S-KX618-F Holders

	14: Diameter 14						
	15: Diameter 15.875						
	16: Diameter 16						
	19: Diameter 19.05						
	20: Diameter 20	M: 150					
	22: Diameter 22	JX:120					
	25: Diameter 25	J: 110					
S: Screw Clamping	254: Diameter 25.4	H: 100		KX618: KX618 Series	L: Left Handed		F: For Turret Lathe
Clamping Method	**Diameter of Toolholders**	**Tool Length**	**-**	**Series**	**Holder Direction**	**-**	**others**
S	**20**	**JX**	**-**	**KX618**	**L**	**-**	**F**

Tool Holder for S-KX618-F (collet holders for external machining)



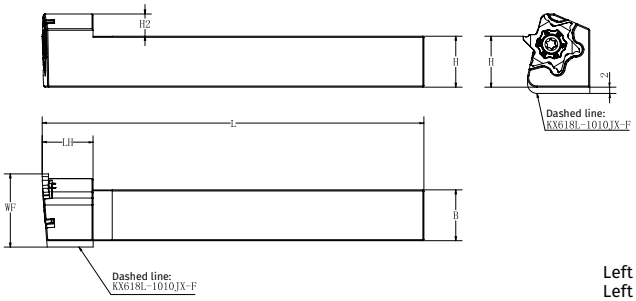
Left handed holders
Left handed holders are for right hand inserts

Type	Size(mm)					Accessaries		Corresponding Insert
	D	H	WF	L	F	Screw	Wrenth	
S14H-KX618L-F	14	13	6	100	15	KS-4008-T	KW-T15	KX618□R □□□
S16G-KX618L-F	16	15	6	95	15	KS-4008-T	KW-T15	KX618□R □□□
S19JX-KX618L-F	19.05	18	6	120	15	KS-4008-T	KW-T15	KX618□R □□□
S20JX-KX618L-F	20	19	6	120	15	KS-4008-T	KW-T15	KX618□R □□□
S22JX-KX618L-F	22	21	10	120	11	KS-4008-T	KW-T15	KX618□R □□□
S25H-KX618L-F	25	24	10	100	11	KS-4008-T	KW-T15	KX618□R □□□
S254JX-KX618L-F	25.4	24	10	120	11	KS-4008-T	KW-T15	KX618□R □□□

Symbols of KX618-F

					JX: 120 J: 110 H: 100		
KX618: KX618 Series	L: left handed						F: for turret lathe
Series	**Holder Direction**	**-**	**Holder Heigh**	**Tool Width**	**Tool Length**	**-**	**Others**
KX618	L	-	12	12	JX	-	F

KX618-F Holders



Left handed holders
Left handed holders are for right hand inserts

Type	Size(mm)						Accessaries		Corresponding Insert
	H	B	L	LH	H2	WF	Screw	Wrenth	
KX618L-1212JX-F	12	12	120	16	9	19	KS-4008-T	KW-T15	KX618□R □□□
KX618L-1616JX-F	16	16	120	16	9	21	KS-4008-T	KW-T15	KX618□R □□□
KX618L-2020JX-F	20	20	120	16	9	25	KS-4008-T	KW-T15	KX618□R □□□

Recommend Parameters For Machining-KX618

GM Super Cutter		
Edge Width	Radial Feed f(mm/rev)	Parameters for Cross Feed
1.5-2.0	0.04-0.1	AP: W*0.5 f: 0.04-0.1

GTR Back-turning Tools		
Edge Width	Radial Feed f(mm/rev)	Parameters for Cross Feed
1.0-1.5	0.01-0.05	AP: W*0.2 f: 0.01-0.03
1.75-2.0	0.02-0.08	AP: W*0.2 f: 0.02-0.07

GR Grooving Tools	
Edge Width	Feeding Speed f(mm/rev)
0.5-1.2	0.02-0.06
1.25-2.5	0.02-0.07

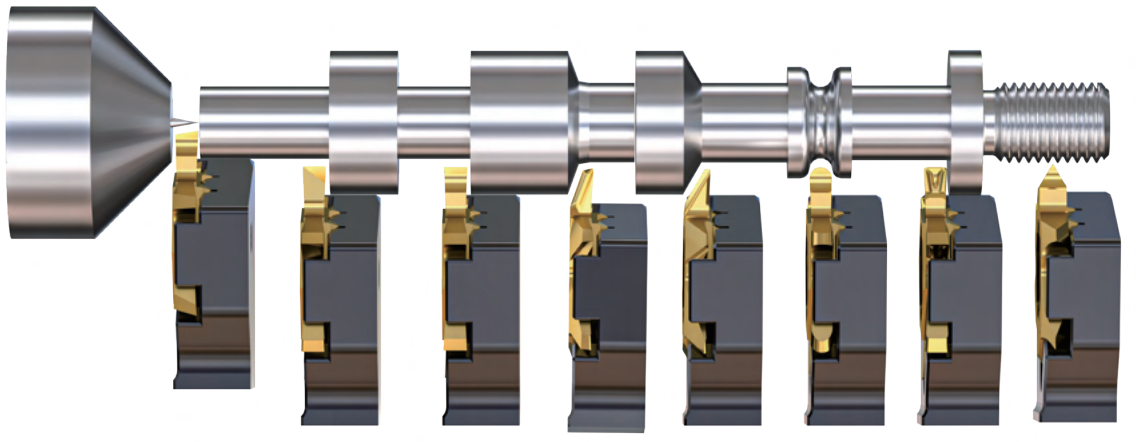
TR Threading Tools	
Type	Cutting Depth Ap(mm)
A-Type	0.02-0.05
B-Type	0.02-0.05
N-Type	0.03-0.08

BR Back-turning Tools	
Cutting Depth Ap(mm)	Feeding Speed f(mm/rev)
0.05-3.5	0.02-0.08

RR Circular Grooving Tools	
Edge Width	Feeding Speed f(mm/rev)
0.7-1.5	0.02-0.06
2.0-2.5	0.03-0.07

CR Parting Tools	
Edge Width	Feeding Speed f(mm/rev)
0.5-1.0	0.008-0.04
1.25-1.5	0.015-0.06

Processing Application

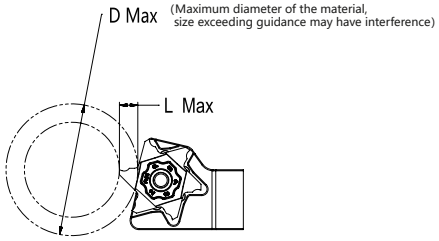


● Notice

1.Maximum diameter of parting is 7MM

2.Maximum groove depth is 3.5mm, groove depth varies according to the diameter of the material, please refer to the figure below

Dmax	32	42	51	65	100
Lmax	6	5.8	5.7	5.6	5.1



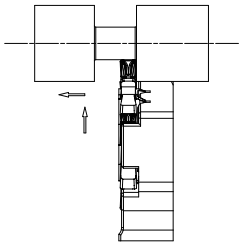
Symbols of KX628 Grooving Tools

	GT: Back-turning Tools		025: 0.25		250: 2.5		035: R0.35		
KX628: KX628 Series	G: Grooving Tools	R: Right Handed	125: 1.25		300: 3.0		005: R0.05		TM: Groove Profile
Series	**Insert Type**	**Insert Direction**	**Edge Width**	**-**	**Effective Cutting Depth**	**-**	**Nose Radius**	**-**	
KX628	**G**	**R**	**125**	**-**	**300**	**-**	**005**	**-**	**TM**

TM Super Cutter

New

Application Examples

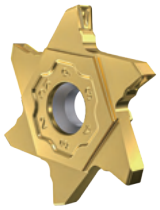
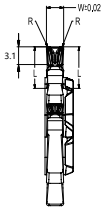


◆ Recommended

◈ Suitable

◇ Applicable

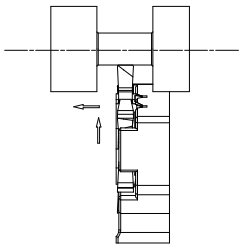
P	Soft Steel	◆	◇	◈		◆	◆		
	Carbon Steel/ Alloy Steel	◆	◇	◈		◈	◆		
M	Austenitic	◆	◆	◆	◆	◆			
	Martensitic	◇	◆	◆	◆	◆			
K	Grey Cast Iron			◇					
	Ductile Cast Iron			◇					
N	Nonferrous							◆	◆
S	Heat Resisting Alloy		◆	◈	◆	◆			
	Titanium Alloy		◆	◈	◆	◆			
H	Hardened Materials			◈					

Shape Right Handed Tool		Type	Size			Carbide with PVD Coating							Carbide
			W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX628GTR 300-600-005-TM	3	6	0.05	●	●						
		KX628GTR 300-600-010-TM	3	6	0.1	●	●						
		KX628GTR 300-600-020-TM	3	6	0.2	●	●						
		KX628GTR 300-600-030-TM	3	6	0.3	●	●						
		KX628GTR 300-600-040-TM	3	6	0.4	●	●						

GTR Back-turning Tools

New

Application Examples

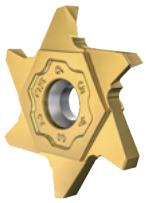
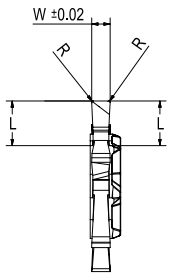


◆ Recommended

◈ Suitable

◇ Applicable

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

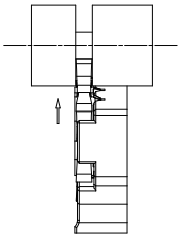
Shape Right Handed Tool		Type	Size			Carbide with PVD Coating							Carbide
			W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX628GTR 150-600-010	1.5	6	0.1	●	●						
		KX628GTR 150-600-020	1.5	6	0.2	●	●						
		KX628GTR 175-600-010	1.75	6	0.1	●	●						
		KX628GTR 175-600-020	1.75	6	0.2	●	●						
		KX628GTR 200-600-010	2	6	0.1	●	●						
		KX628GTR 200-600-020	2	6	0.2	●	●						
		KX628GTR 250-600-010	2.5	6	0.1	●	●						
		KX628GTR 250-600-020	2.5	6	0.2	●	●						
		KX628GTR 300-600-010	3	6	0.1	●	●						
		KX628GTR 300-600-020	3	6	0.2	●	●						
		KX628GTR 300-600-030	3	6	0.3	●	●						
		KX628GTR 300-600-040	3	6	0.4	●	●						

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

GR Grooving Tools

New

Application Examples

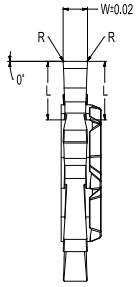


◆ Recommended

◈ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size			Carbide with PVD Coating							Carbide
			W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX628GR 100-400-010	1	4	0.1	●	●						
		KX628GR 100-400-020	1	4	0.2	●	●						
		KX628GR 150-450-010	1.5	4.5	0.1	●	●						
		KX628GR 150-450-020	1.5	4.5	0.2	●	●						
		KX628GR 150-600-010	1.5	6	0.1	●	●						
		KX628GR 150-600-020	1.5	6	0.2	●	●						
		KX628GR 200-600-010	2	6	0.1	●	●						
		KX628GR 200-600-020	2	6	0.2	●	●						
		KX628GR 250-600-010	2.5	6	0.1	●	●						
		KX628GR 250-600-030	2.5	6	0.3	●	●						
		KX628GR 265-600-030	2.65	6	0.3	●	●						
		KX628GR 280-600-030	2.8	6	0.3	●	●						
		KX628GR 300-600-010	3	6	0.1	●	●						
		KX628GR 300-600-030	3	6	0.3	●	●						
		KX628GR 300-600-040	3	6	0.4	●	●						

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

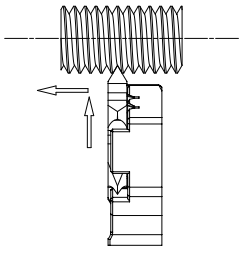
Symbols of KX628 Threading Tools

			040: 0.4	A: Left				005: R0.05
			080: 0.8	B: Right		55: 55°		010: R0.1
KX628: KX628 Series	T: Threading Tools	R: Right Handed	125: 1.25	N: Central		60: 60°		020: R0.2
Series	**Insert Type**	**Insert Direction**	**Tip Width**	**Blade Shape**	**-**	**Thread Angle**	**-**	**Nose Radius**
KX628	T	R	125	A	-	60	-	005

TR Threading Tools

New

Application Examples

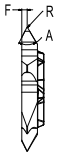
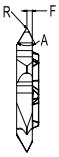
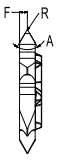


◆ Recommended

◆ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size					Carbide with PVD Coating							Carbide
			F	A	R	Pitch (mm)	Teeth /inch	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
	 A Type	KX628TR 120-A-60-010	1.2	60°	0.1	0.8~2.0	25~17	●	●						
		KX628TR 120-A-60-020	1.2	60°	0.2	1.5~2.0	16~13	●	●						
		KX628TR 120-A-55-010	1.2	55°	0.1		19~11	●	●						
		KX628TR 120-A-55-020	1.2	55°	0.2			●	●						
	 B Type	KX628TR 120-B-60-010	1.2	60°	0.1	0.8~2.0	25~17	●	●						
		KX628TR 120-B-60-020	1.2	60°	0.2	1.5~2.0	16~13	●	●						
		KX628TR 120-B-55-010	1.2	55°	0.1		19~11	●	●						
		KX628TR 120-B-55-020	1.2	55°	0.2			●	●						
	 N Type	KX628TR 165-N-60-010	1.65	60°	0.1	1.0~1.5	25~17	●	●						
		KX628TR 165-N-60-015	1.65	60°	0.15	1.0~1.5	25~17	●	●						
		KX628TR 165-N-60-020	1.65	60°	0.2	1.5~3.0	16~7	●	●						
		KX628TR 165-N-55-010	1.65	55°	0.1		24~10	●	●						
		KX628TR 165-N-55-015	1.65	55°	0.15			●	●						
		KX628TR 165-N-55-020	1.65	55°	0.2		14~10	●	●						

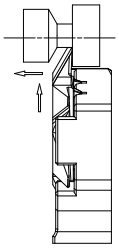
Grades: ◆ Recommended ◆ Suitable ◇ Applicable ● Standard Stock

Symbols of KX628 Back-turning Tools

			005: R0.05		
			010: R0.1		BF: Bf Geometry
KX628: KX628 Series	B: Back-turning	R: Right Handed	015: R0.15		S: Polished Chip Breaker
Series	**Insert Type**	**Insert Direction**	**Nose Radius**	**-**	**Groove Profile**
KX628	B	R	005	-	S

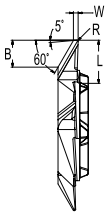
BR Back-turning Tools New

Application Examples



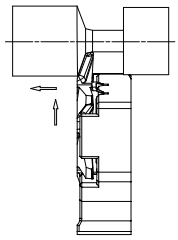
◆ Recommended ◈ Suitable ◇ Applicable

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

Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	L	R	B	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX628BR 005-S	0.5	6	<0.05	4.5	●	●						
		KX628BR 015-S	0.5	6	<0.15	4.5	●	●						
		KX628BR 020-S	0.5	6	<0.2	4.5	●	●						

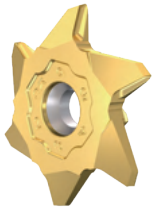
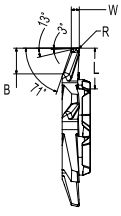
BF Back-turnning Tools New

Application Examples



◆ Recommended ◈ Suitable ◇ Applicable

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

Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	L	R	B	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX628BR 005-BF	0.5	6	<0.05	4.5	●	●						
		KX628BR 015-BF	0.5	6	<0.15	4.5	●	●						
		KX628BR 020-BF	0.5	6	<0.2	4.5	●	●						

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

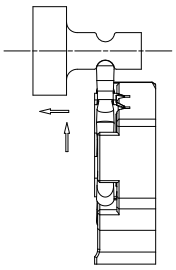
Symbols of KX628 Circular Grooving Tools

						150: 1.5
				050: R0.5		200: 2.0
KX628: KX628 Series	R: Circular grooving Tools	R: Right Handed		125: R1.25		350: 3.5
Series	**Insert Type**	**Insert Direction**		**Nose Radius**	**-**	**Effective Cutting Depth**
KX628	R	R		050	-	200

RR Circular Grooving Tools

New

Application Examples

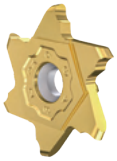


◆ Recommended

◆ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size			Carbide with PVD Coating							Carbide
			W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX628RR 100-600	2	6	1	●	●						
		KX628RR 125-600	2.5	6	1.25	●	●						
		KX628RR 150-600	3	6	1.5	●	●						
		KX628RR 159-600	3.18	6	1.59	●	●						

Grades: ◆Recommended ◆Suitable ◇Applicable ●Standard Stock

Symbols of KX628 Flat Parting Tools

KX628: KX628 Series	C: Parting Tools	R: Right Handed		125: 1.25		
Series	**Insert Type**	**Insert Direction**		**Edge Width**	**-**	**Strengthened Tip Nose**
KX628	C	R		125	-	P

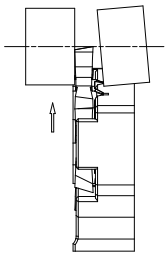
Symbols of KX628 Parting Tools With Lead Angle

				16D: 16°	R: Right Leaded			
KX628: KX628Series	C: Parting Tools	R: Right Handed	125: 1.25	11D: 11°	L: Left Leaded			
Series	**Insert Type**	**Insert Direction**	**Edge Width**	**Lead Angle**	**Lead Direction**	**-**	**Strengthened Tip Nose**	
KX628	C	R	125	16D	R	-	P	

CR Parting Tools

New

Application Examples

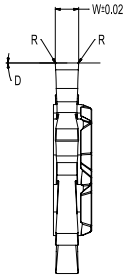
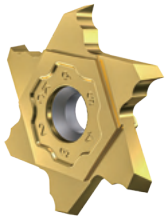
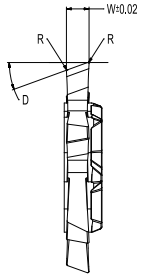


◆ Recommended

◈ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	Maximum Diameter of parting (DMax)	R	D	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX628CR 100-P	1	12	0.08-0.1	0°	●	●						
		KX628CR 125-P	1.25	12	0.15	0°	●	●						
		KX628CR 150-P	1.5	12	0.15	0°	●	●						
		KX628CR 100-11DR-P	1	12	0.08-0.1	11°	●	●						
		KX628CR 125-11DR-P	1.25	12	0.08-0.1	11°	●	●						
		KX628CR 150-11DR-P	1.5	12	0.08-0.1	11°	●	●						
		KX628CR 100-16DR-P	1	12	0.08-0.1	16°	●	●						
		KX628CR 125-16DR-P	1.25	12	0.08-0.1	16°	●	●						
		KX628CR 150-16DR-P	1.5	12	0.08-0.1	16°	●	●						

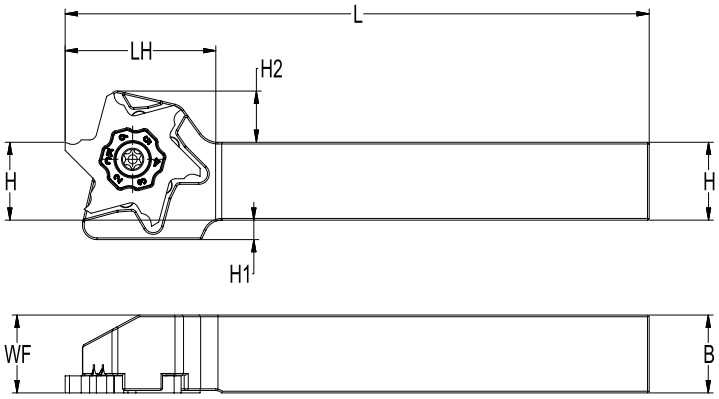
Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

Symbols of KX628 Tool Holders

					M: 150 JX: 120 J: 110 H: 100
KX628: KX628 Series	R: Right Handed				
Series	**Holder Direction**	**-**	**Holder Height**	**Holder Width**	**Tool Length**
KX628	R	-	12	12	JX

KX628 Tool Holders

New



Right Handed Tool holder (R)

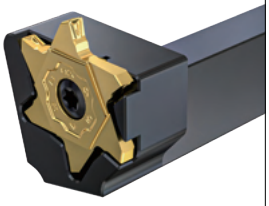
Type	Size(mm)							Accessaries		Corresponding Insert
	H	B	L	LH	WF	H1	H2	Screw	Wrenth	
KX628R-1212JX	12	12	120	32	12	8	10.5	KS-5008-T	KW-T20	KX628□R □□□
KX628R-1616JX	16	16	120	32	16	4	10.5	KS-5008-T	KW-T20	KX628□R □□□
KX628R-2020JX	20	20	120	32	20	0	10.5	KS-5008-T	KW-T20	KX628□R □□□
KX628R-2525M	25	25	150	32	25	0	10.5	KS-5008-T	KW-T20	KX628□R □□□

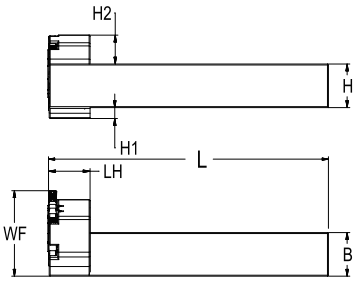
Symbols of KX628-F Tool Holders

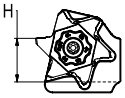
					JX: 120 J: 110 H: 100		
KX628: KX628 Series	L: left handed						
Series	**Holder Direction**	**-**	**Holder Height**	**Holder Width**	**Tool Length**	**-**	**Others**
KX628	L	-	12	12	JX	-	F

KX628-F Tool Holders

New







Left handed holders
Left handed holders are for right hand inserts

Type	Size(mm)							Accessaries		Corresponding Insert
	H	B	L	LH	H1	H2	WF	Screw	Wrenth	
KX628L-1616K-F	16	16	125	15	4	10.6	31	KS-5008-T	KW-T20	KX628□R □□□
KX628L-2020K-F	20	20	125	15	0	10.6	31	KS-5008-T	KW-T20	KX628□R □□□

Recommend Parameters For Machining-KX628

GM Super Cutter		
Edge Width	Radial Feed f(mm/rev)	Parameters For Cross Feed
3.0	0.04-0.1	AP: W*0.5 f: 0.04-0.1

GTR Back-turning Tools		
Edge Width	Radial Feed f(mm/rev)	Parameters For Cross Feed
1.0-1.5	0.01-0.05	AP: W*0.2 f: 0.01-0.03
1.75-2.0	0.02-0.08	AP: W*0.2 f: 0.02-0.07

GR Grooving Tools	
Edge Width	Feeding Speed f(mm/rev)
1.5-2.0	0.02-0.06
2.5-3.0	0.02-0.07

TR Threading Tools	
Type	Cutting Depth Ap(mm)
A-Type	0.02-0.05
B-Type	0.02-0.05
N-Type	0.03-0.08

BR Back-turning Tools	
Cutting Depth Ap(mm)	Feeding Speed f(mm/rev)
0.05-6	0.02-0.08

RR Circular Grooving Tools	
Edge Width	Feeding Speed f(mm/rev)
2.0	0.02-0.06
2.5-3.18	0.03-0.07

CR Parting Tools	
Edge Width	Feeding Speed f(mm/rev)
1.0-1.5	0.015-0.06

BF Back-turning Tools	
Cutting Depth Ap(mm)	Feeding Speed f(mm/rev)
0.05-6	0.04-0.1

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KOYIN CUT

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QLS SERIES

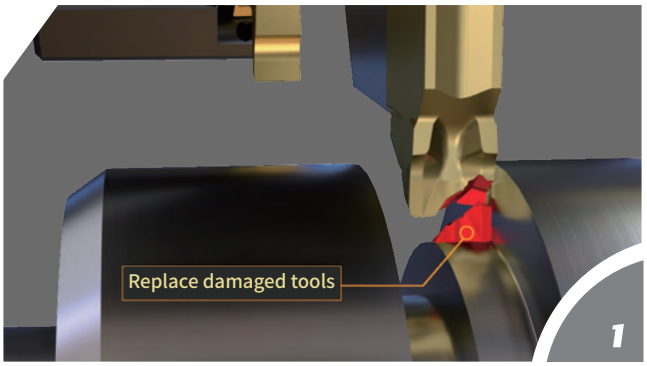
QLS Quick Lock Solid Grooving and Parting Tools

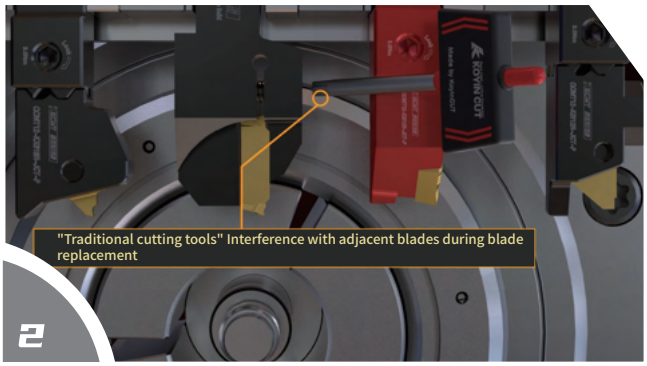
FEATURES AND ADVANTAGES

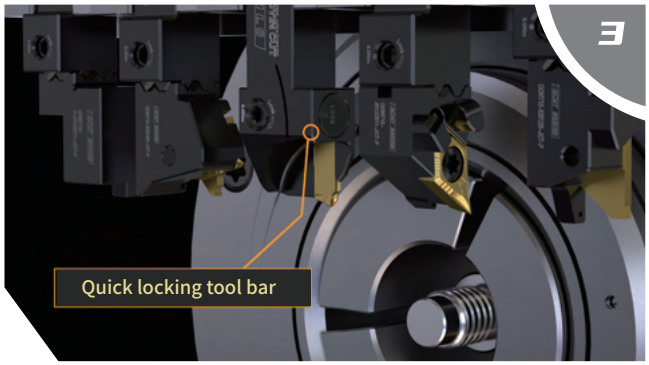
V-shape locating slot design
Vertical and horizontal machining with more stable cutting under stress

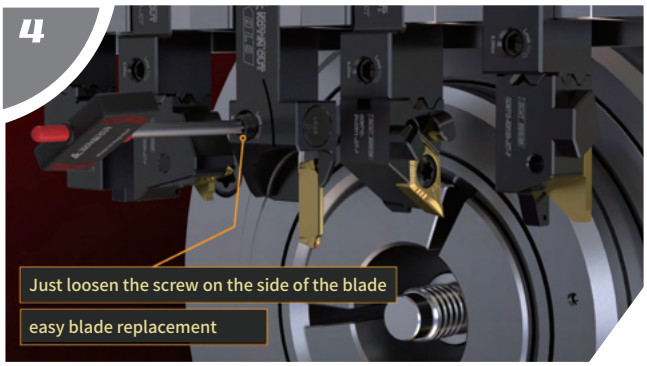
Quick tool clamping is achieved through a taper-driven drawbar activated by dual side-lock screws, providing rigid fixation and fast assembly

Quick Lock Simulation Display









Symbols of KGCS Inserts

		15: 1.5	003: R0.03		R6：Right Lead Angle 6°		
		175: 1.75	01: R0.1		L6：Left Lead Angle 6°		CH: High Feed
		20: 2.0	015: R0.15		R15: Right Lead Angle 15°		TM: Versatile
	D: Standard	25: 2.5	020: R0.2		L15: Left Lead Angle 15°		CM: Versatile
KGC: Grooving、Parting	S: Stable	30: 3.0	025: R0.25		N: Flat		CF: Low Feed
Series	**Insert Type**	**Tip Width**	**Nose Radius**	**-**	**Lead Angle**	**-**	**Geomtery**
KGC	S	20	003	-	N	-	CF

CF Groove Geometry

Diagram

Fig1
centering insert
N

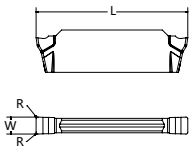
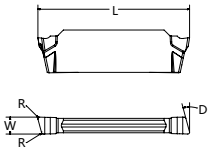
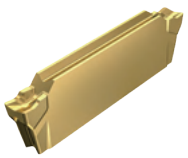


Fig2
insert with right lead angle
R



◆ Recommended
◈ Suitable
◇ Applicable

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

Shape	Type	Size						Carbide with PVD Coating							Carbide
		W	Edge width Tolerance	R	L	D	Fig	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
Low Feed		KGCS 20003-N-CF	2.00	±0.02	0.03	18	0°	1	●	●	●					
		KGCS 2001-N-CF	2.00	±0.02	0.10	18	0°	1	●	●	●					
		KGCS 20015-N-CF	2.00	±0.02	0.15	18	0°	1	●	●	●					
		KGCS 2002-N-CF	2.00	±0.02	0.20	18	0°	1	●	●	●					
		KGCS 2502-N-CF	2.50	±0.04	0.20	18	0°	1	●	●	●					
		KGCS 20003-R6-CF	2.00	±0.02	0.03	18	6°	2	●	●	●					
		KGCS 2001-R6-CF	2.00	±0.02	0.10	18	6°	2	●	●	●					
		KGCS 20015-R6-CF	2.00	±0.02	0.15	18	6°	2	●	●	●					
		KGCS 2002-R6-CF	2.00	±0.02	0.20	18	6°	2	●	●	●					
		KGCS 20003-R15-CF	2.00	±0.02	0.03	18	15°	2	●	●	●					
		KGCS 2001-R15-CF	2.00	±0.02	0.10	18	15°	2	●	●	●					
		KGCS 20015-R15-CF	2.00	±0.02	0.15	18	15°	2	●	●	●					
		KGCS 2002-R15-CF	2.00	±0.02	0.20	18	15°	2	●	●	●					
		KGCS 20003-L6-CF	2.00	±0.02	0.03	18	6°	2	●	●	●					
		KGCS 2001-L6-CF	2.00	±0.02	0.10	18	6°	2	●	●	●					
		KGCS 20015-L6-CF	2.00	±0.02	0.15	18	6°	2	●	●	●					
		KGCS 2002-L6-CF	2.00	±0.02	0.20	18	6°	2	●	●	●					
		KGCS 20003-L15-CF	2.00	±0.02	0.03	18	15°	2	●	●	●					
		KGCS 2001-L15-CF	2.00	±0.02	0.10	18	15°	2	●	●	●					
		KGCS 20015-L15-CF	2.00	±0.02	0.15	18	15°	2	●	●	●					
		KGCS 2002-L15-CF	2.00	±0.02	0.20	18	15°	2	●	●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

CM Geometry

Diagram

Fig1
centering insert
N

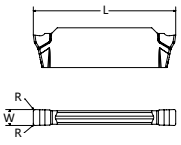
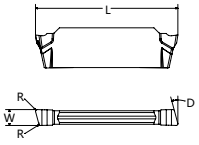


Fig2
insert with right lead angle
R

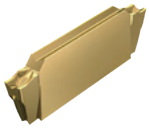


◆ Recommended

◈ Suitable

◇ Applicable

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

Shape		Type	Size						Carbide with PVD Coating							Carbide
			W	Edge width Tolerance	R	L	D	Fig	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
Versatile		KGCS 15003-N-CM	1.5	±0.02	0.03	14	0°	1	●	●	●					
		KGCS 1501-N-CM	1.5	±0.02	0.10	14	0°	1	●	●	●					
		KGCS 15015-N-CM	1.5	±0.02	0.15	14	0°	1	●	●	●					
		KGCS 175015-N-CM	1.75	±0.04	0.15	14	0°	1	●	●	●					
		KGCS 15003-R6-CM	1.5	±0.02	0.03	14	6°	2	●	●	●					
		KGCS 1501-R6-CM	1.5	±0.02	0.10	14	6°	2	●	●	●					
		KGCS 15015-R6-CM	1.5	±0.02	0.15	14	6°	2	●	●	●					
		KGCS 15003-R15-CM	1.5	±0.02	0.03	14	15°	2	●	●	●					
		KGCS 1501-R15-CM	1.5	±0.02	0.10	14	15°	2	●	●	●					
		KGCS 15015-R15-CM	1.5	±0.02	0.15	14	15°	2	●	●	●					
		KGCS 15003-L6-CM	1.5	±0.02	0.03	14	6°	2	●	●	●					
		KGCS 1501-L6-CM	1.5	±0.02	0.10	14	6°	2	●	●	●					
		KGCS 15015-L6-CM	1.5	±0.02	0.15	14	6°	2	●	●	●					
		KGCS 15003-L15-CM	1.5	±0.02	0.03	14	15°	2	●	●	●					
		KGCS 1501-L15-CM	1.5	±0.02	0.10	14	15°	2	●	●	●					
		KGCS 15015-L15-CM	1.5	±0.02	0.15	14	15°	2	●	●	●					
Versatile		KGCS 30005-N-CM	3.00	±0.02	0.05	20	0°	1	●	●	●					
		KGCS 3001-N-CM	3.00	±0.02	0.1	20	0°	1	●	●	●					
		KGCS 3002-N-CM	3.00	±0.02	0.2	20	0°	1	●	●	●					
		KGCS 3003-N-CM	3.00	±0.02	0.3	20	0°	1	●	●	●					
		KGCS 3004-N-CM	3.00	±0.02	0.4	20	0°	1	●	●	●					
		KGCS 30005-R6-CM	3.00	±0.02	0.05	20	6°	2	●	●	●					
		KGCS 3001-R6-CM	3.00	±0.02	0.1	20	6°	2	●	●	●					
		KGCS 30015-R6-CM	3.00	±0.02	0.15	20	6°	2	●	●	●					
		KGCS 3002-R6-CM	3.00	±0.02	0.2	20	6°	2	●	●	●					
		KGCS 30005-R15-CM	3.00	±0.02	0.05	20	15°	2	●	●	●					
		KGCS 3001-R15-CM	3.00	±0.02	0.10	20	15°	2	●	●	●					
		KGCS 30015-R15-CM	3.00	±0.02	0.15	20	15°	2	●	●	●					
		KGCS 3002-R15-CM	3.00	±0.02	0.2	20	15°	2	●	●	●					
		KGCS 30005-L6-CM	3.00	±0.02	0.05	20	6°	2	●	●	●					
		KGCS 3001-L6-CM	3.00	±0.02	0.1	20	6°	2	●	●	●					
		KGCS 30015-L6-CM	3.00	±0.02	0.15	20	6°	2	●	●	●					
		KGCS 3002-L6-CM	3.00	±0.02	0.2	20	6°	2	●	●	●					
		KGCS 30005-R15-CM	3.00	±0.02	0.05	20	15°	2	●	●	●					
		KGCS 3001-R15-CM	3.00	±0.02	0.1	20	15°	2	●	●	●					
		KGCS 30015-L15-CM	3.00	±0.02	0.15	20	15°	2	●	●	●					
		KGCS 3002-L15-CM	3.00	±0.02	0.2	20	15°	2	●	●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

CH、TM Geometry

Diagram

Fig1
centering insert
N

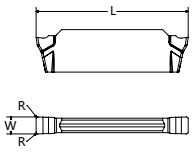
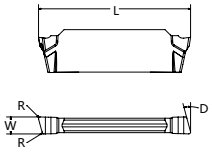
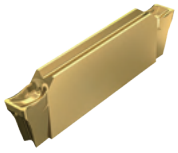


Fig2
insert with right lead angle
R



◆ Recommended
◈ Suitable
◇ Applicable

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

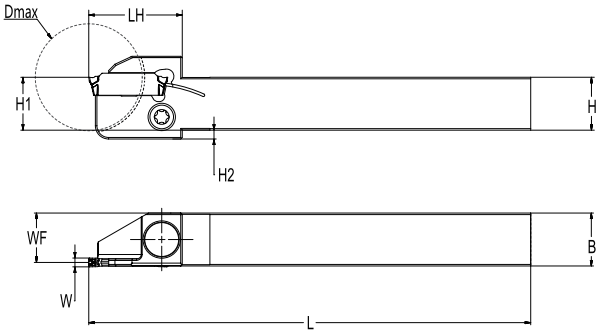
Shape		Type	Size						Carbide with PVD Coating							Carbide
			W	Edge width Tolerance	R	L	D	Fig	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
High Feed		KGCS 20003-N-CH	2.00	±0.02	0.03	18	0°	1								
		KGCS 2001-N-CH	2.00	±0.02	0.10	18	0°	1	●	●	●					
		KGCS 20015-N-CH	2.00	±0.02	0.15	18	0°	1	●	●	●					
		KGCS 2002-N-CH	2.00	±0.02	0.20	18	0°	1	●	●	●					
		KGCS 2502-N-CH	2.50	±0.04	0.20	18	0°	1	●	●	●					
		KGCS 20003-R6-CH	2.00	±0.02	0.03	18	6°	2								
		KGCS 2001-R6-CH	2.00	±0.02	0.10	18	6°	2	●	●	●					
		KGCS 20015-R6-CH	2.00	±0.02	0.15	18	6°	2								
		KGCS 2002-R6-CH	2.00	±0.02	0.20	18	6°	2								
		KGCS 20003-R15-CH	2.00	±0.02	0.03	18	15°	2								
		KGCS 2001-R15-CH	2.00	±0.02	0.10	18	15°	2	●	●	●					
		KGCS 20015-R15-CH	2.00	±0.02	0.15	18	15°	2								
		KGCS 2002-R15-CH	2.00	±0.02	0.20	18	15°	2								
		KGCS 20003-L6-CH	2.00	±0.02	0.03	18	6°	2								
		KGCS 2001-L6-CH	2.00	±0.02	0.10	18	6°	2	●	●	●					
		KGCS 20015-L6-CH	2.00	±0.02	0.15	18	6°	2								
		KGCS 2002-L6-CH	2.00	±0.02	0.20	18	6°	2								
		KGCS 20003-L15-CH	2.00	±0.02	0.03	18	15°	2								
		KGCS 2001-L15-CH	2.00	±0.02	0.10	18	15°	2	●	●	●					
		KGCS 20015-L15-CH	2.00	±0.02	0.15	18	15°	2								
		KGCS 2002-L15-CH	2.00	±0.02	0.20	18	15°	2								
Versatile		KGCS 3002-N-TM	3.00	±0.02	0.2	20	0°	1	●	●	●					
		KGCS 3003-N-TM	3.00	±0.02	0.3	20	0°	1	●	●	●					
		KGCS 3004-N-TM	3.00	±0.02	0.4	20	0°	1	●	●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

Symbols of Toolholders

					H: 100			
PC: Standard Holder, Standard Insert					J: 110			
PCS: Standard Hodler, Stable Insert		R: Right Handed			JX: 120	15: 1.5-1.75		
QLS: Quick Change Holder, Stable Insert	KGC: Grooving、Parting	L: Left Handed			M: 150	2: 2.0-2.5	D24: Diameter of Parting 24	JCT: Inner Cooling
Type	**Series**	**Holder Direction**	**Holder Height**	**Holder Width**	**Tool Length**	**Tip Width**	**Diameter of parting**	**other**
QLS	KGC	R	12	12	JX	2	D24	JCT

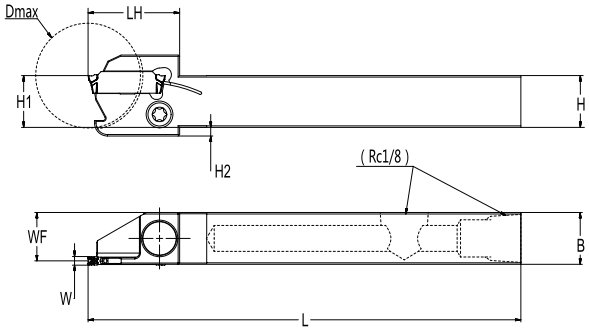
QLS Series



Right Handed Tool holder (R)

Type	Size(mm)								Accessaries			Corresponding Insert
	Dmax	W	H(H1)	B	L	LH	WF	H2	Lock Screw	Sealing Screw	Wrenth	
QLS-KGC□-1010J-15D12 New	12	1.5-1.75	10	10	110	17	9.4	4	KS-50065-TS	KS-50029-T	KW-T15	KGCS 15□□ KGCS 175□□
QLS-KGC□-1212JX-15D16 New	16	1.5-1.75	12	12	120	19	11.4	2	KS-50065-TS	KS-50039-T	KW-T15	
QLS-KGC□-1616JX-15D24 New	24	1.5-1.75	16	16	120	24	15.4	0	KS-5009-TS	KS-50039-T	KW-T15	
QLS-KGC□-1010J-2D20 New	20	2.0-2.5	10	10	110	21	9.2	4	KS-50065-TS	KS-50029-T	KW-T15	KGCS 20□□ KGCS 22□□ KGCS 25□□
QLS-KGC□-1212JX-2D24 New	24	2.0-2.5	12	12	120	21	11.2	2	KS-50065-TS	KS-50039-T	KW-T15	
QLS-KGC□-1616JX-2D32 New	32	2.0-2.5	16	16	120	30	15.2	0	KS-5009-TS	KS-50039-T	KW-T15	
QLS-KGC□-2020JX-2D32 New	32	2.0-2.5	20	20	120	30	19.2	0	KS-5009-TS	KS-50039-T	KW-T15	
QLS-KGC□-1212JX-3D26 New	26	3	12	12	120	22	10.85	3	KS-50065-TS	KS-50039-T	KW-T15	KGCS 3□□□
QLS-KGC□-1616JX-3D36 New	36	3	16	16	120	28	14.85	4	KS-5009-TS	KS-50039-T	KW-T15	
QLS-KGC□-2020JX-3D36 New	36	3	20	20	120	30	18.85	0	KS-5009-TS	KS-50039-T	KW-T15	

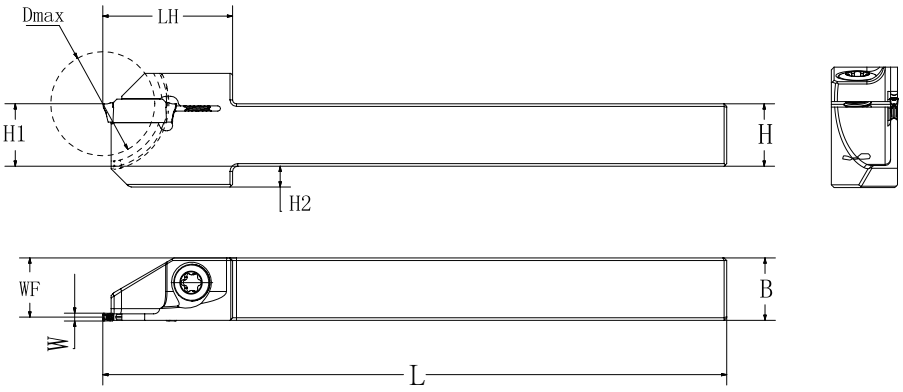
QLS Holders With Inner Cooling New



Right Handed Tool holder (R)

Type	Size(mm)								Accessaries			Corresponding Insert
	Dmax	W	H(H1)	B	L	LH	WF	H2	Lock Screw	Sealing Screw	Wrenth	
QLS-KGC[R/L] -1212JX-2D24-JCT	24	2.0-2.5	12	12	120	28	11.2	7	KS-50065-TS	KS-50039-T	KW-T15	KGCS 20□□ KGCS 22□□ KGCS 25□□
QLS-KGC[R/L] -1616JX-2D32-JCT	32	2.0-2.5	16	16	120	37	15.2	3	KS-5009-TS	KS-50039-T	KW-T15	
QLS-KGC[R/L] -1212JX-3D26-JCT New	26	3	12	12	120	29	10.85	7	KS-50065-TS	KS-50039-T	KW-T15	KGCS 3□□□
QLS-KGC[R/L] -1616JX-3D36-JCT New	36	3	16	16	120	37	14.85	4	KS-5009-TS	KS-50039-T	KW-T15	

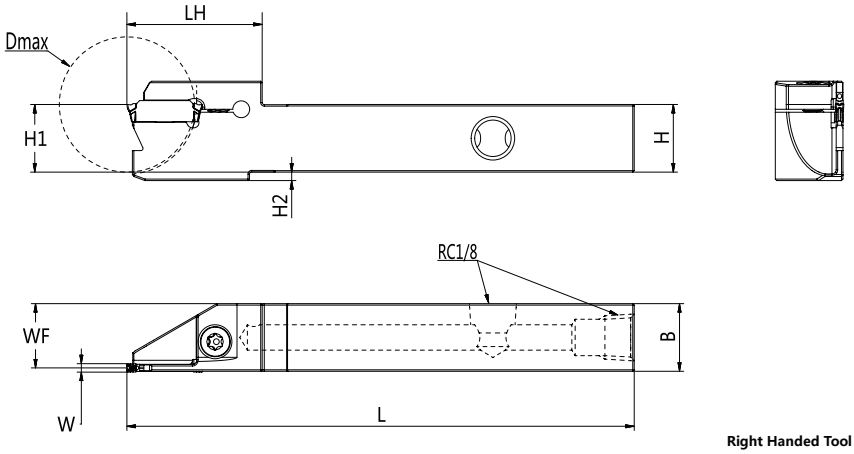
PCS Holders



Right Handed Tool holder (R)

Type	Size(mm)								Accessaries		Corresponding Insert
	Dmax	W	H(H1)	B	L	LH	WF	H2	Lock Screw	Wrenth	
PCS-KGC[R/L] -1010J-15D16	16	1.5-1.75	10	10	110	19.5	9.4	4	KS-4009-T	KW-T15	KGCS 15□□ KGCS 175□□
PCS-KGC[R/L] -1212JX-15D16	16	1.5-1.75	12	12	120	19.5	11.4	2	KS-4009-T	KW-T15	
PCS-KGC[R/L] -1616JX-15D24	24	1.5-1.75	16	16	120	25	15.4	0	KS-5012-T	KW-T20	
PCS-KGC[R/L] -1010J-2D20	20	2.0-2.5	10	10	110	18	9.2	4	KS-4009-T	KW-T15	KGCS 20□□ KGCS 22□□ KGCS 25□□
PCS-KGC[R/L] -1212JX-2D24	24	2.0-2.5	12	12	120	19	11.2	2	KS-4009-T	KW-T15	
PCS-KGC[R/L] -1616JX-2D32	32	2.0-2.5	16	16	120	29	15.2	0	KS-5012-T	KW-T20	
PCS-KGC[R/L] -2020JX-2D32	32	2.0-2.5	20	20	120	32	19.2	0	KS-5016-H	KW-LH4	
PCS-KGC[R/L] -2525M-2D32	32	2.0-2.5	25	25	150	32	24.2	0	KS-5016-H	KW-LH4	
PCS-KGC[R/L] -1212JX-3D26 New	26	3	12	12	120	22	10.85	3	KS-4009-T	KW-T15	KGCS 3□□□
PCS-KGC[R/L] -1616JX-3D36 New	36	3	16	16	120	28	14.85	4	KS-5012-T	KW-T20	
PCS-KGC[R/L] -2020JX-3D36 New	36	3	20	20	120	30	18.85	0	KS-5016-H	KW-LH4	
PCS-KGC[R/L] -2525M-3D36 New	36	3	25	25	150	30	23.85	0	KS-5016-H	KW-LH4	

PCS Holders With Inner Cooling



Right Handed Tool holder (R)

Type	Size(mm)								Accessaries		Corresponding Insert
	Dmax	W	H(H1)	B	L	LH	WF	H2	Lock Screw	Wrenth	
PCS-KGC□-1616JX-2D32-JCT New	32	2.0-2.5	16	16	120	37	15.2	2	KS-5012-T	KW-T20	KGCS 20□□ KGCS 22□□ KGCS 25□□
PCS-KGC□-2020JX-2D32-JCT New	32	2.0-2.5	20	20	120	37	19.2	0	KS-5016-H	KW-LH4	
PCS-KGC□-2525M-2D32-JCT New	32	2.0-2.5	25	25	150	37	24.2	0	KS-5016-H	KW-LH4	
PCS-KGC□-1616JX-3D36-JCT New	36	3	16	16	120	37	14.85	4	KS-5012-T	KW-T20	KGCS 3□□□
PCS-KGC□-2020JX-3D36-JCT New	36	3	20	20	120	37	18.85	0	KS-5016-H	KW-LH4	
PCS-KGC□-2525M-3D36-JCT New	36	3	25	25	150	37	23.85	0	KS-5016-H	KW-LH4	

Recommend Parameters For Machining

KGCS Series								
	Symbols of Grades	Vc (m/min)	CF	CM		CH	TM	
			Edge Width	Edge Width		Edge Width	Edge Width	
			2.0/2.2/2.5	1.5/1.75	3	2.0/2.2/2.5	3	
			Radial Feed	Radial Feed	Radial Feed	Radial Feed	Radial Feed	Cross Feed
P Steel	KPM30N	60-180	0.02-0.07	0.01-0.06	0.01-0.12	0.05-0.15	0.11-0.15	AP: W*0.2 f: 0.1-0.25
M Stainless Steel	KXM15S	60-180	0.01-0.05	0.01-0.05	0.09-0.11	0.05-0.12	0.09-0.13	AP: W*0.2 f: 0.08-0.18
	KMS15C	60-150	0.01-0.05	0.01-0.05	0.09-0.11	0.05-0.12	0.09-0.13	AP: W*0.2 f: 0.08-0.18
	KHS10M	60-130	0.01-0.05	0.01-0.05	0.09-0.11	0.05-0.12	0.09-0.13	AP: W*0.2 f: 0.08-0.18
K Cast Iron	KSH10M	80-200	0.03-0.08	0.03-0.07	0.1-0.12	0.05-0.15	0.11-0.15	AP: W*0.2 f: 0.1-0.25
S Heat Resisting Alloy	KXM15S	30-60	0.01-0.03	0.01-0.03	0.07-0.09	0.03-0.08	0.09-0.1	AP: W*0.2 f: 0.07-0.17
	KMS20	30-80	0.01-0.04	0.01-0.04	0.07-0.09	0.03-0.1	0.09-0.11	AP: W*0.2 f: 0.07-0.17
	KMS15C	30-50	0.01-0.03	0.01-0.03	0.07-0.09	0.03-0.08	0.09-0.1	AP: W*0.2 f: 0.07-0.17
H High-hardness Steel	KHS10M	40-80	0.01-0.04	0.01-0.04	0.01-0.04	0.03-0.08	0.04-0.08	AP: W*0.2 f: 0.05-0.15
N Nonferrous Metal	KCN10D(DLC Coating)	240-450	0.01-0.1	0.01-0.09	/	/	/	/
	KCN10 (Carbide Without Coating)	150-300	0.01-0.08	0.01-0.07	/	/	/	/

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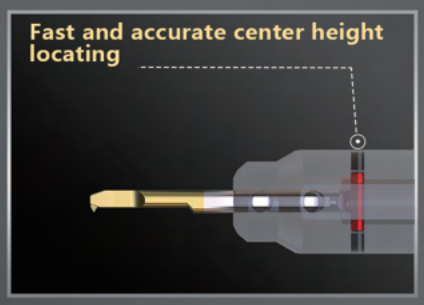
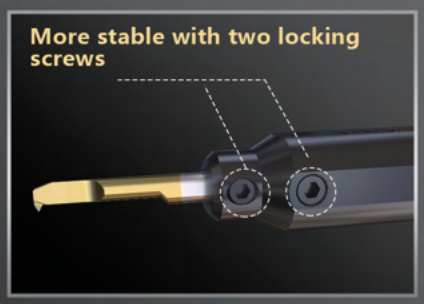
SBT SERIES

Fast Locationg Small Diameter Boring Tools





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SBT Quick Positioning Small Diameter Boring Tools with Inner Cooling

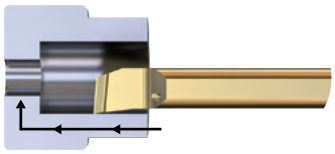
- Quick coordinate positioning
- Wide range tool types
- Supply of Inner cooling

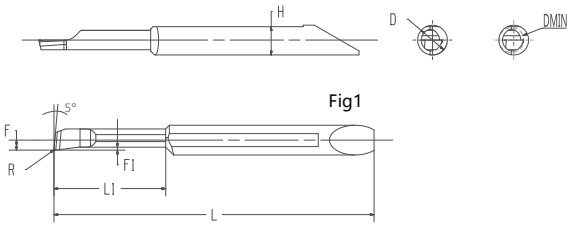
Symbols of SBT Boring Tools

	T: Boring			20: Boring Diameter 2	08: Effective Lenght 8mm	005: R0.05		C2: Double Jet
	P: Boring+profiling	4: Shank Diameter 4		25: Boring Diameter 2.5	125: Effective Lenght 12.5mm	008: R0.08		C1: Single Jet
KH: Boring Series	Q: Boring+profiling+deep Steps	6: Shank Diameter 6		30: Boring Diameter 3.0	15: Effective Lenght 15mm	015: R0.15		Without: Without Jet
Series	**Type**	**Shank Diameter**	**Direction**	**Machinable Diamter of Boring**	**Effective Lenght**	**Nose Radius**	**-**	**Inner Cooling**
KH	T	4	R	20	08	005	-	C2

Internal Processing-Boring Process

Parellel geometry
excellent hardness and sharpness
versatile

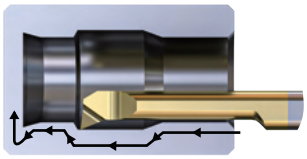




Shape	Type	Minimum Boring Diameter	Size(mm)								Carbide with PVD Coating		Applicable Holders
		DMIN	D	H	L	L1	F	F1	R	Fig	KHS10M	KXM15S	
	KHT4R 2008-010	2	4	3.6	35	8	0.85	0.25	0.1	1	●		KHP4•••
	KHT4R 25125-010	2.5	4	3.6	40	12.5	1.1	0.25	0.1	1	●		KHP4•••
	KHT4R 3013-010	3	4	3.6	43	13	1.35	0.35	0.1	1	●		KHP4•••
	KHT4R 3013-020	3	4	3.6	43	13	1.35	0.35	0.2	1	●		KHP4•••
	KHT4R 4015-010	4	4	3.6	49	15	1.86	0.4	0.1	1	●		KHP4•••
	KHT4R 4015-020	4	4	3.6	49	15	1.86	0.4	0.2	1	●		KHP4•••
	KHT6R 5020-010	5	6	5.6	58	20	2.35	0.5	0.1	1	●		KHP6•••
	KHT6R 5020-020	5	6	5.6	58	20	2.35	0.5	0.2	1	●		KHP6•••
	KHT6R 6025-010	6	6	5.6	63	25	2.85	0.6	0.1	1	●		KHP6•••
	KHT6R 6025-020	6	6	5.6	63	25	2.85	0.6	0.2	1	●		KHP6•••
	KHT4R 2008-010-C1	2	4	3.6	35	8	0.85	0.25	0.1	2	●		KHP4•••JCT
	KHT4R 25125-010-C1	2.5	4	3.6	40	12.5	1.1	0.25	0.1	2	●		KHP4•••JCT
	KHT4R 3013-010-C1	3	4	3.6	43	13	1.35	0.35	0.1	2	●		KHP4•••JCT
	KHT4R 3013-020-C1	3	4	3.6	43	13	1.35	0.35	0.2	2	●		KHP4•••JCT
	KHT4R 4015-010-C2	4	4	3.6	49	15	1.86	0.4	0.1	3	●		KHP4•••JCT
	KHT4R 4015-020-C2	4	4	3.6	49	15	1.86	0.4	0.2	3	●		KHP4•••JCT
	KHT6R 5020-010-C2	5	6	3.6	58	20	2.35	0.5	0.1	3	●		KHP6•••JCT
	KHT6R 5020-020-C2	5	6	3.6	58	20	2.35	0.5	0.2	3	●		KHP6•••JCT
	KHT6R 6025-010-C2	6	6	5.6	63	25	2.85	0.6	0.1	3	●		KHP6•••JCT
	KHT6R 6025-020-C2	6	6	5.6	63	25	2.85	0.6	0.2	3	●		KHP6•••JCT

Internal Processing-Boring Process

With F-lead chipbreaking slot
Sharp edge, chips evacuate at front
For finishing



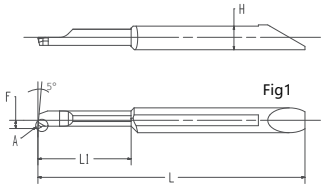
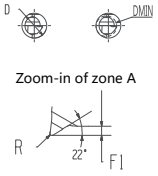


Fig1



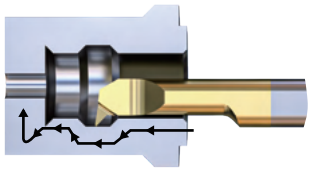
Zoom-in of zone A

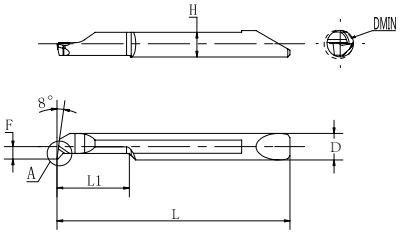

Fig2

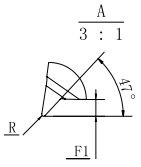
Fig3

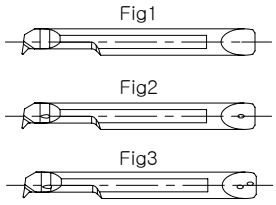
Shape	Type	Minimum Boring Diameter	Size(mm)								Carbide with PVD Coating		Applicable Holders
		DMIN	D	H	L	L1	F	F1	R	Fig	KHS10M	KXM15S	
	KHP4R 2008-005	2	4	3.6	35	8	0.85	0.25	0.05	1	●		KHP4•••
	KHP4R 25125-005	2.5	4	3.6	40	12.5	1.1	0.3	0.05	1	●		KHP4•••
	KHP4R 25125-010	2.5	4	3.6	40	12.5	1.1	0.3	0.1	1	●		KHP4•••
	KHP4R 3013-005	3	4	3.6	43	13	1.35	0.4	0.05	1	●		KHP4•••
	KHP4R 3013-010	3	4	3.6	43	13	1.35	0.4	0.1	1	●		KHP4•••
	KHP4R 4015-010	4	4	3.6	49	15	1.86	0.5	0.1	1	●		KHP4•••
	KHP4R 4015-020	4	4	3.6	49	15	1.86	0.5	0.2	1	●		KHP4•••
	KHP6R 5020-010	5	6	5.6	58	20	2.35	0.7	0.1	1	●		KHP6•••
	KHP6R 5020-020	5	6	5.6	58	20	2.35	0.7	0.2	1	●		KHP6•••
	KHP6R 6025-010	6	6	5.6	63	25	2.85	0.9	0.1	1	●		KHP6•••
	KHP6R 6025-020	6	6	5.6	63	25	2.85	0.9	0.2	1	●		KHP6•••
	KHP4R 2008-005-C1	2	4	3.6	35	8	0.85	0.25	0.05	2	●		KHP4•••JCT
	KHP4R 25125-005-C1	2.5	4	3.6	40	12.5	1.1	0.3	0.05	2	●		KHP4•••JCT
	KHP4R 25125-010-C1	2.5	4	3.6	40	12.5	1.1	0.3	0.1	2	●		KHP4•••JCT
	KHP4R 3013-005-C1	3	4	3.6	43	13	1.35	0.4	0.05	2	●		KHP4•••JCT
	KHP4R 3013-010-C1	3	4	3.6	43	13	1.35	0.4	0.1	2	●		KHP4•••JCT
	KHP4R 4015-010-C2	4	4	3.6	49	15	1.86	0.5	0.1	3	●		KHP4•••JCT
	KHP4R 4015-020-C2	4	4	3.6	49	15	1.86	0.5	0.2	3	●		KHP4•••JCT
	KHP6R 5020-010-C2	5	6	5.6	58	20	2.35	0.7	0.1	3	●		KHP6•••JCT
	KHP6R 5020-020-C2	5	6	5.6	58	20	2.35	0.7	0.2	3	●		KHP6•••JCT
	KHP6R 6025-010-C2	6	6	5.6	63	25	2.85	0.9	0.1	3	●		KHP6•••JCT
	KHP6R 6025-020-C2	6	6	5.6	63	25	2.85	0.9	0.2	3	●		KHP6•••JCT

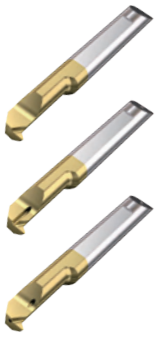
Internal Processing-Boring Process







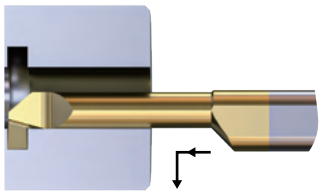


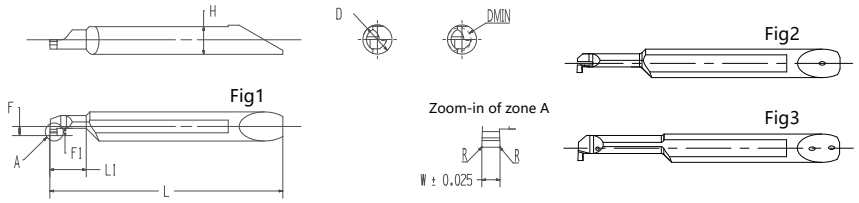
Shape	Type	Minimum Boring Diameter	Size(mm)								Carbide with PVD Coating		Applicable Holders
		DMIN	D	H	L	L1	F	F1	R	Fig	KHS10M	KXM15S	
	KHQ4R 3013-010	3	4	3.6	43	13	1.3	0.6	0.1	1	●		KHP4 •••
	KHQ4R 4015-010	4	4	3.6	49	15	1.8	0.8	0.1	1	●		KHP4 •••
	KHQ4R 4015-020	4	4	3.6	49	15	1.8	0.8	0.2	1	●		KHP4 •••
	KHQ6R 5020-020	5	6	5.6	58	20	2.3	1	0.2	1	●		KHP6 •••
	KHQ6R 6025-020	6	6	5.6	63	25	2.8	1.4	0.2	1	●		KHP6 •••
	KHQ4R 3013-010-C1	3	4	3.6	43	13	1.3	0.6	0.1	2	●		KHP4 ••• JCT
	KHQ4R 4015-010-C2	4	4	3.6	49	15	1.8	0.8	0.1	3	●		KHP4 ••• JCT
	KHQ4R 4015-020-C2	4	4	3.6	49	15	1.8	0.8	0.2	3	●		KHP4 ••• JCT
	KHQ6R 5020-020-C2	5	6	5.6	58	20	2.3	1	0.2	3	●		KHP6 ••• JCT
	KHQ6R 6025-020-C2	6	6	5.6	63	25	2.8	1.4	0.2	3	●		KHP6 ••• JCT

Symbols of Inner Grooving Tools

				30: Boring Diameter 3.0	05: Width 0.5		050: Groove Depth 0.5		C2: Double Jet
		4: Shank Diameter 4		40: Boring Diameter 4.0	075: Width 0.75		100: Groove Depth 1.0		C1: Single Jet
KH: Boring Series	G: Grooving Tools	6: Shank Diameter 6		50: Boring Diameter 5.0	10: Width 1.0		120: Groove Depth 1.2		Without: Without Jet
Series	Type	Shank Diameter	Direction	Machinable Diamter of Boring	Tip Width	-	Machinable Groove Depth	-	Inner Cooling
KH	G	4	R	30	075	-	080	-	C2

Internal Processing-Grooving Process



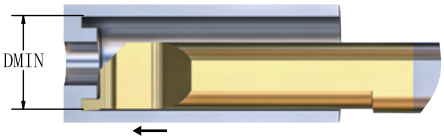


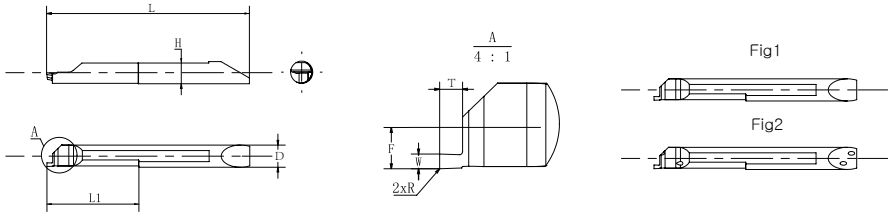
Shape	Type	Minimum Boring Diameter	Size(mm)									Carbide with PVD Coating		Applicable Holders
		DMIN	W	R	D	H	L	L1	F	F1	Fig	KHS10M	KXM15S	
	KHG4R 3005-050	3	0.5	0.05	4	3.6	37	9	1.3	0.5	1	●		KHP4•••
	KHG4R 30075-060	3	0.75	0.05	4	3.6	37	9	1.3	0.6	1	●		KHP4•••
	KHG4R 3010-070	3	1	0.05	4	3.6	37	9	1.3	0.7	1	●		KHP4•••
	KHG4R 4005-050	4	0.5	0.05	4	3.6	40	10	1.75	0.5	1	●		KHP4•••
	KHG4R 40075-060	4	0.75	0.05	4	3.6	40	10	1.75	0.6	1	●		KHP4•••
	KHG4R 4010-100	4	1	0.05	4	3.6	40	10	1.75	1	1	●		KHP4•••
	KHG4R 4015-100	4	1.5	0.05	4	3.6	40	10	1.75	1	1	●		KHP4•••
	KHG4R 4020-100	4	2	0.05	4	3.6	40	10	1.75	1	1	●		KHP4•••
	KHG6R 50075-120	5	0.75	0.05	6	5.6	53	15	2.35	1.2	1	●		KHP6•••
	KHG6R 5010-120	5	1	0.05	6	5.6	53	15	2.35	1.2	1	●		KHP6•••
	KHG6R 5015-120	5	1.5	0.05	6	5.6	53	15	2.35	1.2	1	●		KHP6•••
	KHG6R 5020-120	5	2	0.05	6	5.6	53	15	2.35	1.2	1	●		KHP6•••
	KHG6R 6010-180	6	1	0.05	6	5.6	53	15	2.85	1.8	1	●		KHP6•••
	KHG6R 6015-180	6	1.5	0.05	6	5.6	53	15	2.85	1.8	1	●		KHP6•••
	KHG6R 6020-180	6	2	0.05	6	5.6	53	15	2.85	1.8	1	●		KHP6•••
	KHG4R 3005-050-C1	3	0.5	0.05	4	3.6	37	9	1.3	0.5	2	●		KHP4•••JCT
	KHG4R 30075-060-C1	3	0.75	0.05	4	3.6	37	9	1.3	0.6	2	●		KHP4•••JCT
	KHG4R 3010-070-C1	3	1	0.05	4	3.6	37	9	1.3	0.7	2	●		KHP4•••JCT
	KHG4R 4005-050-C2	4	0.5	0.05	4	3.6	40	10	1.75	0.5	3	●		KHP4•••JCT
	KHG4R 40075-060-C2	4	0.75	0.05	4	3.6	40	10	1.75	0.6	3	●		KHP4•••JCT
	KHG4R 4010-100-C2	4	1	0.05	4	3.6	40	10	1.75	1	3	●		KHP4•••JCT
	KHG4R 4015-100-C2	4	1.5	0.05	4	3.6	40	10	1.75	1	3	●		KHP4•••JCT
	KHG4R 4020-100-C2	4	2	0.05	4	3.6	40	10	1.75	1	3	●		KHP4•••JCT
	KHG6R 50075-120-C2	5	0.75	0.05	6	5.6	53	15	2.35	1.2	3	●		KHP6•••JCT
	KHG6R 5010-120-C2	5	1	0.05	6	5.6	53	15	2.35	1.2	3	●		KHP6•••JCT
	KHG6R 5015-120-C2	5	1.5	0.05	6	5.6	53	15	2.35	1.2	3	●		KHP6•••JCT
	KHG6R 5020-120-C2	5	2	0.05	6	5.6	53	15	2.35	1.2	3	●		KHP6•••JCT
	KHG6R 6010-180-C2	6	1	0.05	6	5.6	53	15	2.85	1.8	3	●		KHP6•••JCT
	KHG6R 6015-180-C2	6	1.5	0.05	6	5.6	53	15	2.85	1.8	3	●		KHP6•••JCT
	KHG6R 6020-180-C2	6	2	0.05	6	5.6	53	15	2.85	1.8	3	●		KHP6•••JCT

Symbols of SBT Face Grooving Tools

				50: Boring Diameter 5.0	05: Width 0.5		120: Groove Depth 1.2		
		4: Shank Diameter 4	R: Right Handed	60: Boring Diameter 6.0	075: Width 0.75		150: Groove Depth 1.5		C2: Double Jet
KH: Boring Series	F: Endface Groove	6: Shank Diameter 6	L: Left Handed	80: Boring Diameter 8.0	10: Width 1.0		280: Groove Depth 2.8		Without: Without Jet
Series	**Type**	**Shank Diameter**	**Direction**	**Machinable Diamter of Boring**	**Tip Width**	**-**	**Machinable Groove Depth**	**-**	**Inner Cooling**
KH	F	4	R	50	10	-	120	-	C2

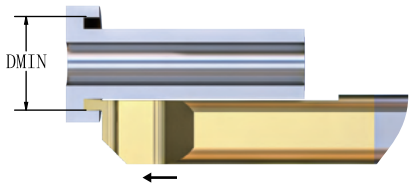
Internal Machining-Face Grooving

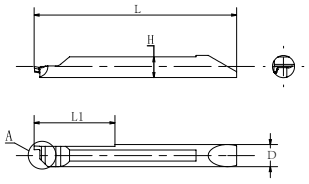


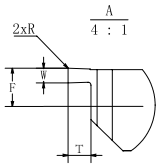


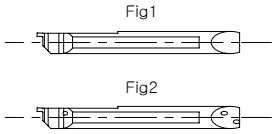
Shape	Type	Minimum Boring Diameter	Size(mm)									Carbide with PVD Coating		Applicable Holders
		DMIN	W	R	D	H	L	L1	F	T	Fig	KHS10M	KXM15S	
	KHF4R 5005-120	5	0.5	0.05	4	3.6	43	15	1.95	1.2	1	●		KHP4•••
	KHF4R 50075-150	5	0.75	0.1	4	3.6	43	15	1.95	1.5	1	●		KHP4•••
	KHF4R 5010-150	5	1	0.1	4	3.6	43	15	1.95	1.5	1	●		KHP4•••
	KHF4R 5015-280	5	1.5	0.1	4	3.6	43	15	1.95	2.8	1	●		KHP4•••
	KHF4R 5005-120-C2	5	0.5	0.05	4	3.6	43	15	1.95	1.2	2	●		KHP4•••JCT
	KHF4R 50075-150-C2	5	0.75	0.1	4	3.6	43	15	1.95	1.5	2	●		KHP4•••JCT
	KHF4R 5010-150-C2	5	1	0.1	4	3.6	43	15	1.95	1.5	2	●		KHP4•••JCT
	KHF4R 5015-280-C2	5	1.5	0.1	4	3.6	43	15	1.95	2.8	2	●		KHP4•••JCT
	KHF6R 6005-120	6	0.5	0.05	6	5.6	55	22	2.8	1.2	1	●		KHP6•••
	KHF6R 60075-150	6	0.75	0.1	6	5.6	55	22	2.8	1.5	1	●		KHP6•••
	KHF6R 6010-150	6	1	0.1	6	5.6	55	22	2.8	1.5	1	●		KHP6•••
	KHF6R 6015-250	6	1.5	0.1	6	5.6	55	22	2.8	2.5	1	●		KHP6•••
	KHF6R 6020-400	6	2	0.1	6	5.6	55	22	2.8	4.0	1	●		KHP6•••
	KHF6R 6005-120-C2	6	0.5	0.05	6	5.6	55	22	2.8	1.2	2	●		KHP6•••JCT
	KHF6R 60075-150-C2	6	0.75	0.1	6	5.6	55	22	2.8	1.5	2	●		KHP6•••JCT
	KHF6R 6010-150-C2	6	1	0.1	6	5.6	55	22	2.8	1.5	2	●		KHP6•••JCT
	KHF6R 6015-250-C2	6	1.5	0.1	6	5.6	55	22	2.8	2.5	2	●		KHP6•••JCT
	KHF6R 6020-400-C2	6	2	0.1	6	5.6	55	22	2.8	4.0	2	●		KHP6•••JCT
	KHF6R 8010-200	8	1	0.1	6	5.6	55	22	2.95	2	1	●		KHP6•••
	KHF6R 8015-300	8	1.5	0.1	6	5.6	55	22	2.95	3	1	●		KHP6•••
	KHF6R 8020-400	8	2	0.1	6	5.6	55	22	2.95	4	1	●		KHP6•••
	KHF6R 8025-500	8	2.5	0.1	6	5.6	55	22	2.95	5	1	●		KHP6•••
	KHF6R 8030-600	8	3	0.1	6	5.6	55	22	2.95	6	1	●		KHP6•••
	KHF6R 8010-200-C2	8	1	0.1	6	5.6	55	22	2.95	2	2	●		KHP6•••JCT
	KHF6R 8015-300-C2	8	1.5	0.1	6	5.6	55	22	2.95	3	2	●		KHP6•••JCT
	KHF6R 8020-400-C2	8	2	0.1	6	5.6	55	22	2.95	4	2	●		KHP6•••JCT
	KHF6R 8025-500-C2	8	2.5	0.1	6	5.6	55	22	2.95	5	2	●		KHP6•••JCT
	KHF6R 8030-600-C2	8	3	0.1	6	5.6	55	22	2.95	6	2	●		KHP6•••JCT
	KHF8R 1015-300	10	1.5	0.2	8	7.6	53	22	3.95	3	1	●		KHP8•••
	KHF8R 1020-400	10	2	0.2	8	7.6	53	22	3.95	4	1	●		KHP8•••
	KHF8R 1025-500	10	2.5	0.2	8	7.6	53	22	3.95	5	1	●		KHP8•••
	KHF8R 1030-600	10	3	0.2	8	7.6	53	22	3.95	6	1	●		KHP8•••
	KHF8R 1015-300-C2	10	1.5	0.2	8	7.6	53	22	3.95	3	2	●		KHP8•••JCT
	KHF8R 1020-400-C2	10	2	0.2	8	7.6	53	22	3.95	4	2	●		KHP8•••JCT
	KHF8R 1025-500-C2	10	2.5	0.2	8	7.6	53	22	3.95	5	2	●		KHP8•••JCT
	KHF8R 1030-600-C2	10	3	0.2	8	7.6	53	22	3.95	6	2	●		KHP8•••JCT

Internal Machining-Face Grooving







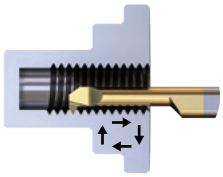


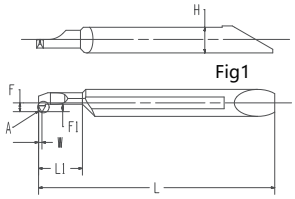
Shape	Type	Minimum Boring Diameter	Size(mm)									Carbide with PVD Coating		Applicable Holders
		DMIN	W	R	D	H	L	L1	F	T	Fig	KHS10M	KXM15S	
	KHF4L 5005-120	5	0.5	0.05	4	3.6	43	15	1.75	1.2	1	●		KHP4•••
	KHF4L 50075-150	5	0.75	0.1	4	3.6	43	15	1.75	1.5	1	●		KHP4•••
	KHF4L 5010-150	5	1	0.1	4	3.6	43	15	1.75	1.5	1	●		KHP4•••
	KHF4L 5015-280	5	1.5	0.1	4	3.6	43	15	1.75	2.8	1	●		KHP4•••
	KHF4L 5005-120-C2	5	0.5	0.05	4	3.6	43	15	1.75	1.2	2	●		KHP4•••JCT
	KHF4L 50075-150-C2	5	0.75	0.1	4	3.6	43	15	1.75	1.5	2	●		KHP4•••JCT
	KHF4L 5010-150-C2	5	1	0.1	4	3.6	43	15	1.75	1.5	2	●		KHP4•••JCT
	KHF4L 5015-280-C2	5	1.5	0.1	4	3.6	43	15	1.75	2.8	2	●		KHP4•••JCT
	KHF6L 6005-120	6	0.5	0.05	6	5.6	55	22	2.6	1.2	1	●		KHP6•••
	KHF6L 60075-150	6	0.75	0.1	6	5.6	55	22	2.6	1.5	1	●		KHP6•••
	KHF6L 6010-150	6	1	0.1	6	5.6	55	22	2.6	1.5	1	●		KHP6•••
	KHF6L 6015-250	6	1.5	0.1	6	5.6	55	22	2.6	2.5	1	●		KHP6•••
	KHF6L 6020-400	6	2	0.1	6	5.6	55	22	2.6	4.0	1	●		KHP6•••
	KHF6L 6005-120-C2	6	0.5	0.05	6	5.6	55	22	2.6	1.2	2	●		KHP6•••JCT
	KHF6L 60075-150-C2	6	0.75	0.1	6	5.6	55	22	2.6	1.5	2	●		KHP6•••JCT
	KHF6L 6010-150-C2	6	1	0.1	6	5.6	55	22	2.6	1.5	2	●		KHP6•••JCT
	KHF6L 6015-250-C2	6	1.5	0.1	6	5.6	55	22	2.6	2.5	2	●		KHP6•••JCT
	KHF6L 6020-400-C2	6	2	0.1	6	5.6	55	22	2.6	4.0	2	●		KHP6•••JCT
	KHF6L 8010-200	8	1	0.1	6	5.6	55	22	2.75	2	1	●		KHP6•••
	KHF6L 8015-300	8	1.5	0.1	6	5.6	55	22	2.75	3	1	●		KHP6•••
	KHF6L 8020-400	8	2	0.1	6	5.6	55	22	2.75	4	1	●		KHP6•••
	KHF6L 8025-500	8	2.5	0.1	6	5.6	55	22	2.75	5	1	●		KHP6•••
	KHF6L 8030-600	8	3	0.1	6	5.6	55	22	2.75	6	1	●		KHP6•••
	KHF6L 8010-200-C2	8	1	0.1	6	5.6	55	22	2.75	2	2	●		KHP6•••JCT
	KHF6L 8015-300-C2	8	1.5	0.1	6	5.6	55	22	2.75	3	2	●		KHP6•••JCT
	KHF6L 8020-400-C2	8	2	0.1	6	5.6	55	22	2.75	4	2	●		KHP6•••JCT
	KHF6L 8025-500-C2	8	2.5	0.1	6	5.6	55	22	2.75	5	2	●		KHP6•••JCT
	KHF6L 8030-600-C2	8	3	0.1	6	5.6	55	22	2.75	6	2	●		KHP6•••JCT
	KHF8L 1015-300	10	1.5	0.2	8	7.6	53	22	3.75	3	1	●		KHP8•••
	KHF8L 1020-400	10	2	0.2	8	7.6	53	22	3.75	4	1	●		KHP8•••
	KHF8L 1025-500	10	2.5	0.2	8	7.6	53	22	3.75	5	1	●		KHP8•••
	KHF8L 1030-600	10	3	0.2	8	7.6	53	22	3.75	6	1	●		KHP8•••
	KHF8L 1015-300-C2	10	1.5	0.2	8	7.6	53	22	3.75	3	2	●		KHP8•••JCT
	KHF8L 1020-400-C2	10	2	0.2	8	7.6	53	22	3.75	4	2	●		KHP8•••JCT
	KHF8L 1025-500-C2	10	2.5	0.2	8	7.6	53	22	3.75	5	2	●		KHP8•••JCT
	KHF8L 1030-600-C2	10	3	0.2	8	7.6	53	22	3.75	6	2	●		KHP8•••JCT

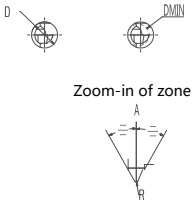
Symbols of SBT Threading Tools

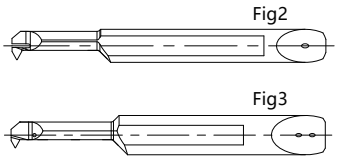
				30: Boring Diameter 3					C2: Double Jet
		4: Shank Diameter 4		40: Boring Diameter 4.0	003: R0.03				C1: Single Jet
KH: Boring Series	I: Threading Tools	6: Shank Diameter 6		50: Boring Diameter 5.0	005: R0.05		60A: 60°		Without: Without Jet
Series	**Type**	**Shank Diameter**	**Direction**	**Machinable Diamter of Boring**	**Nose Radius**	**-**	**Thread Angle**	**-**	**Inner Cooling**
KH	I	4	R	30	003	-	60A	-	C2

Internal Processing- Theading Process









Shape	Type	Minimum Boring Diameter	Size(mm)										Metric Thread		Imperial Thread		Carbide with PVD Coating		Applicable Holders
		DMIN	D	H	L	L1	F	F1	W	R	Fig	A	Specifications of Thread	Pitch (mm)	Specifications of Thread	Pitch (teeth per inch)	KHS10M	KXM15S	
	KHI4R 30003-60A	3	4	3.6	34	6.5	1.19	1	0.5	0.03Max	1	60°	M4 and above (treading M3.5 and above)	0.35~0.8	No.8-32UNC No.8-36UNF and above	36~32	●		KHP4 •••
	KHI4R 35003-60A	3.5	4	3.6	36	8.5	1.44	1.2	0.6	0.03Max	1	60°	M4.5 and above (treading M4.5 and above)	0.5~1.0	No.10-24UNC No.8-36UNF and above	36~24	●		KHP4 •••
	KHI4R 40005-60A	4	4	3.6	38	10.5	1.69	1.2	0.6	0.05Max	1	60°	M5 and above (treading M6 and above)	0.75~1.25	No.12-24UNC No.12-28UNF and above	28~20	●		KHP4 •••
	KHI6R 50005-60A	5	6	5.6	48	15.5	1.94	1.3	0.65	0.05Max	1	60°	M7 and above (treading M6 and above)	0.75~1.5	1/4-20UNC 1/4-28UNF and above	28~18	●		KHP6 •••
	KHI6R 60005-60A	6	6	5.6	53	19.5	2.44	1.6	0.8	0.05Max	1	60°	M8 and above (treading M7 and above)	0.75~1.5	5/16-18UNC 5/16-24UNF and above	24~16	●		KHP6 •••
	KHI4R 40005-60A-C1	4	4	3.6	38	10.5	1.69	1.2	0.6	0.05Max	2	60°	M5 and above (treading M6 and above)	0.75~1.25	No.12-24UNC No.12-28UNF and above	28~20	●		KHP4 •••JCT
	KHI6R 50005-60A-C2	5	6	5.6	48	15.5	1.94	1.3	0.65	0.05Max	3	60°	M7 and above (treading M6 and above)	0.75~1.5	1/4-20UNC 1/4-28UNF and above	28~18	●		KHP6 •••JCT
	KHI6R 60005-60A-C2	6	6	5.6	53	19.5	2.44	1.6	0.8	0.05Max	3	60°	M8 and above (treading M7 and above)	0.75~1.5	5/16-18UNC 5/16-24UNF and above	24~16	●		KHP6 •••JCT

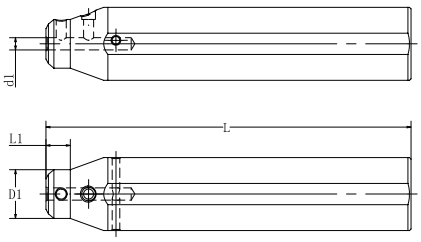
Symbols of SBT Tool Holders

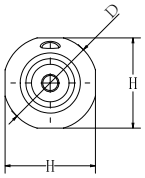
				16: Shank Diameter 16				
				1905: Shank Diameter 19.05				
				20: Shank Diameter 20				
		4: Shank Diameter 4		22: Shank Diameter 22		90: Length 90		
		6: Shank Diameter 6		25: Shank Diameter 25		100: Length 100		Without: Without Jet
KH: Boring Series	P: Tool Holders	8: Shank Diameter 8		254: Shank Diameter 25.4		120: Length 120		JCT: Inner Cooling
Series	**Tool Holders**	**Tool Diameter**	**-**	**Shank Diameter**	**-**	**Tool Length**	**-**	**Inner Cooling**
KH	P	4	-	20	-	100	-	JCT

Accessaries

Symbols of Tool Holders	Lock Screw (for insert)	Wrenth	Lock Screw (for pin)	Wrenth	Locating Pin
KHP□-16□□□□	KS-4004-SH	KW-LH2	KS-3002-SH	KW-LH1.5	KLP-2511
KHP□-1905□□□□	KS-4004-SH	KW-LH2	KS-3003-SH	KW-LH1.5	KLP-2511
KHP□-20□□□□	KS-4004-SH	KW-LH2	KS-3003-SH	KW-LH1.5	KLP-2511
KHP□-22□□□□	KS-4004-SH	KW-LH2	KS-3003-SH	KW-LH1.5	KLP-2514
KHP□-25□□□□	KS-4004-SH	KW-LH2	KS-3003-SH	KW-LH1.5	KLP-2514
KHP□-254□□□□	KS-4004-SH	KW-LH2	KS-3003-SH	KW-LH1.5	KLP-2514

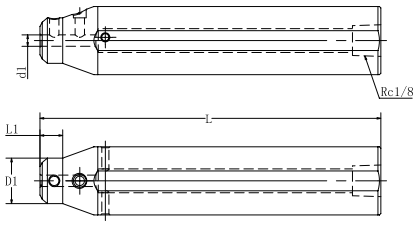
Internal Processing-Tool Holders

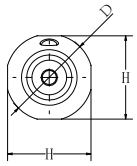




Shape	Type	Stock	Size(mm)						Corresponding Insert
			D	D1	d1	L	L1	H	
	KHP4-16-90		16	13	4	90	8	15	KH□4R/L□□□
	KHP4-1905-100		19.05	14	4	100	8	18	KH□4R/L□□□
	KHP4-20-100		20	15	4	100	8	19	KH□4R/L□□□
	KHP4-22-120		22	17	4	120	8	21	KH□4R/L□□□
	KHP4-25-120		25	20	4	120	8	24	KH□4R/L□□□
	KHP4-254-120		25.4	20.4	4	120	8	24.4	KH□4R/L□□□
	KHP6-16-90		16	13	6	90	8	15	KH□6R/L□□□
	KHP6-1905-100		19.05	14	6	100	8	18	KH□6R/L□□□
	KHP6-20-100		20	15	6	100	8	19	KH□6R/L□□□
	KHP6-22-120		22	17	6	120	8	21	KH□6R/L□□□
	KHP6-25-120		25	20	6	120	8	24	KH□6R/L□□□
	KHP6-254-120		25.4	20.4	6	120	8	24.4	KH□6R/L□□□
	KHP8-1905-100		19.05	15	8	100	8	18	KH□8R/L□□□
	KHP8-20-100		20	15	8	100	8	19	KH□8R/L□□□
	KHP8-22-120		22	17	8	120	8	21	KH□8R/L□□□
	KHP8-25-120		25	20	8	120	8	24	KH□8R/L□□□
	KHP8-254-120		25.4	20.4	8	120	8	24.4	KH□8R/L□□□

Internal Processing-Holders with JCT





Shape	Type	Stock	Size(mm)						Corresponding Insert
			D	D1	d1	L	L1	H	
	KHP4-16-90-JCT		16	13	4	90	8	15	KH□4R/L□□□
	KHP4-1905-100-JCT		19.05	14	4	100	8	18	KH□4R/L□□□
	KHP4-20-100-JCT		20	15	4	100	8	19	KH□4R/L□□□
	KHP4-22-120-JCT		22	17	4	120	8	21	KH□4R/L□□□
	KHP4-25-120-JCT		25	20	4	120	8	24	KH□4R/L□□□
	KHP4-254-120-JCT		25.4	20.4	4	120	8	24.4	KH□4R/L□□□
	KHP6-16-90-JCT		16	13	6	90	8	15	KH□6R/L□□□
	KHP6-1905-100-JCT		19.05	14	6	100	8	18	KH□6R/L□□□
	KHP6-20-100-JCT		20	15	6	100	8	19	KH□6R/L□□□
	KHP6-22-120-JCT		22	17	6	120	8	21	KH□6R/L□□□
	KHP6-25-120-JCT		25	20	6	120	8	24	KH□6R/L□□□
	KHP6-254-120-JCT		25.4	20.4	6	120	8	24.4	KH□6R/L□□□
	KHP8-1905-100-JCT		19.05	15	8	100	8	18	KH□8R/L□□□
	KHP8-20-100-JCT		20	15	8	100	8	19	KH□8R/L□□□
	KHP8-22-120-JCT		22	17	8	120	8	21	KH□8R/L□□□
	KHP8-25-120-JCT		25	20	8	120	8	24	KH□8R/L□□□
	KHP8-254-120-JCT		25.4	20.4	8	120	8	24.4	KH□8R/L□□□

Recommend Parameters For Machining

SBT Small Diameter Boring Tools								
	VC (m/min)							
	Symbols of Grades							
	KPM30N	KCP10P	KXM15S	KMS15C	KHS10M	KMS20	KCN10D (DLC Coating)	KCN10 (Carbide without Coating)
P Steel	50-150	50-160	50-150	50-150	50-130			
M Stainless Steel			40-100	40-100	40-80	40-120		
K Cast Iron					50-150			
S Heat Resisting Alloy			30-60	30-60		30-80		
H High-hardness steel					30-60			
N Nonferrous metal							120-250	100-180

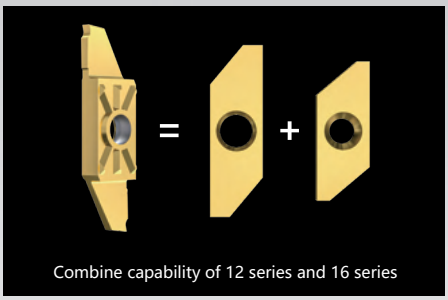
Tool Type

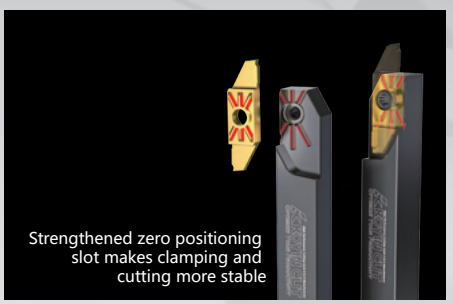
Parameters	KHT Boring Tool	KHP Boring Tool	KHQ Boring Tool	KHG Boring Tool	KHF Boring Tool	KHI Boring Tool
Processing volume ap Ap (mm)	0.01-0.2	0.01-0.2	0.01-0.2			0.015-0.05
Feeding Speed f (mm/rev)	0.02-0.1	0.02-0.1	0.02-0.1	0.02-0.05	0.02-0.05	

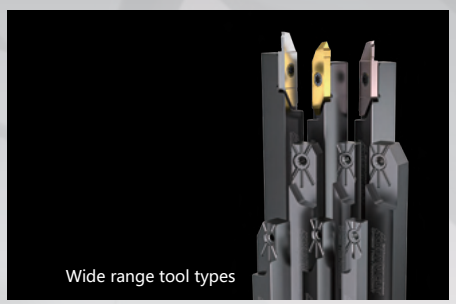
KX116

KX116 CNC PRECISION AUTOMATIC LATHE SPECIAL SMALL PARTS CUTTING TOOL SERIES

Scan QR code to watch the videos



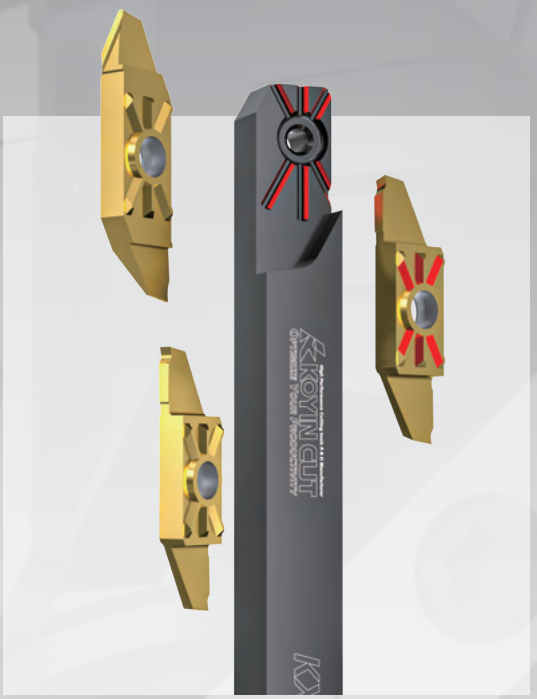




for Precision Small Parts KX116 Tools Dedicated

FEATURES AND ADVANTAGES

- Combine capability of 12 series and 16 series
- Multiple tools (parting, grooving, back-turning, threading)
- Grade varies according to 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 are available

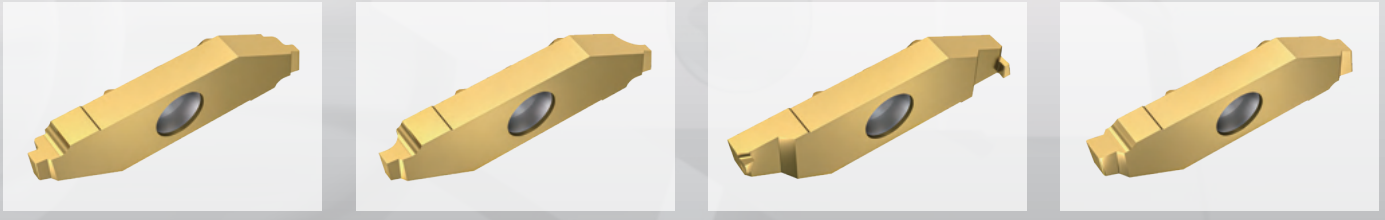


■ More stable cutting performance with strengthened zero positioning slot to eliminate longitudinal machining force

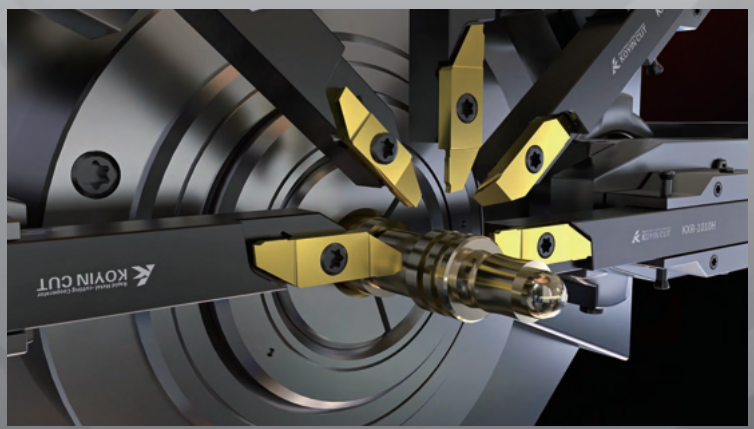
■ Precise positioning and repeatable accuracy with strengthened zero positioning slot

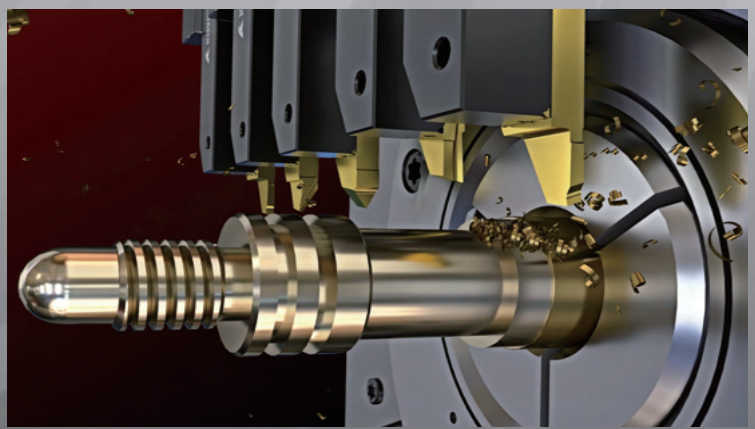
■ one holder for different inserts

■ Display of Customized Tools

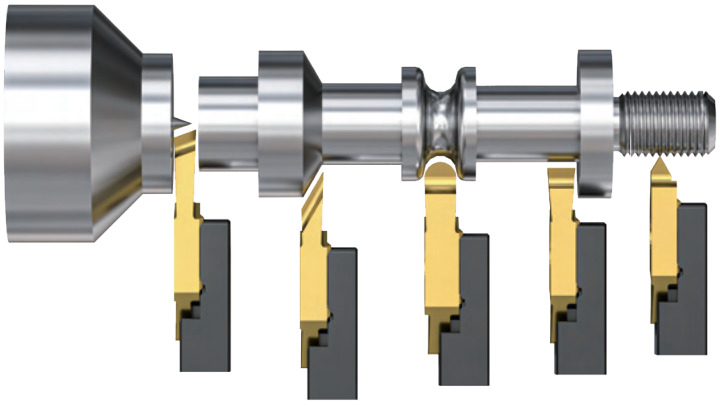


■ Simulated Application Scenario





Processing Application



Parting
Maximum Diameter of parting is 16mm

Back-turning

Profiling

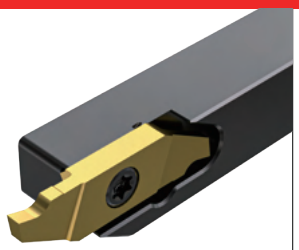
Grooving

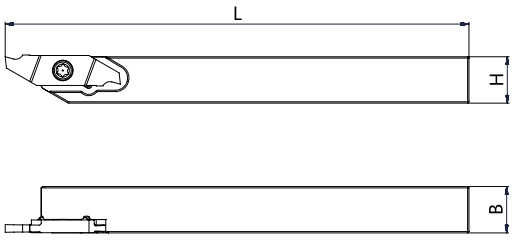
Threading

Symbols of KX116 Tool Holders

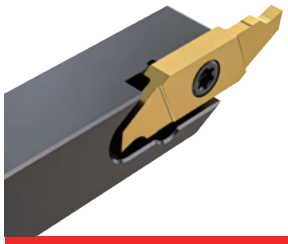
						M： 150
						JX： 120
	N/A: Standard Holders	R： Right Handed				J： 110
KX116: KX116 Series	S： Halved Holders	L： Left Handed				H： 100
Series	**Halved Holders**	**Holder Direction**	**-**	**Holder Height**	**Holder Width**	**Tool Length**
KX116	S	R	-	12	12	JX

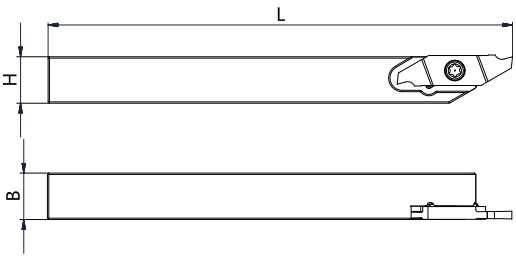
Regular Holders





Right Handed Tool holder (R)

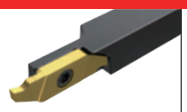


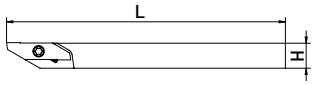


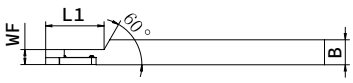
Left handed holders (L)

Type	Size(mm)			Accessaries		Corresponding Insert
	H	B	L	Screw	Wrenth	
KX116R/L -0808H	8	8	100	KS-3504-T	KW-T15	KX116□R/L□□□
KX116R/L -1010JX	10	10	120	KS-35065-T	KW-T15	KX116□R/L□□□
KX116R/L -1212JX	12	12	120	KS-35065-T	KW-T15	KX116□R/L□□□
KX116R/L -1616JX	16	16	120	KS-35065-T	KW-T15	KX116□R/L□□□
KX116R/L -2020JX	20	20	120	KS-35065-T	KW-T15	KX116□R/L□□□
KX116R/L -2525M	25	25	150	KS-35065-T	KW-T15	KX116□R/L□□□

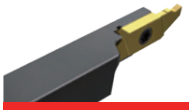
Halved Holders

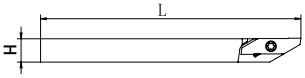


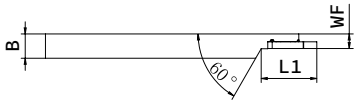




Right Handed Tool holder (R)







Left handed holders (L)

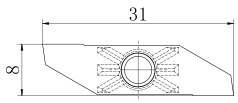
Type	Size(mm)					Accessaries		Corresponding Insert
	H	B	WF	L1	L	Screw	Wrenth	
KX116S□-0808H	8	8	7.2	26	100	KS-3504-T	KW-T15	KX116□□□□
KX116S□-1010JX	10	10	7.2	26	120	KS-3504-T	KW-T15	KX116□□□□
KX116S□-1212JX	12	12	7.2	26	120	KS-3504-T	KW-T15	KX116□□□□
KX116S□-1616JX	16	16	7.2	26	120	KS-3504-T	KW-T15	KX116□□□□

Symbols of KX116 Tools for Grooving, Circular Grooving, Axial Grooving and Back-turning

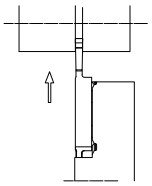
	B: Back-turning Tools						
	BT: Back-turning Tools						
	GT: Back-turning Tools						
	R: Circular Grooving Tools	R: Right Handed	050: 0.5		280: 2.8		035: R0.35
KX116: KX116 Series	G: Grooving Tools	L: Left Handed	125: 1.25		400: 4.0		005: R0.05
Series	**Insert Type**	**Insert Direction**	**Tip Width**	**–**	**Effective Cutting Depth**	**–**	**Nose Radius**
KX116	G	R	125	–	400	–	005

116G Grooving Tools

Insert Blank

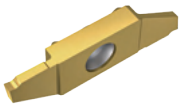
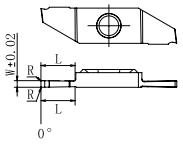


Application Examples



◆ Recommended
◈ Suitable
◇ Applicable

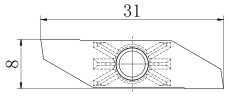
P	Soft Steel	◆	◇	◈		◆	◆		
	Carbon Steel/ Alloy Steel	◆	◇	◈		◈	◆		
M	Austenitic	◆	◆	◆	◆	◆			
	Martensitic	◇	◆	◆	◆	◆			
K	Grey Cast Iron			◇					
	Ductile Cast Iron			◇					
N	Nonferrous							◆	◆
S	Heat Resisting Alloy		◆	◈	◆	◆			
	Titanium Alloy		◆	◈	◆	◆			
H	Hardened Materials			◈					

Shape Right Handed Tool	Type	Size			Carbide with PVD Coating							Carbide
		W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
	KX116G□-070-300-005	0.7	3.0	0.05		●	●					
	KX116G□-100-400-005	1.0	4.0	0.05		●	●					
	KX116G□-100-400-010	1.0	4.0	0.1		●	●					
	KX116G□-125-400-005	1.25	4.0	0.05		●	●					
	KX116G□-125-400-010	1.25	4.0	0.1		●	●					
	KX116G□-150-500-005	1.5	5.0	0.05		●	●					
	KX116G□-150-500-010	1.5	5.0	0.1		●	●					
	KX116G□-150-500-020	1.5	5.0	0.2		●	●					
	KX116G□-200-600-005	2.0	6.0	0.05		●	●					
	KX116G□-200-600-010	2.0	6.0	0.1		●	●					
	KX116G□-200-600-020	2.0	6.0	0.2		●	●					
	KX116G□-250-800-005	2.5	8.0	0.05		●	●					
	KX116G□-250-800-010	2.5	8.0	0.1		●	●					
	KX116G□-250-800-020	2.5	8.0	0.2		●	●					
	KX116G□-300-800-005	3.0	8.0	0.05		●	●					
	KX116G□-300-800-010	3.0	8.0	0.1		●	●					
	KX116G□-300-800-020	3.0	8.0	0.2		●	●					

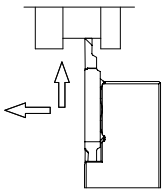
Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

116GT Back-turning Tools

Insert Blank



Application Examples

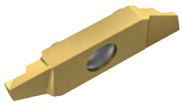


◆ Recommended

◈ Suitable

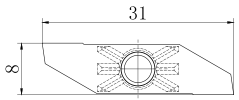
◇ Applicable

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

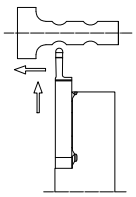
Shape Right Handed Tool	Type	Size			Carbide with PVD Coating							Carbide
		W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
	KX116GT□□-100-250-010	1	2.5	0.1		●	●					
	KX116GT□□-125-300-010	1.25	3	0.1		●	●					
	KX116GT□□-150-300-010	1.5	3	0.1		●	●					
	KX116GT□□-150-300-020	1.5	3	0.2		●	●					
	KX116GT□□-175-400-010	1.75	4	0.1		●	●					
	KX116GT□□-175-400-020	1.75	4	0.2		●	●					
	KX116GT□□-200-400-010	2	4	0.1		●	●					
	KX116GT□□-200-400-020	2	4	0.2		●	●					
	KX116GT□□-250-600-010	2.5	6	0.1		●	●					
	KX116GT□□-250-600-020	2.5	6	0.2		●	●					
	KX116GT□□-300-700-010	3	7	0.1		●	●					
	KX116GT□□-300-700-020	3	7	0.2		●	●					

116R Circular Grooving Tools

Insert Blank



Application Examples

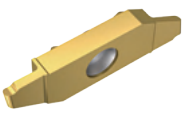


◆ Recommended

◈ Suitable

◇ Applicable

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

Shape Right Handed Tool	Type	Size			Carbide with PVD Coating							Carbide
		W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
	KX116R□□-070-300-035	0.7	3.0	0.35		●	●					
	KX116R□□-100-400-050	1	4.0	0.5		●	●					
	KX116R□□-150-500-075	1.5	5.0	0.75		●	●					
	KX116R□□-200-600-100	2	6.0	1		●	●					
	KX116R□□-250-800-125	2.5	8.0	1.25		●	●					
	KX116R□□-300-800-150	3	8.0	1.5		●	●					

Grades: ◆Recommended ◈Suitable ◇Applicable ●Standard Stock

116B Back-turning Tools

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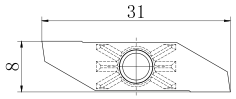
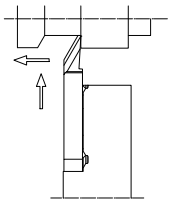


Application Examples

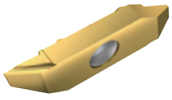
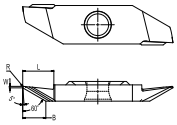


◆ Recommended

◈ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	L	R	B	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX116B[R/L] 025-280-005	0.25	2.8	<0.05	2		●	●					
		KX116B[R/L] 030-460-005	0.3	4.6	<0.05	4.1		●	●					
		KX116B[R/L] 030-460-010	0.3	4.6	<0.1	4.1		●	●					
		KX116B[R/L] 030-460-015	0.3	4.6	<0.15	4.1		●	●					
		KX116B[R/L] 030-630-005	0.3	6.3	<0.05	4.5		●	●					
		KX116B[R/L] 030-630-010	0.3	6.3	<0.1	4.5		●	●					
		KX116B[R/L] 030-630-015	0.3	6.3	<0.15	4.5		●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

116BT Back-turning Tools

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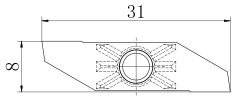
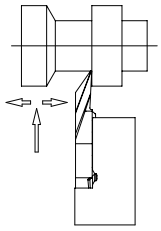
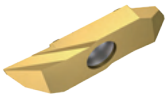
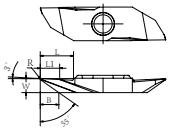


Application Examples



◆ Recommended
◈ Suitable
◇ Applicable

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

Shape Right Handed Tool		Type	Size					Carbide with PVD Coating							Carbide
			W	L	R	B	L1	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX116BTR 320-450-005	3.2	7.5	<0.05	4.5	4		●	●					
		KX116BTR 320-440-010	3.2	7.5	<0.1	4.4	3.9		●	●					
		KX116BTR 320-420-020	3.2	7.5	<0.2	4.2	3.7		●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

Symbols of KX116 Flat Parting Tools

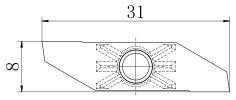
		R: Right Handed	050: 0.5		S: R0.03-R0.05
KX116: KX116 Series	C: Parting	L: Left Handed	125: 1.25		P: R0.08
Series	**Insert Type**	**Insert Direction**	**Tip Width**	**-**	**Nose Radius**
KX116	C	R	125	-	S

Symbols of KX116 Parting Tools With Lead Angle

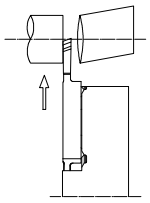
				20D: 20°			N: Without Chipbreaking Slot and Nose Radius
		R: Right Handed	050: 0.5	16D: 16°	R: Right Leaded		S: R0.03-R0.05
KX116: KX116 Series	C: Parting	L: Left Handed	125: 1.25	11D: 11°	L: Left Leaded		P: R0.08
Series	**Insert Type**	**Insert Direction**	**Tip Width**	**Lead Angle**	**Lead Direction**	**-**	**Nose Radius/other**
KX116	C	R	125	16D	R	-	S

116C Parting Tools

Insert Blank



Application Examples

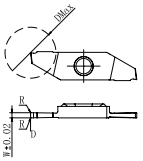
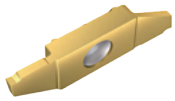
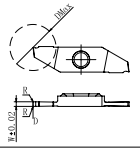
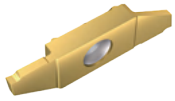
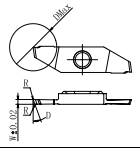
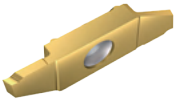
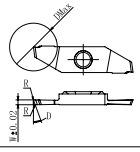
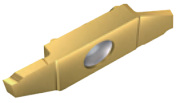
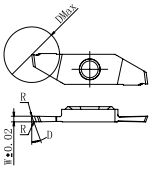
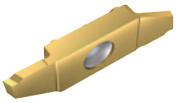
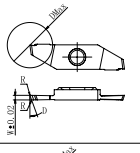
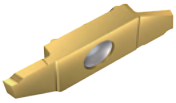
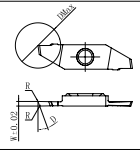
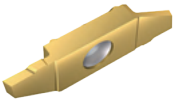


◆ Recommended

⬙ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	DMax	R	D	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
flat		KX116C$^{R}/_{L}$ 050-S	0.5	5	0.03-0.05	0°		●	●					
		KX116C$^{R}/_{L}$ 070-S	0.7	8	0.03-0.05	0°		●	●					
		KX116C$^{R}/_{L}$ 100-S	1	12	0.03-0.05	0°		●	●					
		KX116C$^{R}/_{L}$ 125-S	1.25	12	0.03-0.05	0°		●	●					
		KX116C$^{R}/_{L}$ 150-S	1.5	16	0.03-0.05	0°		●	●					
		KX116C$^{R}/_{L}$ 200-S	2	16	0.03-0.05	0°		●	●					
flat strengthened edge		KX116C$^{R}/_{L}$ 100-P	1	12	0.08±0.01	0°		●	●					
		KX116C$^{R}/_{L}$ 150-P	1.5	16	0.08±0.01	0°		●	●					
		KX116C$^{R}/_{L}$ 200-P	2	16	0.08±0.01	0°		●	●					
		KX116C$^{R}/_{L}$ 200-200-P	2	20	0.08±0.01	0°								
with right lead angle		KX116C$^{R}/_{L}$ 100-11DR-S	1	12	0.03-0.05	11°		●	●					
		KX116C$^{R}/_{L}$ 125-11DR-S	1.25	12	0.03-0.05	11°		●	●					
		KX116C$^{R}/_{L}$ 150-11DR-S	1.5	16	0.03-0.05	11°		●	●					
with right lead angle strengthened edge		KX116C$^{R}/_{L}$ 100-11DR-P	1	12	0.08±0.01	11°		●	●					
		KX116C$^{R}/_{L}$ 125-11DR-P	1.25	12	0.08±0.01	11°		●	●					
		KX116C$^{R}/_{L}$ 150-11DR-P	1.5	16	0.08±0.01	11°		●	●					
with right lead angle		KX116C$^{R}/_{L}$ 050-16DR-S	0.5	5	0.03-0.05	16°		●	●					
		KX116C$^{R}/_{L}$ 070-16DR-S	0.7	8	0.03-0.05	16°		●	●					
		KX116C$^{R}/_{L}$ 100-16DR-S	1	12	0.03-0.05	16°		●	●					
		KX116C$^{R}/_{L}$ 125-16DR-S	1.25	12	0.03-0.05	16°		●	●					
		KX116C$^{R}/_{L}$ 150-16DR-S	1.5	16	0.03-0.05	16°		●	●					
		KX116C$^{R}/_{L}$ 200-16DR-S	2	16	0.03-0.05	16°		●	●					
with right lead angle strengthened edge		KX116C$^{R}/_{L}$ 100-16DR-P	1	12	0.08±0.01	16°		●	●					
		KX116C$^{R}/_{L}$ 150-16DR-P	1.5	16	0.08±0.01	16°		●	●					
		KX116C$^{R}/_{L}$ 200-16DR-P	2	16	0.08±0.01	16°		●	●					
with right lead angle without chipbreaking slot		KX116C$^{R}/_{L}$ 070-20DR-N	0.7	8	0	20°		●	●					
		KX116C$^{R}/_{L}$ 100-20DR-N	1	12	0	20°		●	●					
		KX116C$^{R}/_{L}$ 150-20DR-N	1.5	16	0	20°		●	●					

Grades: ◆ Recommended ⬙ Suitable ◇ Applicable ● Standard Stock

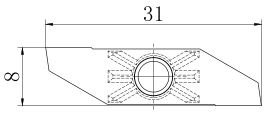
NOTE: KX116C$^{R}/_{L}$ 200-200-P, Relief angle is needed for holders

Symbols of KX116 Threading Tools

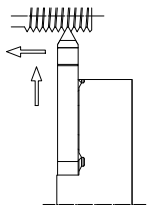
			040: 0.4		A: Left				005: R0.05
		R: Right Handed	080: 0.8		B: Right		55: 55°		010: R0.1
KX116: KX116 Series	T: Threading	L: Left Handed	165: 1.65		N: Central		60: 60°		020: R0.2
Series	**Insert Type**	**Insert Direction**	**Tip Width**	**-**	**Blade Shape**	**-**	**Thread Angle**	**-**	**Nose Radius**
KX116	T	R	040	-	A	-	60	-	005

116T Threading Tools

Insert Blank



Application Examples

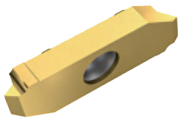
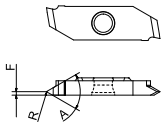
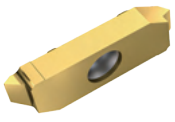
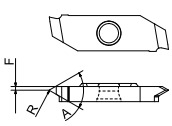
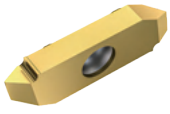
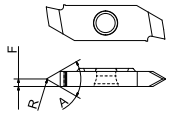


◆ Recommended

⬙ Suitable

◇ Applicable

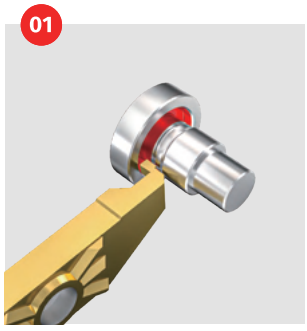
P	Soft Steel	◆	◇	⬙		◆	◆				
	Carbon Steel/ Alloy Steel	◆	◇	⬙		⬙	◆				
M	Austenitic	◆	◆	◆	◆	◆					
	Martensitic	◇	◆	◆	◆	◆					
K	Grey Cast Iron			◇							
	Ductile Cast Iron			◇							
N	Nonferrous							◆	◆		
S	Heat Resisting Alloy		◆	⬙	◆	◆					
	Titanium Alloy		◆	⬙	◆	◆					
H	Hardened Materials			⬙							

Shape Right Handed Tool		Type	Size					Carbide with PVD Coating							Carbide
			F	A	R	Pitch (mm)	Teeth /inch	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX116T R/L 040-A-60-005	0.4	60°	0.05	0.2-0.75	127-34		●	●					
		KX116T R/L 040-A-60-010	0.4	60°	0.1	0.2-0.75	127-34		●	●					
		KX116T R/L 040-A-60-020	0.4	60°	0.2	0.2-0.75	127-34		●	●					
		KX116T R/L 080-A-60-005	0.8	60°	0.05	0.4-1.25	63-21		●	●					
		KX116T R/L 080-A-60-010	0.8	60°	0.1	0.4-1.25	63-21		●	●					
		KX116T R/L 080-A-60-020	0.8	60°	0.2	0.4-1.25	63-21		●	●					
		KX116T R/L 080-A-55-005	0.8	55°	0.05		40-16		●	●					
		KX116T R/L 080-A-55-010	0.8	55°	0.1		24-20		●	●					
		KX116T R/L 040-B-60-005	0.4	60°	0.05	0.2-0.75	127-34		●	●					
		KX116T R/L 040-B-60-010	0.4	60°	0.1	0.2-0.75	127-34		●	●					
		KX116T R/L 040-B-60-020	0.4	60°	0.2	0.2-0.75	127-34		●	●					
		KX116T R/L 080-B-60-005	0.8	60°	0.05	0.4-1.25	63-21		●	●					
		KX116T R/L 080-B-60-010	0.8	60°	0.1	0.4-1.25	63-21		●	●					
		KX116T R/L 080-B-60-020	0.8	60°	0.2	0.4-1.25	63-21		●	●					
		KX116T R/L 080-B-55-005	0.8	55°	0.05		40-16		●	●					
		KX116T R/L 080-B-55-010	0.8	55°	0.1		24-20		●	●					
		KX116T R/L 165-N-60-010	1.65	60°	0.1	1.0-1.5	25-17		●	●					
		KX116T R/L 165-N-60-020	1.65	60°	0.2	1.0-1.5	25-17		●	●					
		KX116T R/L 165-N-55-010	1.65	55°	0.1		24-10		●	●					
		KX116T R/L 165-N-55-020	1.65	55°	0.2		14-10		●	●					

Grades: ◆ Recommended ⬙ Suitable ◇ Applicable ● Standard Stock

Display of Customized Inserts

01



02

03

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

Recommend Parameters For Machining-KX116

116GT Back-turning Tools		
Edge Width	Radial Feed f(mm/rev)	Parameters for Cross Feed
1.0-1.5	0.01-0.05	AP: W*0.2 f: 0.01-0.03
1.75-2.5	0.02-0.08	AP: W*0.2 f: 0.02-0.07
3	0.02-0.1	AP: W*0.2 f: 0.02-0.11

116C Parting Tools	
Edge width	Feeding Speed f(mm/rev)
0.5-1.0	0.008-0.04
1.25-2	0.015-0.06

116G Grooving Tools	
Edge Width	Feeding Speed f(mm/rev)
0.7-1.25	0.01-0.05
1.5-3.0	0.02-0.1

116B Back-turning Tools	
Cutting Depth Ap(mm)	Feeding Speed f(mm/rev)
0.05-6.0	0.02-0.08

116R Circular Grooving Tools	
Edge Width	Feeding Speed f(mm/rev)
0.7-1.0	0.01-0.05
1.5-3.0	0.02-0.1

116T Threading Tools	
Type	Cutting Depth Ap(mm)
A Type	0.02-0.05
B Type	0.02-0.05
N Type	0.03-0.08

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KOYIN CUT

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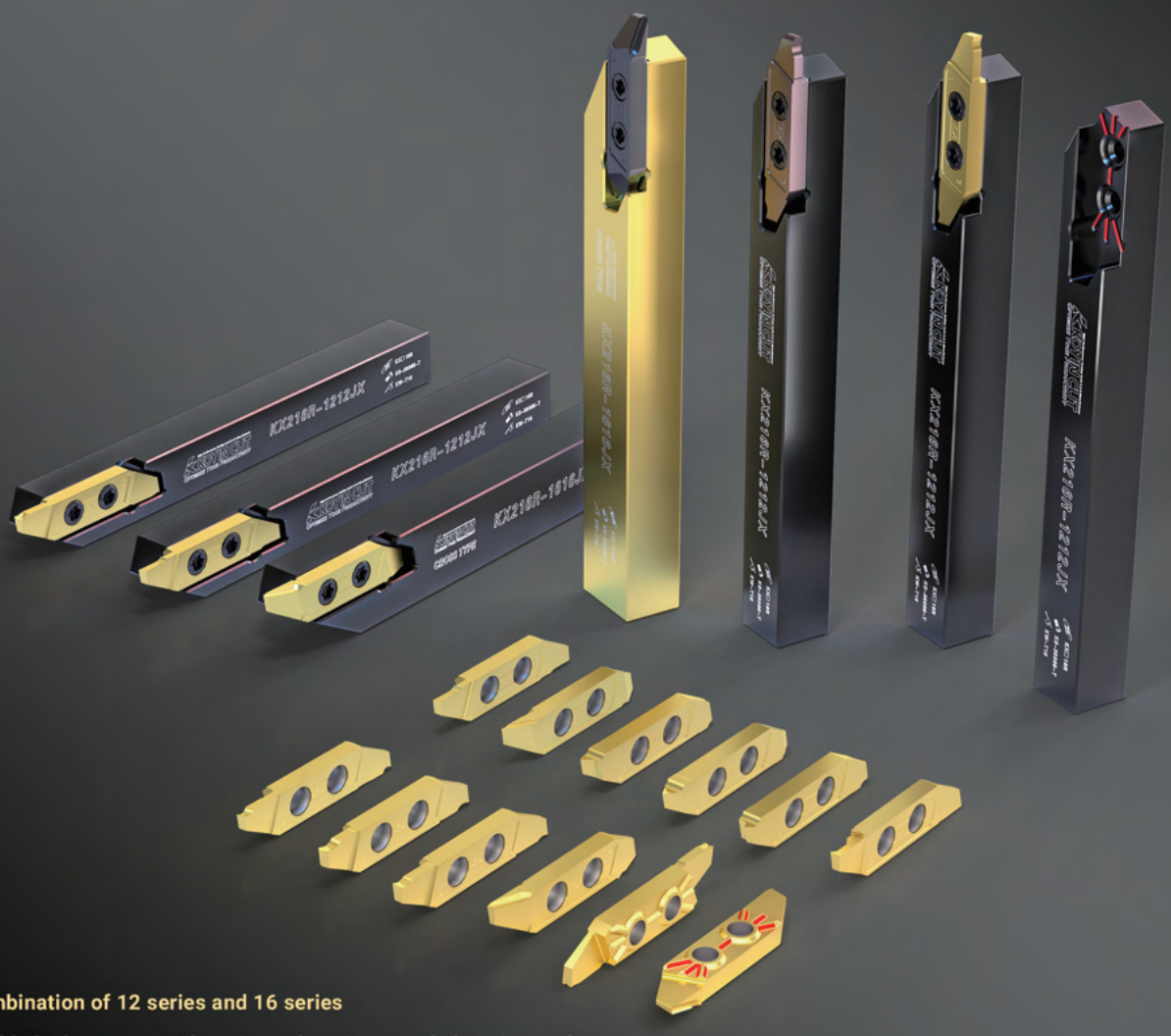
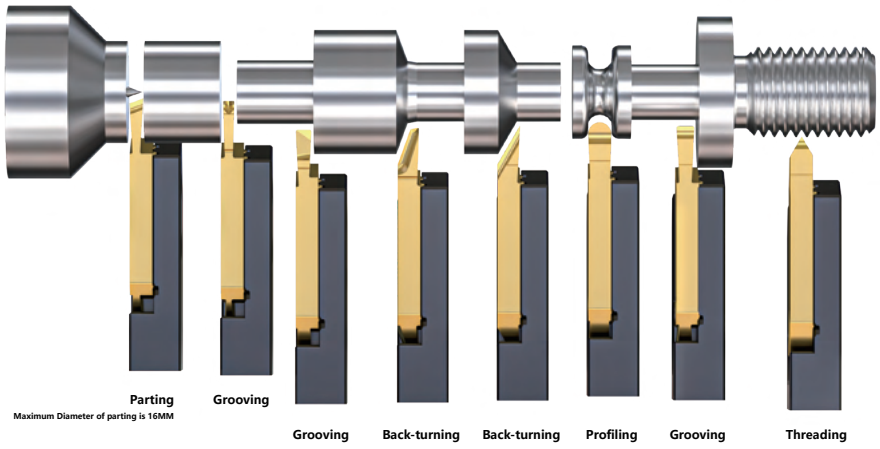
KX216 SERIES

KX216 Tools Dedicated for Precision Small Parts



- Combination of 12 series and 16 series
- Double lock screws, 14 locationg slots, improved clamping and stability, more efficient
- Various types including parting, grooving, side grooving, back turning, threading and customizations
- Rich grade selections can handle various processed materials (stainless steel, alloy, soft iron, non-ferrous etc.)
- Various specifications and sizes (12*12/16*16/20*20/25*25), as well as customizations

Processing Application

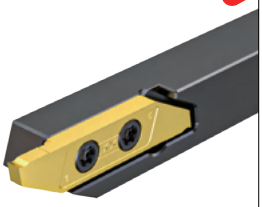


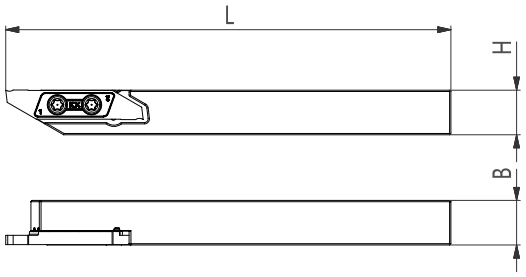
Symbols of KX216 Tool Holders

						M : 150
						JX : 120
	N/A: Standard Holders	R: Right Handed				J : 110
KX216: KX216 Series	S: Halved Holders	L: Left Handed				H : 100
Series	**Halved Holders**	**Holder Direction**	**-**	**Holder Height**	**Holder Width**	**Tool Length**
KX216	S	R	-	12	12	JX

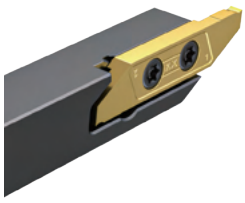
Regular Holders

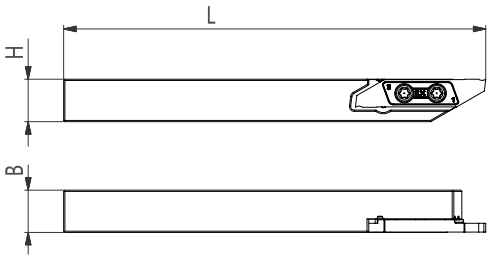
New





Right Handed Tool holder (R)



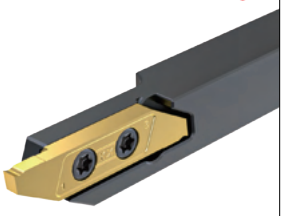


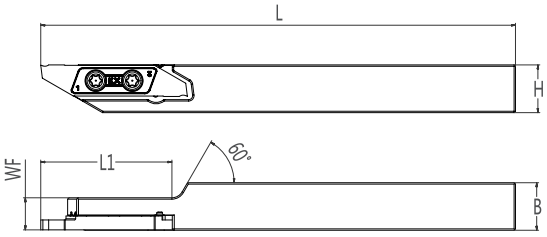
Left handed holders (L)

Type	Size(mm)			Accessaries		Corresponding Insert
	H	B	L	Screw	Wrenth	
KX216R/L -0808H	8	8	100	KS-3504-T	KW-T15	KX216□R/L□□□
KX216R/L -1010JX	10	10	120	KS-35065-T	KW-T15	KX216□R/L□□□
KX216R/L -1212JX	12	12	120	KS-35065-T	KW-T15	KX216□R/L□□□
KX216R/L -1616JX	16	16	120	KS-35065-T	KW-T15	KX216□R/L□□□
KX216R/L -2020JX	20	20	120	KS-35065-T	KW-T15	KX216□R/L□□□
KX216R/L -2525M	25	25	150	KS-35065-T	KW-T15	KX216□R/L□□□

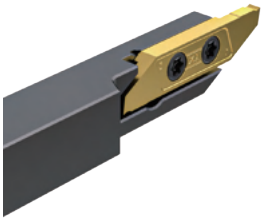
Halved Holders

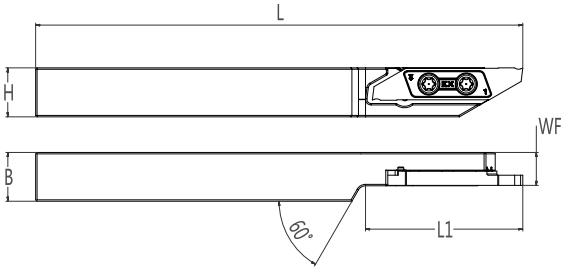
New





Right Handed Tool holder (R)





Left handed holders (L)

Type	Size(mm)					Accessaries		Corresponding Insert
	H	B	WF	L1	L	Screw	Wrenth	
KX216S R/L -0808H	8	8	7.2	26	100	KS-3504-T	KW-T15	KX216□R/L□□□
KX216S R/L -1010JX	10	10	7.2	26	120	KS-3504-T	KW-T15	KX216□R/L□□□
KX216S R/L -1212JX	12	12	7.2	26	120	KS-3504-T	KW-T15	KX216□R/L□□□
KX216S R/L -1616JX	16	16	7.2	26	120	KS-3504-T	KW-T15	KX216□R/L□□□

Symbols of KX216 Grooving, Circular Grooving and Back-turning

	B: Back-turning Tools BT: Back-turning Tools GT: Axial Grooving Tools R: Circular Grooving Tools				280 : 2.8		035 : R0.35		
KX216: KX216 Series	G: Grooving Tools	R: Right Handed L: Left Handed	050 : 0.5 125 : 1.25		400 : 4.0		005 : R0.05		BF: BFGeometry
Series	**Halved Holders**	**Insert Direction**	**Tip Width**	**-**	**Nose Radius**	**-**	**Cutting Depth**		**Geometry**
KX216	G	R	125	-	400	-	005	-	BF

216G Grooving Tools

New

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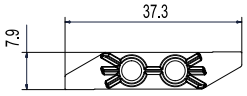
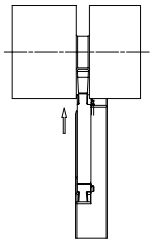


Application Examples

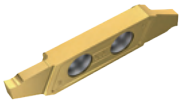
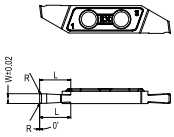


◆ Recommended

◈ Suitable

◇ Applicable

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

Shape Right Handed Tool	Type	Size			Carbide with PVD Coating							Carbide
		W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
 	KX216G□□ 070-300-005	0.7	3	0.05		●	●					
	KX216G□□ 100-400-005	1	4	0.05		●	●					
	KX216G□□ 100-400-010	1	4	0.1		●	●					
	KX216G□□ 125-400-005	1.25	4	0.05		●	●					
	KX216G□□ 125-400-010	1.25	4	0.1		●	●					
	KX216G□□ 150-500-005	1.5	5	0.05		●	●					
	KX216G□□ 150-500-010	1.5	5	0.1		●	●					
	KX216G□□ 150-500-020	1.5	5	0.2		●	●					
	KX216G□□ 200-600-005	2	6	0.05		●	●					
	KX216G□□ 200-600-010	2	6	0.1		●	●					
	KX216G□□ 200-600-020	2	6	0.2		●	●					
	KX216G□□ 250-800-005	2.5	8	0.05		●	●					
	KX216G□□ 250-800-010	2.5	8	0.1		●	●					
	KX216G□□ 250-800-020	2.5	8	0.2		●	●					
	KX216G□□ 300-800-005	3	8	0.05		●	●					
	KX216G□□ 300-800-010	3	8	0.1		●	●					
	KX216G□□ 300-800-020	3	8	0.2		●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

216GT Back-turning Tools

New

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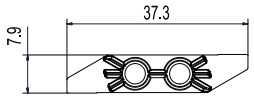
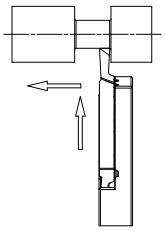


Application Examples

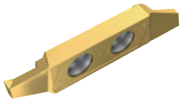
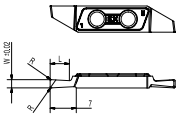


◆ Recommended

◈ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size			Carbide with PVD Coating							Carbide
			W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX216GTR 100-250-010	1	2.5	0.1		●	●					
		KX216GTR 125-300-010	1.25	3	0.1		●	●					
		KX216GTR 150-300-010	1.5	3	0.1		●	●					
		KX216GTR 150-300-020	1.5	3	0.2		●	●					
		KX216GTR 175-400-010	1.75	4	0.1		●	●					
		KX216GTR 175-400-020	1.75	4	0.2		●	●					
		KX216GTR 200-400-010	2	4	0.1		●	●					
		KX216GTR 200-400-020	2	4	0.2		●	●					
		KX216GTR 250-600-010	2.5	6	0.1		●	●					
		KX216GTR 250-600-020	2.5	6	0.2		●	●					
		KX216GTR 300-700-010	3	7	0.1		●	●					
		KX216GTR 300-700-020	3	7	0.2		●	●					

216R Circular Grooving Tools

New

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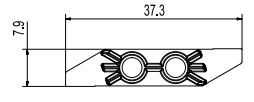
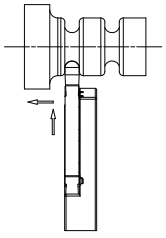


Application Examples

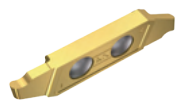
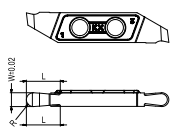


◆ Recommended

◈ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size			Carbide with PVD Coating							Carbide
			W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX216R R/L 070-300-035	0.7	3	0.35		●	●					
		KX216R R/L 100-400-050	1	4	0.5		●	●					
		KX216R R/L 150-500-075	1.5	5	0.75		●	●					
		KX216R R/L 200-600-100	2	6	1		●	●					
		KX216R R/L 250-800-125	2.5	8	1.25		●	●					
		KX216R R/L 300-800-150	3	8	1.5		●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

216B Back-turning Tools

New

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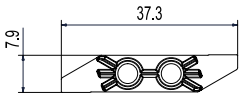
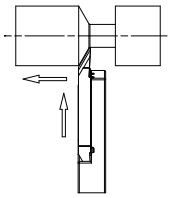


Application Examples

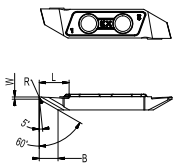


◆ Recommended

◈ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	L	R	B	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX216B R/L 030-280-005	0.3	2.8	<0.05	4.5		●	●					
		KX216B R/L 040-460-005	0.4	4.6	<0.05	4.5		●	●					
		KX216B R/L 040-460-010	0.4	4.6	<0.1	4.5		●	●					
		KX216B R/L 040-460-015	0.4	4.6	<0.15	4.5		●	●					
		KX216B R/L 040-630-005	0.4	6.3	<0.05	4.5		●	●					
		KX216B R/L 040-630-010	0.4	6.3	<0.1	4.5		●	●					
		KX216B R/L 040-630-015	0.4	6.3	<0.15	4.5		●	●					

216BF Back-turning Tools

New

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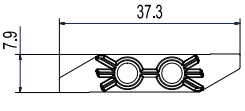
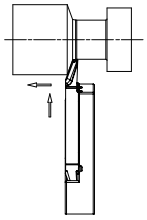


Application Examples

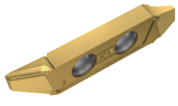
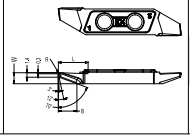


◆ Recommended

◈ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	L	R	B	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX216B R/L 030-630-005-BF	3.3	6.3	<0.05	5.0		●	●					
		KX216B R/L 030-630-010-BF	3.3	6.3	<0.1	5.0		●	●					
		KX216B R/L 030-630-015-BF	3.3	6.3	<0.15	5.0		●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

216BT Back-turning Tools

New

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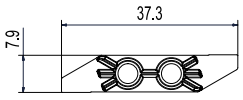
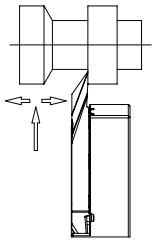


Application Examples

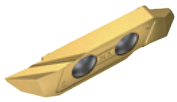
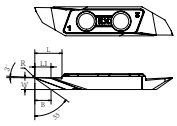


◆ Recommended

◈ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size					Carbide with PVD Coating							Carbide
			W	L	R	B	L1	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX216BTR 340-470-005	3.4	7.5	<0.05	4.7	4		●	●					
		KX216BTR 340-460-010	3.4	7.5	<0.1	4.6	3.9		●	●					
		KX216BTR 340-435-020	3.4	7.5	<0.2	4.35	3.65		●	●					
		KX216BTR 340-385-040	3.4	7.5	<0.4	3.85	3.15		●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

Symbols of KX216 Flat Parting Tools

		R: Right Handed		050: 0.5		S: R0.03-R0.05
KX216: KX216 Series	C: Parting	L: Left Handed		125: 1.25		P: R0.08
KX216	**Insert Type**	**Insert Direction**		**Tip Width**	**-**	**Nose Radius**
KX216	C	R		125	-	S

Symbols of KX216 Parting Tools With Lead Angle

				20D: 20°		N: Without Chipbreaking Slot and Nose Radius
		R: Right Handed	050: 0.5	16D: 16°	R: Right Leaded	S: R0.03-R0.05
KX216: KX216 Series	C: Parting	L: Left Handed	125: 1.25	11D: 11°	L: Left Leaded	P: R0.08
KX216	**Insert Type**	**Insert Direction**	**Tip Width**	**Lead Angle**	**Lead Direction**	**Nose Radius/other**
KX216	C	R	125	16D	R	S

216C Parting Tools

New

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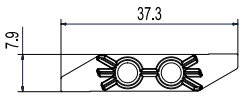
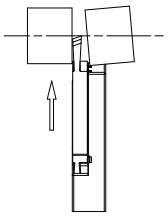


Application Examples

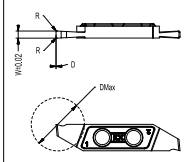
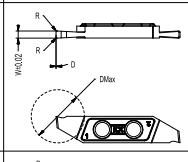
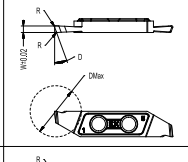
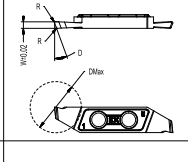
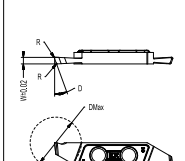
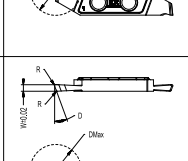
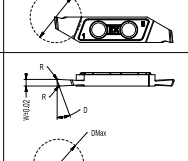


◆ Recommended

⬙ Suitable

◇ Applicable

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

Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	DMax	R	D	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
flat		KX216C R/L 050-S	0.5	5	0.03-0.05	0°		●	●					
		KX216C R/L 070-S	0.7	8	0.03-0.05	0°		●	●					
		KX216C R/L 100-S	1	12	0.03-0.05	0°		●	●					
		KX216C R/L 125-S	1.25	12	0.03-0.05	0°		●	●					
		KX216C R/L 150-S	1.5	16	0.03-0.05	0°		●	●					
		KX216C R/L 200-S	2	16	0.03-0.05	0°		●	●					
f lat strengthened edge		KX216C R/L 100-P	1	12	0.08±0.01	0°		●	●					
		KX216C R/L 150-P	1.5	16	0.08±0.01	0°		●	●					
		KX216C R/L 200-P	2	16	0.08±0.01	0°		●	●					
		KX216C R/L 200-180-P	2	18	0.08±0.01	0°								
with right lead angle		KX216C R/L 100-11DR-S	1	12	0.03-0.05	11°		●	●					
		KX216C R/L 125-11DR-S	1.25	12	0.03-0.05	11°		●	●					
		KX216C R/L 150-11DR-S	1.5	16	0.03-0.05	11°		●	●					
with right lead angle strengthened edge		KX216C R/L 100-11DR-P	1	12	0.08±0.01	11°		●	●					
		KX216C R/L 125-11DR-P	1.25	12	0.08±0.01	11°		●	●					
		KX216C R/L 150-11DR-P	1.5	16	0.08±0.01	11°		●	●					
with right lead angle		KX216C R/L 050-16DR-S	0.5	5	0.03-0.05	16°		●	●					
		KX216C R/L 070-16DR-S	0.7	8	0.03-0.05	16°		●	●					
		KX216C R/L 100-16DR-S	1	12	0.03-0.05	16°		●	●					
		KX216C R/L 125-16DR-S	1.25	12	0.03-0.05	16°		●	●					
		KX216C R/L 150-16DR-S	1.5	16	0.03-0.05	16°		●	●					
		KX216C R/L 200-16DR-S	2	16	0.03-0.05	16°		●	●					
with right lead angle strengthened edge		KX216C R/L 100-16DR-P	1	12	0.08±0.01	16°		●	●					
		KX216C R/L 150-16DR-P	1.5	16	0.08±0.01	16°		●	●					
		KX216C R/L 200-16DR-P	2	16	0.08±0.01	16°		●	●					
with right lead angle without chipbreaking slot		KX216C R/L 070-20DR-N	0.7	8	0	20°		●	●					
		KX216C R/L 100-20DR-N	1	12	0	20°		●	●					
		KX216C R/L 150-20DR-N	1.5	16	0	20°		●	●					

Grades: ◆ Recommended ⬙ Suitable ◇ Applicable ● Standard Stock

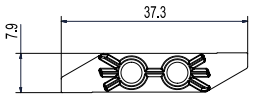
NOTE: KX216C R/L 200-180-P, Relief angle is needed for holders

Symbols of KX216 Threading Tools

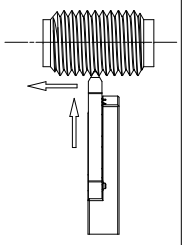
			040: 0.4		A: Left				005: R0.05
		R: Right Handed	080: 0.8		B: Right		55: 55°		010: R0.1
KX216: KX216 Series	T: Threading	L: Left Handed	165: 1.65		N: Central		60: 60°		020: R0.2
Series	**Insert Type**	**Insert Direction**	**Tip Width**	**-**	**Blade Shape**	**-**	**Thread Angle**	**-**	**Nose Radius**
KX216	T	R	040	-	A	-	60	-	005

216T Threading Tools

Insert Blank



Application Examples

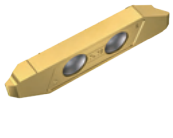
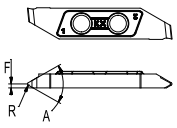
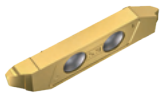
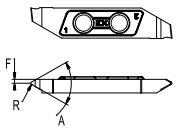
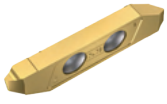
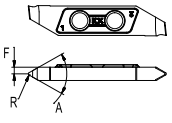


◆ Recommended

◈ Suitable

◇ Applicable

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

Shape (Right Handed Tool)		Type	Size					Carbide with PVD Coating							Carbide
			F	A	R	Pitch (mm)	Teeth /inch	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KX216T R/L 040-A-60-005	0.4	60°	0.05	0.2-0.75	127-34		●	●					
		KX216T R/L 040-A-60-010	0.4	60°	0.1	0.2-0.75	127-34		●	●					
		KX216T R/L 040-A-60-020	0.4	60°	0.2	0.2-0.75	127-34		●	●					
		KX216T R/L 080-A-60-005	0.8	60°	0.05	0.4-1.25	63-21		●	●					
		KX216T R/L 080-A-60-010	0.8	60°	0.1	0.4-1.25	63-21		●	●					
		KX216T R/L 080-A-60-020	0.8	60°	0.2	0.4-1.25	63-21		●	●					
		KX216T R/L 080-A-55-005	0.8	55°	0.05		40-16		●	●					
		KX216T R/L 080-A-55-010	0.8	55°	0.1		40-16		●	●					
		KX216T R/L 040-B-60-005	0.4	60°	0.05	0.2-0.75	127-34		●	●					
		KX216T R/L 040-B-60-010	0.4	60°	0.1	0.2-0.75	127-34								
		KX216T R/L 040-B-60-020	0.4	60°	0.2	0.2-0.75	127-34		●	●					
		KX216T R/L 080-B-60-005	0.8	60°	0.05	0.4-1.25	63-21		●	●					
		KX216T R/L 080-B-60-010	0.8	60°	0.1	0.4-1.25	63-21								
		KX216T R/L 080-B-60-020	0.8	60°	0.2	0.4-1.25	63-21		●	●					
		KX216T R/L 080-B-55-005	0.8	55°	0.05		40-16		●	●					
		KX216T R/L 080-B-55-010	0.8	55°	0.1		24-20		●	●					
		KX216T R/L 165-N-60-010	1.65	60°	0.1	1.0-1.5	25-17		●	●					
		KX216T R/L 165-N-60-020	1.65	60°	0.2	1.0-1.5	25-17								
		KX216T R/L 165-N-55-010	1.65	55°	0.1		24-10		●	●					
		KX216T R/L 165-N-55-020	1.65	55°	0.2		14-10		●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

Recommend Parameters For Machining-KX216

216GT Back-turning Tools		
Edge Width	Radial Feed f(mm/rev)	Parameters for Cross Feed
1.0-1.5	0.01-0.05	AP: W*0.2 f: 0.02-0.05
1.75-2.5	0.02-0.08	AP: W*0.2 f: 0.03-0.1
3	0.02-0.1	AP: W*0.2 f: 0.03-0.15

216C parting Tools	
Edge Width	Feeding Speed f(mm/rev)
0.5-1.0	0.008-0.04
1.25-2	0.015-0.06

216G Grooving Tools	
Edge Width	Feeding Speed f(mm/rev)
0.7-1.25	0.01-0.05
1.5-3.0	0.02-0.1

216B Back-turning Tools	
Cutting Depth Ap(mm)	Feeding Speed f(mm/rev)
0.05-6.0	0.02-0.08

216R Circular Grooving Tools	
Edge Width	Feeding Speed f(mm/rev)
0.7-1.0	0.01-0.05
1.5-3.0	0.02-0.1

216T Threading Tools	
Type	Cutting Depth Ap(mm)
A Type	0.02-0.05
B Type	0.02-0.05
N Type	0.03-0.08

216BF Back-turning tools	
Cutting Depth Ap(mm)	Feeding Speed f(mm/rev)
0.05-6.0	0.04-0.1

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High Performance Cutting tools R & D Manufacturer

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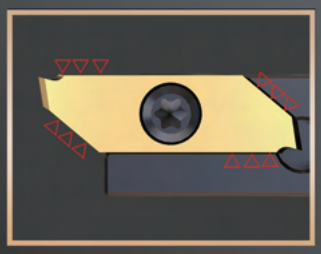
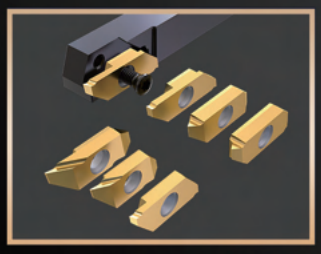
KSI12/16 SERIES

KSI12/16 Tools For Small Parts



Precision full lapped

Stable clamping with 5°



One holder for all inserts

Symbols of KSI Tool Holders

						M: 150		
						JX: 120		
	12: 12 Type	R: Right Handed				J: 110		
KSI: KSI Series	16: 16 Type	L: Left Handed				H: 100		S: Halved
Series	**Insert Size**	**Holder Direction**	**Holder Height**	**Holder Width**	**-**	**Tool Length**	**-**	**Others**
KSI	12	R	12	12	-	J	-	S

Symbols of KSI Tools for Grooving, Circular Grooving, Axial Grooving and Back-turning

	G: Hrooving Tools					
	GT: Side Grooving Tools			070: 0.7	300: 3.0	R005: R0.05
	R: Circular Grooving Tools	12: 12 Type	R: Right Handed	100: 1.0	400: 4.0	R010: R0.1
KSI: KSI Series	B: Back-turning Tools	16: 16 Type	L: Left Handed	125: 1.25	550: 5.5	R020: R0.2
Series	**Insert Type**	**Insert Size**	**Insert Direction**	**Tip Width**	**Cutting Depth**	**Nose Radius**
KSI	GT	12	R	125	300	R005

Symbols of KSI Flat Parting Tools

		12: 12 Type	R: Right Handed	050: 0.5		S: R0.03-R0.05
KSI: KSI Series	C: Parting	16: 16 Tyte	L: Left Handed	125: 1.25		P: R0.08
Series	**Insert Type**	**Insert Size**	**Insert Direction**	**Tip Width**	**-**	**Nose Radius**
KSI	C	12	R	125	-	S

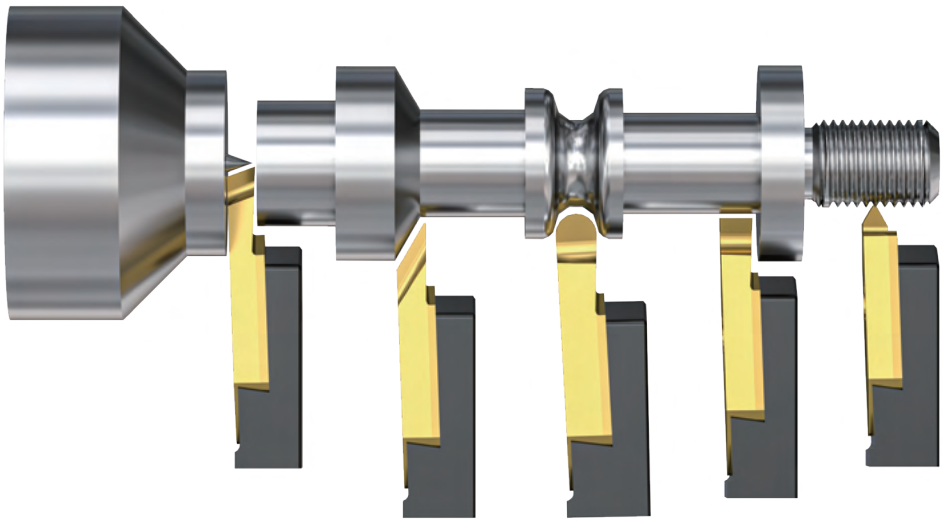
Symbols of KSI Parting Tools With Lead Angle

					20D: 20°		N: Without Chipbreaking Slot and Nose Radius
		12: 12 Type	R: Right Handed	050: 0.5	16D: 16°	R: With Right Lead Angle	S: R0.03-R0.05
KSI: KSI Series	C: Parting	16: 16 Type	L: Left Handed	125: 1.25	11D: 11°	L: With Left Lead Angle	P: R0.08
Series	**Insert Type**	**Insert Size**	**Insert Direction**	**Tip Width**	**Lead Angle**	**Lead Direction**	**Nose Radius/other**
KSI	C	12	R	125	16D	R	S

Symbols of KSI Threading Tools

							005: R0.05
				040: 0.4	A: Left		010: R0.1
		12: 12 Type	R: Right Handed	080: 0.8	B: Right	55: 55°	015: R0.15
KSI: KSI Series	T: Threading	16: 16 Type	L: Left Handed	165: 1.65	N: Central	60: 60°	020: R0.2
Series	**Insert Type**	**Insert Size**	**Insert Direction**	**Tip Width**	**Blade Shape**	**Thread Angle**	**Nose Radius**
KSI	T	12	R	040	A	60	010

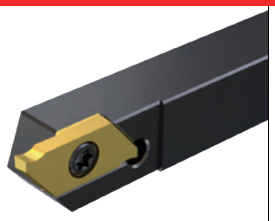
Application Examples of 12 Series

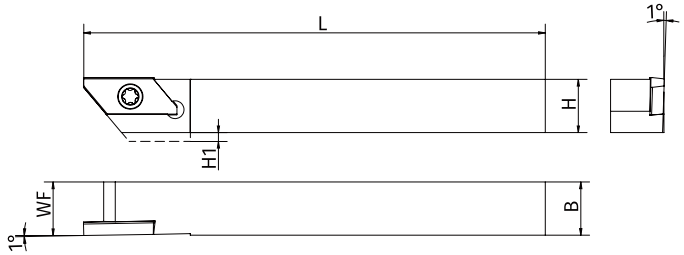


Parting **Back-turning** **Profiling** **Grooving** **Threading**

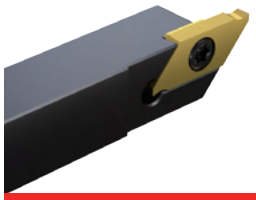
Maximum Diameter of Parting is 12mm

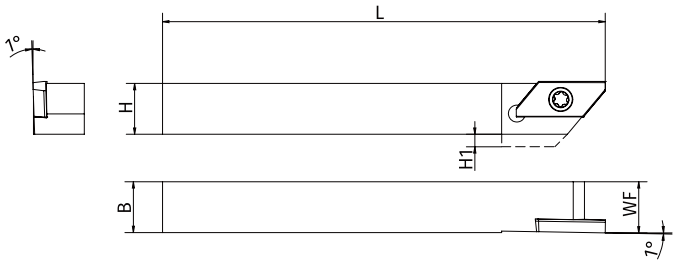
Tool Holders of 12 Series





Right Handed Tool holder (R)

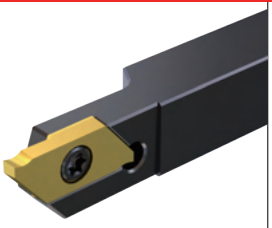


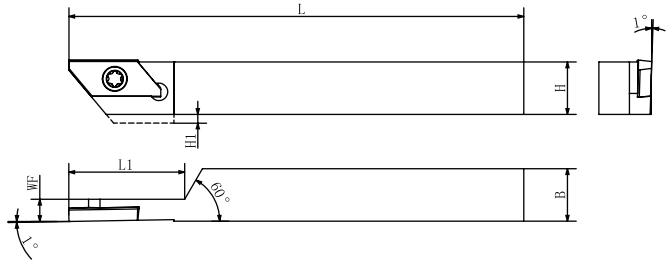


Left handed holders (L)

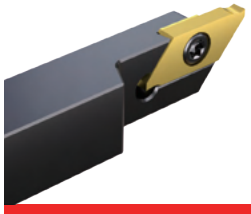
Type	Size(mm)					Accessaries		Corresponding Insert
	H	H1	B	WF	L	Screw	Wrenth	
KSI12R/L -1010J	10	2	10	10	110	KS-35065-T	KW-T15	KSI□12R/L □□□
KSI12R/L -1212J	12	0	12	12	110	KS-35065-T	KW-T15	KSI□12R/L □□□
KSI12R/L -1616J	16	0	16	16	110	KS-35065-T	KW-T15	KSI□12R/L □□□
KSI12R/L -2020J	20	0	20	20	110	KS-35065-T	KW-T15	KSI□12R/L □□□

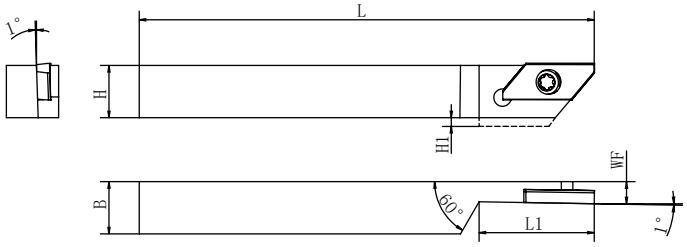
12 Series-Halved Holders





Right Handed Tool holder (R)



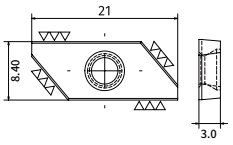


Left handed holders (L)

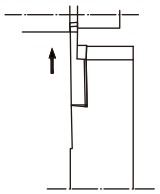
Type	Size(mm)						Accessaries		Corresponding Insert
	H	H1	B	WF	L	L1	Screw	Wrenth	
KSI12ℛ -1010-J-S	10	2	10	7.2	110	22	KS-3504-T	KW-T15	KSI□12ℛ □□□
KSI12ℛ -1212-J-S	12	0	12	7.2	110	26	KS-3504-T	KW-T15	KSI□12ℛ □□□

12 Series-Grooving Tools

Insert Blank

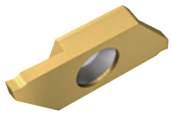
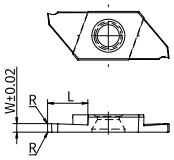


Application Examples



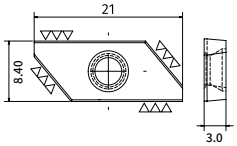
◆ Recommended
◈ Suitable
◇ Applicable

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

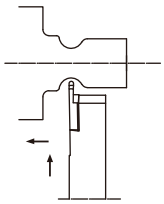
Shape Right Handed Tool		Type	Size			Carbide with PVD Coating							Carbide
			W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KSIG12R/L 070-300-R005	0.7	3.0	0.05		●	●					
		KSIG12R/L 100-400-R005	1.0	4.0	0.05		●	●					
		KSIG12R/L 100-400-R010	1.0	4.0	0.1		●	●					
		KSIG12R/L 125-400-R005	1.25	4.0	0.05		●	●					
		KSIG12R/L 125-400-R010	1.25	4.0	0.1		●	●					
		KSIG12R/L 150-500-R005	1.5	5.0	0.05		●	●					
		KSIG12R/L 150-500-R010	1.5	5.0	0.1		●	●					
		KSIG12R/L 150-500-R020	1.5	5.0	0.2		●	●					
		KSIG12R/L 200-600-R005	2.0	6.0	0.05		●	●					
		KSIG12R/L 200-600-R010	2.0	6.0	0.1		●	●					
		KSIG12R/L 200-600-R020	2.0	6.0	0.2		●	●					
		KSIG12R/L 250-700-R005	2.5	7.0	0.05		●	●					
		KSIG12R/L 250-700-R010	2.5	7.0	0.1		●	●					
		KSIG12R/L 250-700-R020	2.5	7.0	0.2		●	●					

12 Series-Circular Grooving Tools

Insert Blank

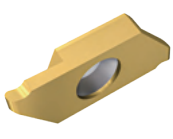
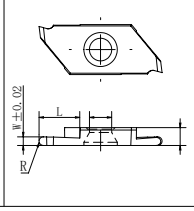


Application Examples



◆ Recommended
◈ Suitable
◇ Applicable

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

Shape Right Handed Tool		Type	Size			Carbide with PVD Coating							Carbide
			W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KSIR12R/L 070-160-R035	0.7	1.6	0.35		●	●					
		KSIR12R/L 100-200-R050	1	2.0	0.5		●	●					
		KSIR12R/L 150-300-R075	1.5	3.0	0.75		●	●					
		KSIR12R/L 200-300-R100	2	3.0	1		●	●					
		KSIR12R/L 250-400-R125	2.5	4.0	1.25		●	●					

Grades: ◆Recommended ◈Suitable ◇Applicable ●Standard Stock

12 Series - Parting Tools

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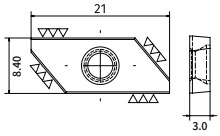
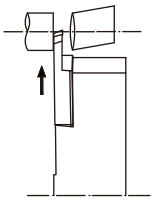
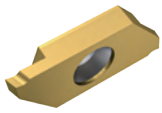
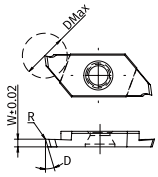
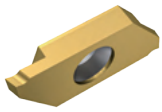
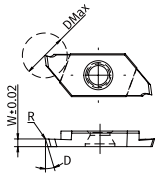
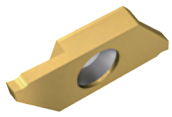
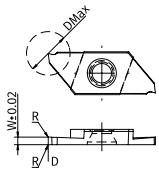


Application Examples



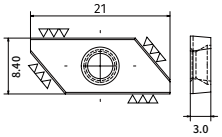
◆ Recommended
◈ Suitable
◇ Applicable

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

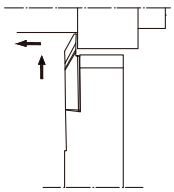
Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	DMax	R	D	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KSIC12R/L 050-16DR-S	0.5	5	0.05	16°		●	●					
		KSIC12R/L 070-16DR-S	0.7	8	0.05	16°		●	●					
		KSIC12R/L 100-16DR-S	1	12	0.05	16°		●	●					
		KSIC12R/L 125-16DR-S	1.25	12	0.05	16°		●	●					
		KSIC12R/L 150-16DR-S	1.5	12	0.05	16°		●	●					
		KSIC12R/L 200-16DR-S	2	12	0.05	16°		●	●					
		KSIC12R/L 050-20DR-S	0.5	5	0.05	20°		●	●					
		KSIC12R/L 070-20DR-S	0.7	8	0.05	20°		●	●					
		KSIC12R/L 100-20DR-S	1	12	0.05	20°		●	●					
		KSIC12R/L 125-20DR-S	1.25	12	0.05	20°		●	●					
		KSIC12R/L 150-20DR-S	1.5	12	0.05	20°		●	●					
		KSIC12R/L 200-20DR-S	2	12	0.05	20°		●	●					
		KSIC12R/L 050-S	0.5	5	0.05	0°		●	●					
		KSIC12R/L 070-S	0.7	8	0.05	0°		●	●					
		KSIC12R/L 100-S	1	12	0.05	0°		●	●					
		KSIC12R/L 125-S	1.25	12	0.05	0°		●	●					
		KSIC12R/L 150-S	1.5	12	0.05	0°		●	●					
		KSIC12R/L 200-S	2	12	0.05	0°		●	●					

12 Series - Back turning Tools

Insert Blank

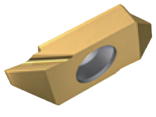
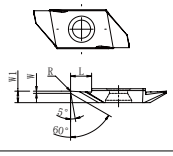


Application Examples



◆ Recommended
◈ Suitable
◇ Applicable

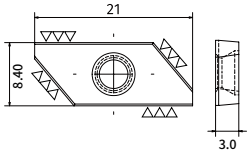
P	Soft Steel	◆	◇	◈		◆	◆		
	Carbon Steel/ Alloy Steel	◆	◇	◈		◈	◆		
M	Austenitic	◆	◆	◆	◆	◆			
	Martensitic	◇	◆	◆	◆	◆			
K	Grey Cast Iron			◇					
	Ductile Cast Iron			◇					
N	Nonferrous							◆	◆
S	Heat Resisting Alloy		◆	◈	◆	◆			
	Titanium Alloy		◆	◈	◆	◆			
H	Hardened Materials			◈					

Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	L	R	W1	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KSIB12R/L 025-280-R005	0.25	2.8	<0.05	1.5		●	●					
		KSIB12R/L 030-460-R005	0.3	4.6	<0.05	2.8		●	●					
		KSIB12R/L 030-460-R015	0.3	4.6	<0.15	2.8		●	●					

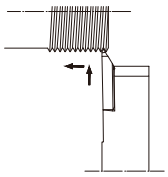
Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

12 Series - Threading Tools

Insert Blank



Application Examples

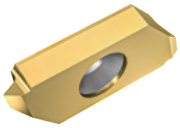
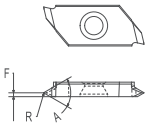
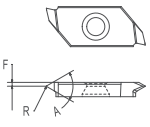
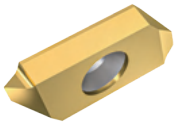
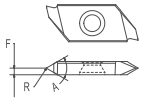


◆ Recommended

◈ Suitable

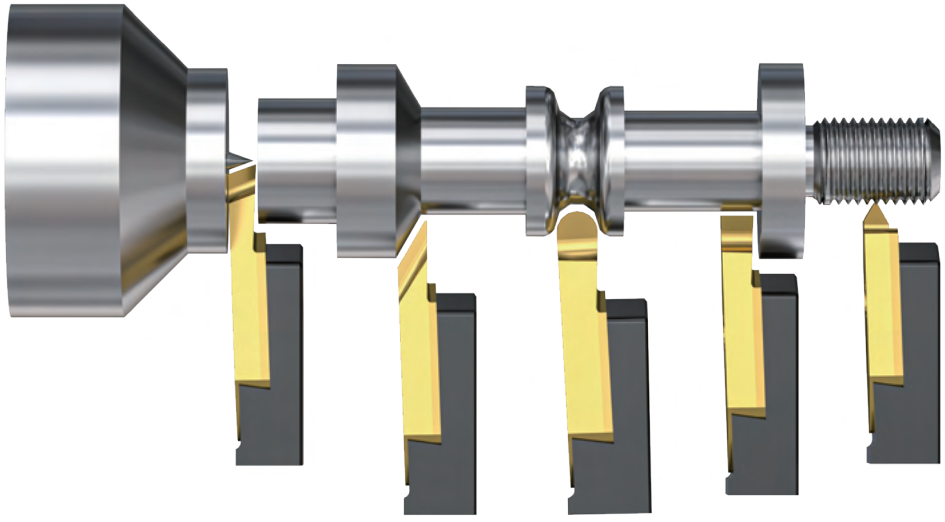
◇ Applicable

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

Shape Right Handed Tool		Type	Size					Carbide with PVD Coating							Carbide
			F	A	R	Pitch (mm)	Teeth /inch	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
	A Type	KSIT12[R/L] 040-A-60-005	0.4	60°	0.05	0.2~0.75	127~34		●	●					
		KSIT12[R/L] 040-A-60-010	0.4	60°	0.1	0.2~0.75	127~34		●	●					
		KSIT12[R/L] 040-A-60-020	0.4	60°	0.2	0.2~0.75	127~34		●	●					
		KSIT12[R/L] 080-A-60-005	0.8	60°	0.05	0.4~1.25	63~21		●	●					
		KSIT12[R/L] 080-A-60-010	0.8	60°	0.1	0.4~1.25	63~21		●	●					
		KSIT12[R/L] 080-A-60-020	0.8	60°	0.2	0.4~1.25	63~21		●	●					
		KSIT12[R/L] 080-A-55-005	0.8	55°	0.05		40~16		●	●					
		KSIT12[R/L] 080-A-55-010	0.8	55°	0.1		24~20		●	●					
	B Type	KSIT12[R/L] 040-B-60-005	0.4	60°	0.05	0.2~0.75	127~34		●	●					
		KSIT12[R/L] 040-B-60-010	0.4	60°	0.1	0.2~0.75	127~34		●	●					
		KSIT12[R/L] 040-B-60-020	0.4	60°	0.2	0.2~0.75	127~34		●	●					
		KSIT12[R/L] 080-B-60-005	0.8	60°	0.05	0.4~1.25	63~21		●	●					
		KSIT12[R/L] 080-B-60-010	0.8	60°	0.1	0.4~1.25	63~21		●	●					
		KSIT12[R/L] 080-B-60-020	0.8	60°	0.2	0.4~1.25	63~21		●	●					
		KSIT12[R/L] 080-B-55-005	0.8	55°	0.05		40~16		●	●					
		KSIT12[R/L] 080-B-55-010	0.8	55°	0.1		24~20		●	●					
	N Type	KSIT12[R/L] 150-N-60-010	1.5	60°	0.1	1.0~1.5	25~17		●	●					
		KSIT12[R/L] 150-N-60-020	1.5	60°	0.2	1.0~1.5	25~17		●	●					
		KSIT12[R/L] 150-N-55-010	1.5	55°	0.1		24~10		●	●					
		KSIT12[R/L] 150-N-55-020	1.5	55°	0.2		16~9		●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

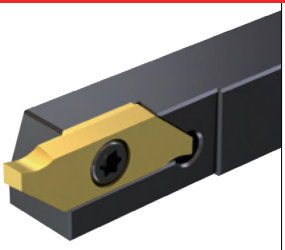
Application Examples of 16 Series



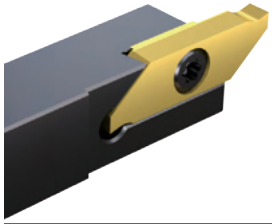
Parting Back-turning Profiling Grooving Threading

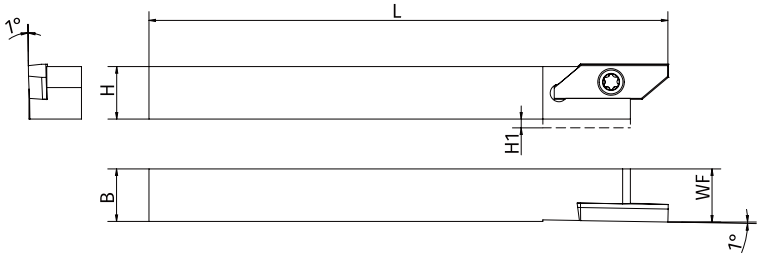
Maximum Diameter of Parting is 16mm

Tool Holders of 16 Series



Right Handed Tool holder (R)

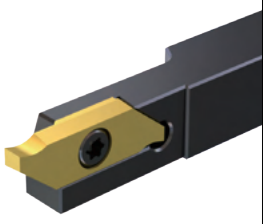


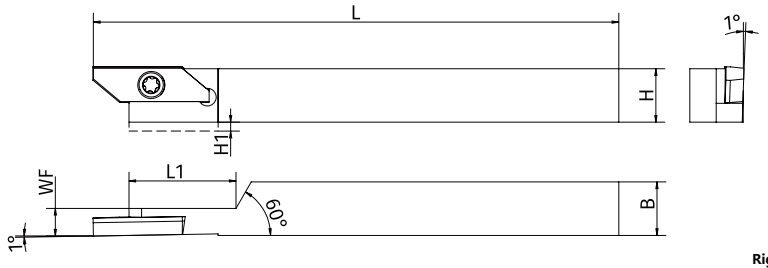


Left handed holders (L)

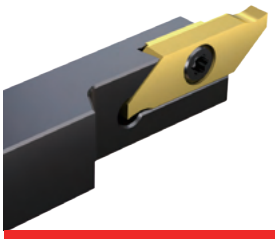
Type	Size(mm)					Accessaries		Corresponding Insert
	H	H1	B	WF	L	Screw	Wrenth	
KSI16R/L -1010-J	10	2	10	10	110	KS-4508-T	KW-T15	KSI□16R/L □□□
KSI16R/L -1212-J	12	0	12	12	110	KS-4508-T	KW-T15	KSI□16R/L □□□
KSI16R/L -1616-J	16	0	16	16	110	KS-4508-T	KW-T15	KSI□16R/L □□□
KSI16R/L -2020-J	20	0	20	20	110	KS-4508-T	KW-T15	KSI□16R/L □□□

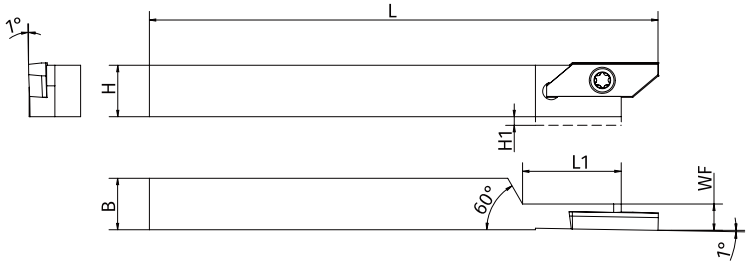
Halved Holders





Right Handed Tool holder (R)



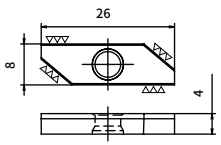


Left handed holders (L)

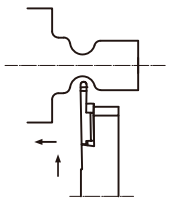
Type	Size(mm)						Accessaries		Corresponding Insert
	H	H1	B	WF	L	L1	Screw	Wrenth	
KSI16R/L -1010-J-S	10	2	10	7.2	110	22	KS-4508-T	KW-T15	KSI□16R/L □□□
KSI16R/L -1212-J-S	12	0	12	7.2	110	26	KS-4508-T	KW-T15	KSI□16R/L □□□

16 Series - Circular Grooving Tools

Insert Blank

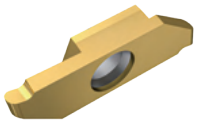
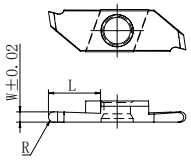


Application Examples



◆ Recommended
◈ Suitable
◇ Applicable

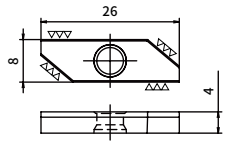
P	Soft Steel	◆	◇	◈		◆	◆		
	Carbon Steel/ Alloy Steel	◆	◇	◈		◈	◆		
M	Austenitic	◆	◆	◆	◆	◆			
	Martensitic	◇	◆	◆	◆	◆			
K	Grey Cast Iron			◇					
	Ductile Cast Iron			◇					
N	Nonferrous							◆	◆
S	Heat Resisting Alloy		◆	◈	◆	◆			
	Titanium Alloy		◆	◈	◆	◆			
H	Hardened Materials			◈					

Shape Right Handed Tool		Type	Size			Carbide with PVD Coating							Carbide
			W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KSIR16R/L 200-300-R100	2.0	3.0	1		●	●					
		KSIR16R/L 250-300-R125	2.5	3.0	1.25		●	●					
		KSIR16R/L 300-400-R150	3.0	4.0	1.5		●	●					

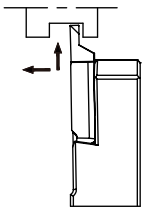
Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

16 Series-Grooving Tools (can be used in axial machining)

Insert Blank

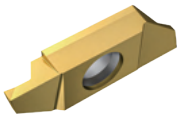
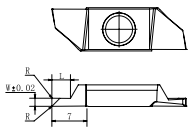


Application Examples



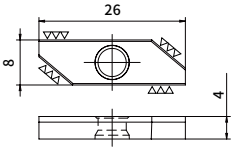
◆ Recommended
◈ Suitable
◇ Applicable

		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
P	Soft Steel	◆	◇	◈		◆	◆		
	Carbon Steel/ Alloy Steel	◆	◇	◈		◈	◆		
M	Austenitic	◆	◆	◆	◆	◆			
	Martensitic	◇	◆	◆	◆	◆			
K	Grey Cast Iron			◇					
	Ductile Cast Iron			◇					
N	Nonferrous							◆	◆
S	Heat Resisting Alloy		◆	◈	◆	◆			
	Titanium Alloy		◆	◈	◆	◆			
H	Hardened Materials			◈					

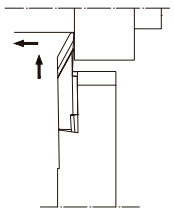
Shape Right Handed Tool	Type	Size W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	Carbide KCN10
 	KSIGT16R/L 100-250-R010	1	2.5	0.1		●	●					
	KSIGT16R/L 125-300-R010	1.25	3	0.1		●	●					
	KSIGT16R/L 150-300-R010	1.5	3	0.1		●	●					
	KSIGT16R/L 150-300-R020	1.5	3	0.2		●	●					
	KSIGT16R/L 175-400-R010	1.75	4	0.1		●	●					
	KSIGT16R/L 175-400-R020	1.75	4	0.2		●	●					
	KSIGT16R/L 200-400-R010	2	4	0.1		●	●					
	KSIGT16R/L 200-400-R020	2	4	0.2		●	●					
	KSIGT16R/L 250-600-R010	2.5	6	0.1		●	●					
	KSIGT16R/L 250-600-R020	2.5	6	0.2		●	●					
	KSIGT16R/L 300-700-R010	3	7	0.1		●	●					
	KSIGT16R/L 300-700-R020	3	7	0.2		●	●					

16 Series - Back turning Tools

Insert Blank

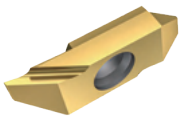
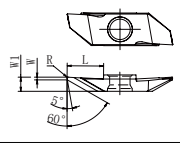


Application Examples



◆ Recommended
◈ Suitable
◇ Applicable

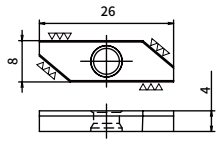
		KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
P	Soft Steel	◆	◇	◈		◆	◆		
	Carbon Steel/ Alloy Steel	◆	◇	◈		◈	◆		
M	Austenitic	◆	◆	◆	◆	◆			
	Martensitic	◇	◆	◆	◆	◆			
K	Grey Cast Iron			◇					
	Ductile Cast Iron			◇					
N	Nonferrous							◆	◆
S	Heat Resisting Alloy		◆	◈	◆	◆			
	Titanium Alloy		◆	◈	◆	◆			
H	Hardened Materials			◈					

Shape Right Handed Tool	Type	Size W	L	R	W1	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	Carbide KCN10
 	KSIB16R/L 030-630-R005	0.3	6.3	<0.05	3.3		●	●					
	KSIB16R/L 030-630-R010	0.3	6.3	<0.1	3.3		●	●					

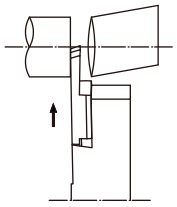
Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

16 Series - Parting Tools

Insert Blank

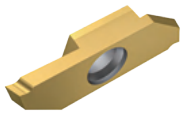
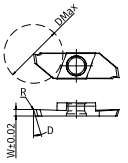
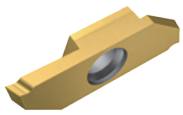
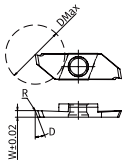
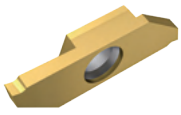
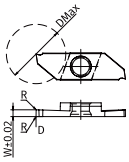


Application Examples



◆ Recommended
◈ Suitable
◇ Applicable

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

Shape Right Handed Tool		Type	Size				Carbide with PVD Coating							Carbide
			W	DMax	R	D	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KSIC16R/L 150-16DR-S	1.5	16	0.05	16°		●	●					
		KSIC16R/L 200-16DR-S	2.0	16	0.05	16°		●	●					
		KSIC16R/L 150-20DR-S	1.5	16	0.05	20°		●	●					
		KSIC16R/L 200-20DR-S	2.0	16	0.05	20°		●	●					
		KSIC16R/L 070-S	0.7	8	0.05	0°		●	●					
		KSIC16R/L 100-S	1	12	0.05	0°		●	●					
		KSIC16R/L 125-S	1.25	12	0.05	0°		●	●					
		KSIC16R/L 150-S	1.5	16	0.05	0°		●	●					
		KSIC16R/L 175-S	1.75	16	0.05	0°		●	●					
		KSIC16R/L 200-S	2	16	0.05	0°		●	●					
		KSIC16R/L 200-P	2	16	0.08	0°		●	●					
		KSIC16R/L 300-S	3	16	0.05	0°		●	●					
		KSIC16R/L 300-P	3	16	0.08	0°		●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

16 Series - Threading Tools

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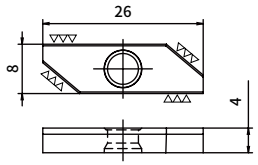
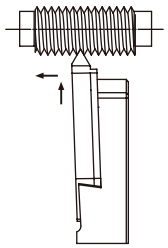
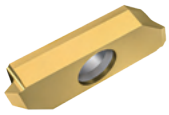
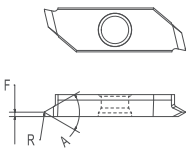
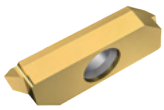
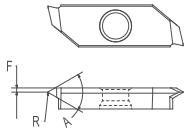
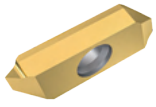
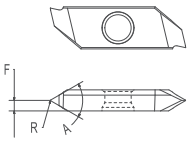


Application Examples



◆ Recommended
◈ Suitable
◇ Applicable

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

Shape Right Handed Tool		Type	Size					Carbide with PVD Coating							Carbide
			F	A	R	Pitch (mm)	Teeth /inch	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
	A型 	KSIT16ᴿ/ʟ 040-A-60-005	0.4	60°	0.05	0.2~0.75	127~34		●	●					
		KSIT16ᴿ/ʟ 040-A-60-010	0.4	60°	0.1	0.2~0.75	127~34		●	●					
		KSIT16ᴿ/ʟ 040-A-60-020	0.4	60°	0.2	0.2~0.75	127~34		●	●					
		KSIT16ᴿ/ʟ 080-A-60-005	0.8	60°	0.05	0.4~1.25	63~21		●	●					
		KSIT16ᴿ/ʟ 080-A-60-010	0.8	60°	0.1	0.4~1.25	63~21		●	●					
		KSIT16ᴿ/ʟ 080-A-60-020	0.8	60°	0.2	0.4~1.25	63~21		●	●					
		KSIT16ᴿ/ʟ 080-A-55-005	0.8	55°	0.05		40~16		●	●					
		KSIT16ᴿ/ʟ 080-A-55-010	0.8	55°	0.1		24~20		●	●					
	B型 	KSIT16ᴿ/ʟ 040-B-60-005	0.4	60°	0.05	0.2~0.75	127~34		●	●					
		KSIT16ᴿ/ʟ 040-B-60-010	0.4	60°	0.1	0.2~0.75	127~34		●	●					
		KSIT16ᴿ/ʟ 040-B-60-020	0.4	60°	0.2	0.2~0.75	127~34		●	●					
		KSIT16ᴿ/ʟ 080-B-60-005	0.8	60°	0.05	0.4~1.25	63~21		●	●					
		KSIT16ᴿ/ʟ 080-B-60-010	0.8	60°	0.1	0.4~1.25	63~21		●	●					
		KSIT16ᴿ/ʟ 080-B-60-020	0.8	60°	0.2	0.4~1.25	63~21		●	●					
		KSIT16ᴿ/ʟ 080-B-55-005	0.8	55°	0.05		40~16		●	●					
		KSIT16ᴿ/ʟ 080-B-55-010	0.8	55°	0.1		24~20		●	●					
	N型 	KSIT16ᴿ/ʟ 175-N-60-010	1.75	60°	0.1	0.8~3.5	31~7		●	●					
		KSIT16ᴿ/ʟ 175-N-60-015	1.75	60°	0.15	1.0~1.25	25~7		●	●					
		KSIT16ᴿ/ʟ 175-N-60-020	1.75	60°	0.2	1.5~3.5	16~7		●	●					
		KSIT16ᴿ/ʟ 175-N-60- 025	1.75	60°	0.25	1.75~3.5	14~7		●	●					
		KSIT16ᴿ/ʟ 175-N-55-010	1.75	55°	0.1		48-8		●	●					
		KSIT16ᴿ/ʟ 175-N-55-022	1.75	55°	0.22		14~8		●	●					

Grades: ◆ Recommended ◈ Suitable ◇ Applicable ● Standard Stock

Recommend Parameters For Machining-KSI12/16

Back-turning Tools		
Edge Width	Radial Feed f(mm/rev)	Parameters for Cross Feed
1.0-1.5	0.01-0.05	AP: W*0.2 f: 0.02-0.05
1.75-2.5	0.02-0.08	AP: W*0.2 f: 0.02-0.1
3	0.02-0.1	AP: W*0.2 f: 0.02-0.15

Parting Tools	
Edge Width	Feeding Speed f(mm/rev)
0.5-1.0	0.008-0.04
1.25-1.5	0.015-0.06

Grooving Tools	
Edge Width	Feeding Speed f(mm/rev)
0.7-1.25	0.01-0.05
1.5-3.0	0.02-0.1

Back-turning Tools	
Cutting Depth Ap(mm)	Feeding Speed f(mm/rev)
0.05-6.0	0.02-0.08

Circular Grooving Tools	
Edge Width	Feeding Speed f(mm/rev)
2.0-3.0	0.02-0.1

Threading Tools	
Type	Cutting Depth Ap(mm)
A Type	0.02-0.05
B Type	0.02-0.05
N Type	0.03-0.08

Tables below are based on the samples and publications of each company. uncertified

Comparison Table of Geometry

KOYINCUT	KYOCERA	NTK	TUNGALOY	MITSUBISHI	SUMITOMO	TAEGUTEC	SANDVIK	KENNAMETAL	ISCAR	SECO	WALTER	AHNO
SF	GQ/GK	AM3	JS	SMG	LU/SU	-	PM	FP	14/WF	FFI	PF	PM1/ASF/PMS
PF	GF/SK/SKS/PF	YL	PS	SMG	SI/SU	SA	UF	LF/K	SM/PF	FFI/MF2	FN2	PMT1/PMC/PS
CF	CK	CL	AL	AZ	-	-	-	HP	AS	AL	MN2	AEC
MF	CF	AMX	01	FV	FC	-	-	-	-	-	FM4	AQ
AF	MU/MQ/HQ	UL	TSF	SH	SU	SU	XF/MF	CT	NF	MF2	MP3	NMT
RF	-	-	-	-	-	-	-	-	-	-	-	-

Comparison Table of Insert Grade

Grades	KOYINCUT	KYOCERA	NTK	TUNGALOY	MITSUBISHI	SUMITOMO	TAEGUTEC	SANDVIK	KENNAMETAL	ISCAR	SECO	WALTER	WIDIA	AHNO	UTILIS	BIMU
P	KHS10M	PR930	VW1	AH120	VP10RT	AC1030U	TT9030	1525	KCP05	IC807	CP200	WPP10G	WP15CT	AM5015	UHM10 MZ	QM2
		PR1225	QM3	AH725	VP10MT	AC6030M	TT8020	4035	KCP10B	IC8150	CP250	WPP20S	WP25CT	AP5210	UHM20 HPX	
	KCP10P	PR1535		SH725	MS6015	AC8015P		4315	KCP10	IC8250	CP500	WPP30G	WP35CT	AL10	UHM20 TX+	
		PR1705		SH730	VP15TF	AC8020P		4325	KCP25B	IC8350	CP600	WPP30S	WS10PT	AL20	UHM20 MZ	
	KPM30N	PR1725		GH330	VP20RT	AC8025P		4335	KCP25	IC830		WEP10C	WM35CT		UHM30 TX+	
				GH730		AC8035P		5015	KCP30						UHM30 MZ	
M	KHS10M	PR930	ST4	AH120	VP10RT	AC1030U	TT9030	1115	KCM15B	IC807	TS2000	WMP20S	WM15CT	AM15C	UHM10 HX	QM3
		PR1225	DT4	AH725	VP10MF	AC6020M	TT8010	1125	KCM15	IC6015	TS2500	WSM01	WM25CT	AM5015	UHM10 TX+	
	KMS20	PR1535	TM4	SH725	MS9025	AC6030M	TT8020	2015	KCM25B	IC6025	CP200	WSM10S	WM35CT	AM5020	UHM20 HPX	
		PR1725	ZM3	SH730	VP15TF	AC6040M		2025	KCM25	IC830	CP600	WSM20S	WS10PT	AM5025	UHM20 TX+	
	KXM15S		DM4		VP20MF	AC610M		2220	KCM35		890	WSM30S	WM25PT	AL10	UHM30 HX	
					VP20RT	AC630M		3210						AL20	UHM30 TX+	
	KMS15C				MP7035			3225							UHM30 MZ	
															UHM30 SX	
S	KHS10M	PR005S	DT4	AH725	MP9005	AC5005S	TT8020	1105	K313	IC804	TH1000	WSM01	WU10HT	AM5015	UHM10 TX+	QM3
		PR015S	DM4	SH730	MP9015	AC5015S		1115	K68	IC806	TS2000	WSM20S	WS10PT	AM5025	UHM20 TX+	
	KMS20	PR1535		GH110	MP9025	AC5025S		1125	KCU10	IC830	TS2050	WSM30S	WS25PT	AM5110	UHM30 HX	
					VP05RT			H13A	KC5010		TS2500	WS10	WM15CT	AM5120+	UHM30 TX+	
	KXM15S				VP10RT			S05F	KC5025		CP200		WM25CT	AP5210		
	KMS15C				VP20RT						HX		WM35CT			
											883					
N	KCN10	GW05	KM1	GH110	HTI10	H1	K10	H10	KC5410	IC520	KX	WNN10	HCK10	AK10	UHM10	K20
				KS05F				H13A	K313	IC20		WN10	HWK10	AK20	UHM20	
	KCN10D												HWK15			

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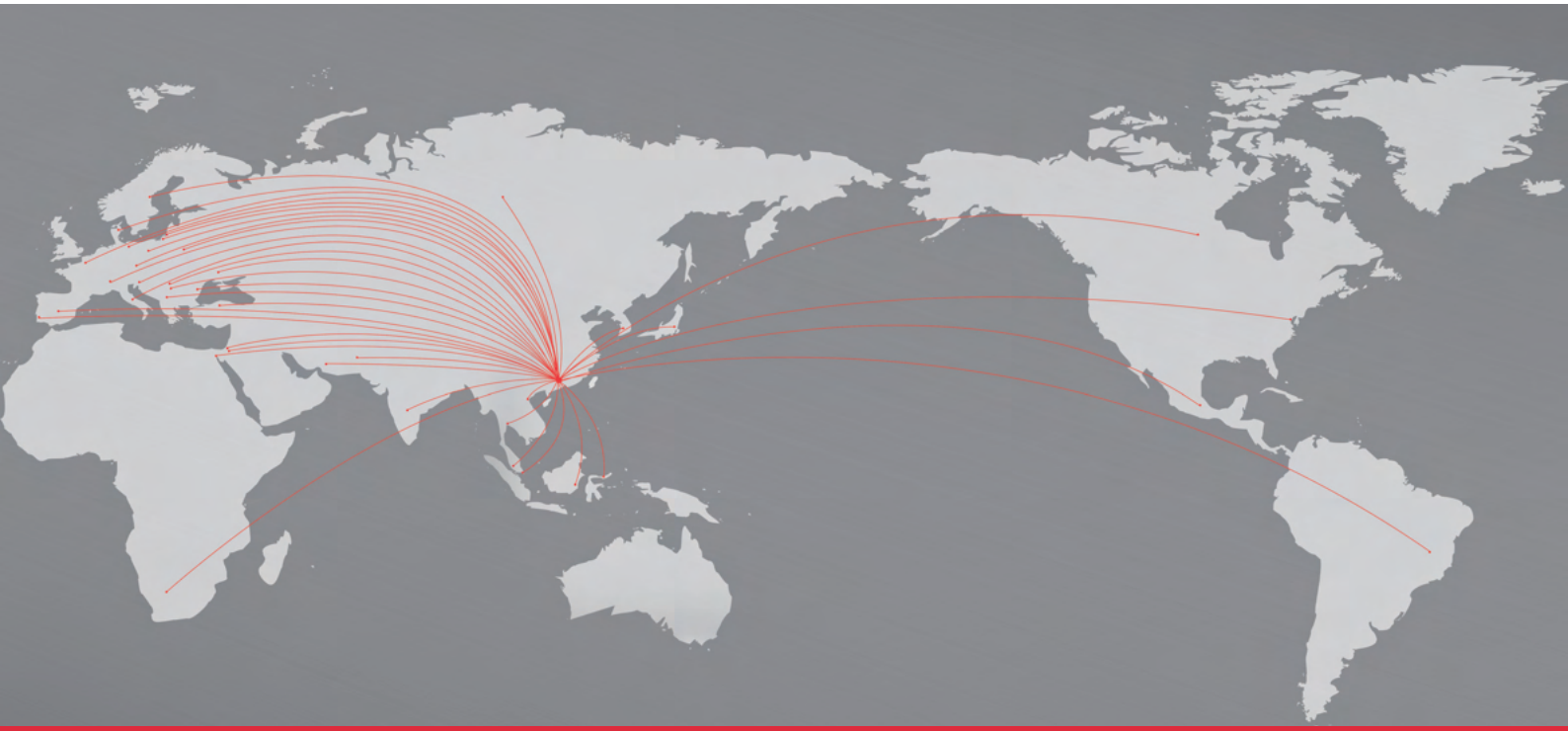

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