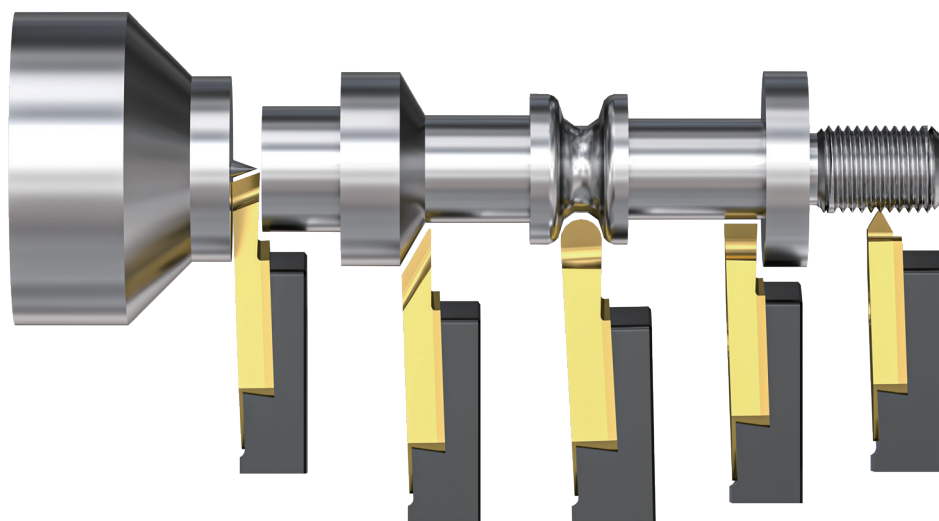


Application Examples of 16 Series



Parting

Back-turning

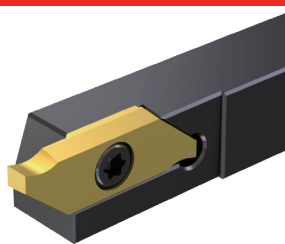
Profiling

Grooving

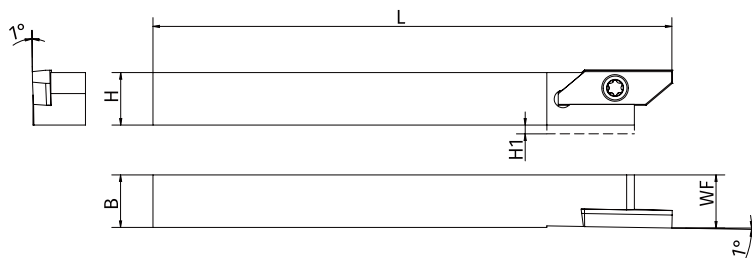
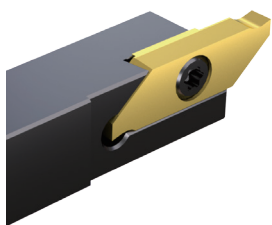
Threading

Maximum Diameter of parting is 16MM

Tool Holders of 16 Series



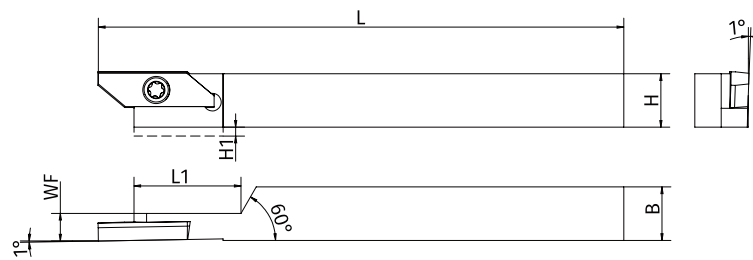
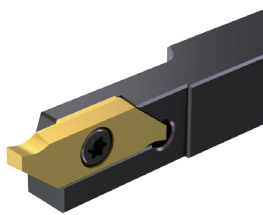
Right Handed Tool holder (R)



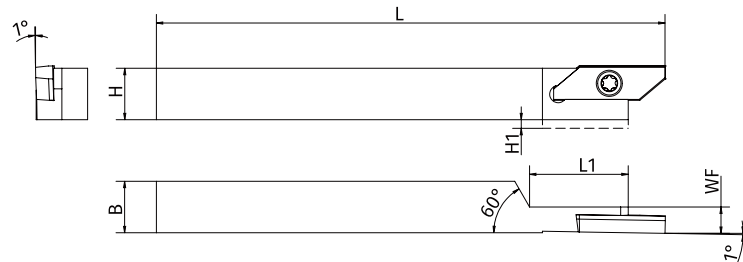
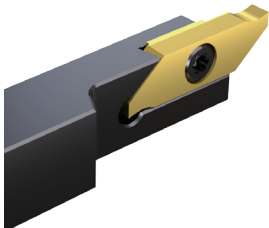
left handed holders (L)

Type	Size(mm)					Accessories		Corresponding Insert
	H	H1	B	WF	L	Screw	Wrenth	
KSI16% -1010-J	10	2	10	10	110	KS-4508-T	KW-T15	KSI□16% □□□
KSI16% -1212-J	12	0	12	12	110	KS-4508-T	KW-T15	KSI□16% □□□
KSI16% -1616-J	16	0	16	16	110	KS-4508-T	KW-T15	KSI□16% □□□
KSI16% -2020-J	20	0	20	20	110	KS-4508-T	KW-T15	KSI□16% □□□

Halved Holders



Right Handed Tool holder (R)

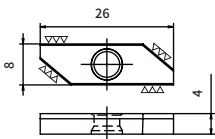


Left handed holders (L)

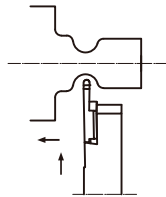
Type	Size(mm)						Accessories		Corresponding Insert
	H	H1	B	WF	L	L1	Screw	Wrench	
KSI16% -1010-J-S	10	2	10	7.2	110	22	KS-4508-T	KW-T15	KSI16% □□□
KSI16% -1212-J-S	12	0	12	7.2	110	26	KS-4508-T	KW-T15	KSI16% □□□

16 Series-circular Grooving

Workblank



Application Examples



◆ Recommended
◊ Suitable
◇ Applicable

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

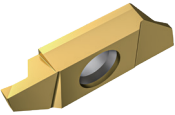
Shape Right Handed Tool	Type	Size			PVD Coated Cemented Carbide							Cemented carbide
		W	L	R	KPM30N	KKM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
 	KSI16% 200-300-R100	2.0	3.0	1		●	●					
	KSI16% 250-300-R125	2.5	3.0	1.25		●	●					
	KSI16% 300-400-R150	3.0	4.0	1.5		●	●					

Grades: ◆ Recommended ◊ Suitable ◇ Applicable

● Standard Stock

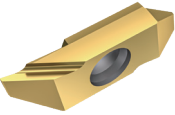
16 Series-grooving (can be used in axial machining)

Workblank	Application Examples	 Recommended  Suitable  Applicable	P	Soft steel	◆	◇	◆		◆	◆			
				Carbide	◆	◇	◆		◆	◆			
			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			PVD Coated Cemented Carbide								Cemented carbide
		W	L	R	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10	
	KSIGT16% 100-250-R010	1	2.5	0.1		●	●						
	KSIGT16% 125-300-R010	1.25	3	0.1		●	●						
	KSIGT16% 150-300-R010	1.5	3	0.1		●	●						
	KSIGT16% 150-300-R020	1.5	3	0.2		●	●						
	KSIGT16% 175-400-R010	1.75	4	0.1		●	●						
	KSIGT16% 175-400-R020	1.75	4	0.2		●	●						
	KSIGT16% 200-400-R010	2	4	0.1		●	●						
	KSIGT16% 200-400-R020	2	4	0.2		●	●						
	KSIGT16% 250-600-R010	2.5	6	0.1		●	●						
	KSIGT16% 250-600-R020	2.5	6	0.2		●	●						
	KSIGT16% 300-700-R010	3	7	0.1		●	●						
	KSIGT16% 300-700-R020	3	7	0.2		●	●						

16 Series-back-turning

Workblank	Application Examples	 Recommended  Suitable  Applicable	P	Soft steel	◆	◇	◆		◆	◆			
				Carbide	◆	◇	◆		◆	◆			
			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				PVD Coated Cemented Carbide								Cemented carbide
		W	L	R	W1	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10	
	KSIB16% 030-630-R005	0.3	6.3	<0.05	3.3		●	●						
	KSIB16% 030-630-R010	0.3	6.3	<0.1	3.3		●	●						

Grades: ◆ Recommended ◇ Suitable ◇ Applicable

● Standard Stock

16 Series-parting

Workblank

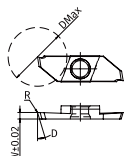
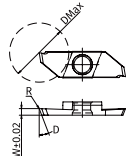
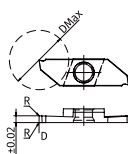
Application Examples



The diagram shows a vertical assembly. A horizontal cylinder is positioned on the left, with a vertical cylinder attached to its right end. An upward-pointing arrow is located below the horizontal cylinder, indicating a direction of movement or force.

 Recommended
 Suitable
 Applicable

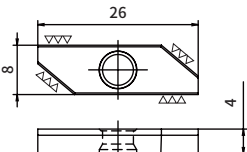
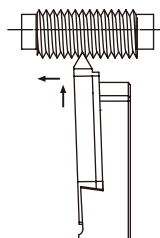
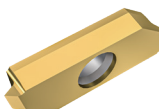
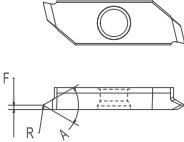
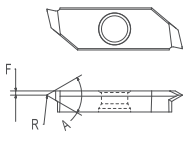
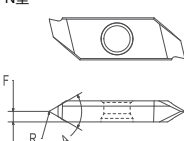
P	Soft steel	◆	◇	◆		◆	◆		
	Carbide	◆	◇	◆		◆	◆		
M	Austenitic	◆	◆	◆	◆	◆			
	Martensitic	◇	◆	◆	◆	◆			
K	Grey Cast Iron			◇					
	Ductile Cast Iron			◇					
N	Nonferrous							◆	◆
S	Heat Resisting Alloy		◆	◇	◆	◆			
	Titanium Alloy		◆	◇	◆	◆			
H	Hardened Materials			◆					

Shape Right Handed Tool		Type	Size				PVD Coated Cemented Carbide							Cemented carbide
			W	DMax	R	D	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10
		KSIC16% 150-16DR-S	1.5	16	0.05	16°		●	●					
		KSIC16% 200-16DR-S	2.0	16	0.05	16°		●	●					
		KSIC16% 150-20DR-S	1.5	16	0.05	20°		●	●					
		KSIC16% 200-20DR-S	2.0	16	0.05	20°		●	●					
		KSIC16% 070-S	0.7	8	0.05	0°		●	●					
		KSIC16% 100-S	1	12	0.05	0°		●	●					
		KSIC16% 125-S	1.25	12	0.05	0°		●	●					
		KSIC16% 150-S	1.5	16	0.05	0°		●	●					
		KSIC16% 175-S	1.75	16	0.05	0°		●	●					
		KSIC16% 200-S	2	16	0.05	0°		●	●					
		KSIC16% 200-P	2	16	0.08	0°		●	●					
		KSIC16% 300-S	3	16	0.05	0°		●	●					
		KSIC16% 300-P	3	16	0.08	0°		●	●					

Grades: Recommended Suitable Applicable

- Standard Stock

16 Series-threading

Workblank		Application Examples		Recommended		Suitable		Applicable		P		M		K		N		S		H									
										Soft steel		Carbide		Austenitic		Martensitic		Grey Cast Iron		Ductile Cast Iron		Nonferrous		Heat Resisting Alloy		Titanium Alloy		Hardened Materials	
Shape Right Handed Tool		Type		Size					PVD Coated Cemented Carbide								Cemented carbide												
				F	A	R	Pitch (mm)	Teeth per inch	KPM30N	KXM15S	KHS10M	KMS20	KMS15C	KCP10P	KCN10D	KCN10													
	A型		KSIT16% 040-A-60-005	0.4	60°	0.05	0.2~0.75	127~34		●	●																		
			KSIT16% 040-A-60-010	0.4	60°	0.1	0.2~0.75	127~34		●	●																		
			KSIT16% 040-A-60-020	0.4	60°	0.2	0.2~0.75	127~34		●	●																		
			KSIT16% 080-A-60-005	0.8	60°	0.05	0.4~1.25	63~21		●	●																		
			KSIT16% 080-A-60-010	0.8	60°	0.1	0.4~1.25	63~21		●	●																		
			KSIT16% 080-A-60-020	0.8	60°	0.2	0.4~1.25	63~21		●	●																		
			KSIT16% 080-A-55-005	0.8	55°	0.05		40~16		●	●																		
			KSIT16% 080-A-55-010	0.8	55°	0.1		24~20		●	●																		
	B型		KSIT16% 040-B-60-005	0.4	60°	0.05	0.2~0.75	127~34		●	●																		
			KSIT16% 040-B-60-010	0.4	60°	0.1	0.2~0.75	127~34		●	●																		
			KSIT16% 040-B-60-020	0.4	60°	0.2	0.2~0.75	127~34		●	●																		
			KSIT16% 080-B-60-005	0.8	60°	0.05	0.4~1.25	63~21		●	●																		
			KSIT16% 080-B-60-010	0.8	60°	0.1	0.4~1.25	63~21		●	●																		
			KSIT16% 080-B-60-020	0.8	60°	0.2	0.4~1.25	63~21		●	●																		
			KSIT16% 080-B-55-005	0.8	55°	0.05		40~16		●	●																		
			KSIT16% 080-B-55-010	0.8	55°	0.1		24~20		●	●																		
	N型		KSIT16% 175-N-60-010	1.75	60°	0.1	0.8~3.5	31~7		●	●																		
			KSIT16% 175-N-60-015	1.75	60°	0.15	1.0~1.25	25~7		●	●																		
			KSIT16% 175-N-60-020	1.75	60°	0.2	1.5~3.5	16~7		●	●																		
			KSIT16% 175-N-60-025	1.75	60°	0.25	1.75~3.5	14~7		●	●																		
			KSIT16% 175-N-55-010	1.75	55°	0.1		48~8		●	●																		
			KSIT16% 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

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

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

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

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

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