

# KX618

## KX618 STABLE CLAMPING 6 EDGES SERIES



Six Head Inserts  
KX618 Stable Clamping



**6 Cutting Edges**  
Much Economical



**strengthened zero positioning slot**  
Stable Clamping Stable Cutting



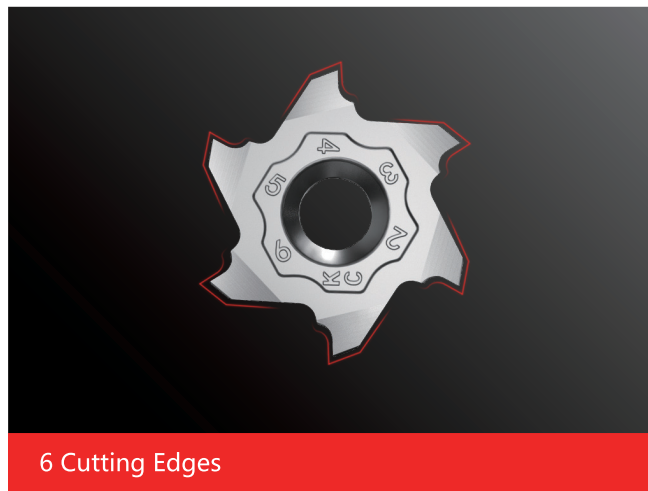
**Multiple tools for different purposes**  
meet different needs of processing

# KX618

stable clamping 6 heads series



## FEATURES AND ADVANTAGES



6 Cutting Edges

much economical as its cutting edges is as twice as triangular inserts

KX618 Stable Clamping  
Six Heads Inserts



Multiple tools for different purposes

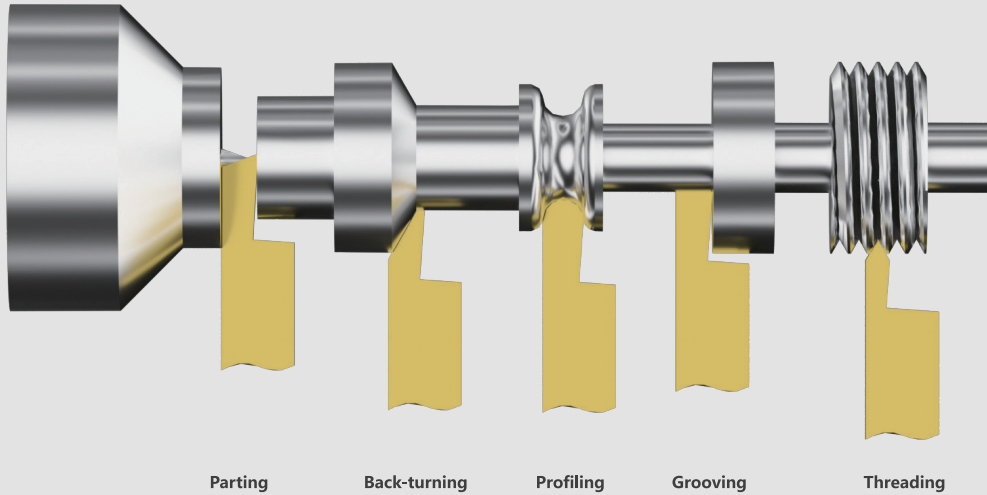
available with grooving, threading, back-turning, parting, circular grooving and etc



strengthened zero positioning slot

"\*" shape clamping to make it stable

## Processing Applications



### ● Notice

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

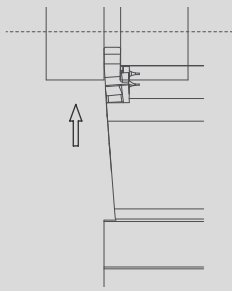
<b>Dmax</b>	32	42	51	65	100	
<b>Lmax</b>	3.5	3.3	3.2	3.0	2.5	

## Symbols of KX618 Grooving Tools

KX618: KX618 Series	G: Grooving tools	R: right handed	025: 0.25 125: 1.25		250: 2.5 300: 3.0		035: R0.35 005: R0.05
<b>Series</b>	<b>Insert Type</b>	<b>Insert Direction</b>	<b>edge width</b>	<b>-</b>	<b>effective cutting depth</b>	<b>-</b>	<b>Nose Radius</b>
<b>KX618</b>	<b>G</b>	<b>R</b>	<b>125</b>	<b>-</b>	<b>300</b>	<b>-</b>	<b>005</b>

## Grooving tools

Processing Application



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

shape  
Right Handed Tool

Type

Size

PVD Coated Cemented Carbide

cemented carbide

W

L

R

KPM30N

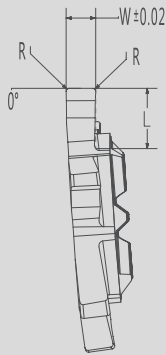
KXM15S

KH510M

KMS20

KCN10D

KCN10



KX618GR 050-150-005	0.5	1.5	0.05		●	●				
KX618GR 060-150-005	0.6				●	●				
KX618GR 070-150-005	0.7				●	●				
KX618GR 075-150-005	0.75				●	●				
KX618GR 070-200-005	0.7			2.0	0.05		●	●		
KX618GR 075-200-005	0.75						●	●		
KX618GR 080-200-005	0.8						●	●		
KX618GR 090-200-005	0.9						●	●		
KX618GR 100-200-005	1.0						●	●		
KX618GR 100-200-010	1.0						●	●		
KX618GR 110-200-005	1.1		●			●				
KX618GR 110-200-010	1.1		●			●				
KX618GR 120-200-005	1.2		●			●				
KX618GR 120-200-010	1.2		●			●				
KX618GR 125-200-005	1.25	3.0	0.05		●	●				
KX618GR 125-200-010	1.25				●	●				
KX618GR 130-200-010	1.3				●	●				
KX618GR 130-200-020	1.3				●	●				
KX618GR 140-200-010	1.4				●	●				
KX618GR 140-200-020	1.4				●	●				
KX618GR 150-200-010	1.5				●	●				
KX618GR 150-200-020	1.5				●	●				
KX618GR 160-200-010	1.6				●	●				
KX618GR 160-200-020	1.6				●	●				
KX618GR 170-200-010	1.7	3.0	0.1		●	●				
KX618GR 170-200-020	1.7				●	●				
KX618GR 175-200-010	1.75				●	●				
KX618GR 175-200-020	1.75				●	●				
KX618GR 100-300-005	1.0			3.0	0.05		●	●		
KX618GR 100-300-010	1.0						●	●		
KX618GR 110-300-005	1.1						●	●		
KX618GR 110-300-010	1.1						●	●		
KX618GR 120-300-005	1.2						●	●		
KX618GR 120-300-010	1.2						●	●		
KX618GR 125-300-005	1.25		●			●				
KX618GR 125-300-010	1.25		●			●				
KX618GR 130-300-010	1.3		●			●				
KX618GR 130-300-020	1.3		●			●				
KX618GR 140-300-010	1.4	3.0	0.1		●	●				
KX618GR 140-300-020	1.4				●	●				
KX618GR 150-300-010	1.5				●	●				
KX618GR 150-300-020	1.5				●	●				
KX618GR 160-300-010	1.6				●	●				
KX618GR 160-300-020	1.6				●	●				

KX618 Stable Clamping  
Six heads inserts

shape  
Right Handed Tool

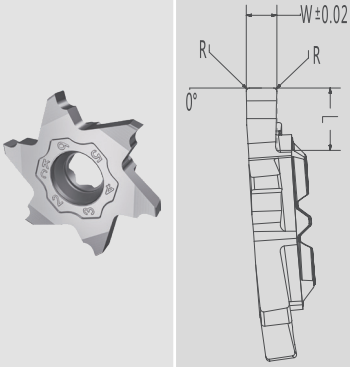
Type

Size

PVD Coated Cemented Carbide

cemented  
carbide

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



Six Head Inverts  
KX618 Stable Clamping

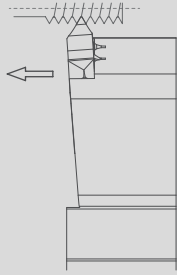
Grades: ◆ Recommended ◆ Suitable ◇ Applicable ● Standard Stock

## Symbols of KX618 Threading Tools

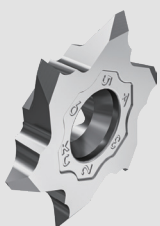
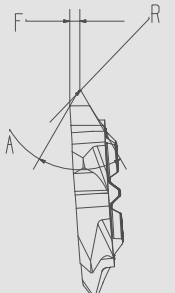
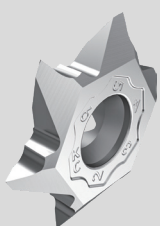
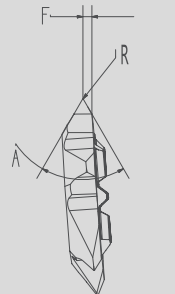
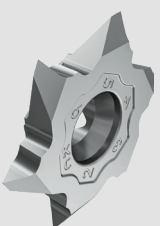
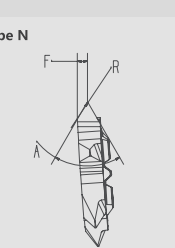
KX618: KX618 Series			040: 0.4		A: left
T: Threading Tools			080: 0.8		B: right
R: Right Handed			125: 1.25		N: central
Series	Insert Type	Insert Direction	Tip Width	-	Edge Position
<b>KX618</b>	<b>T</b>	<b>R</b>	<b>125</b>	<b>-</b>	<b>A</b>

## Threading Tools

processing diagram



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

shape Right Handed Tool	Type	Size					PVD Coated Cemented Carbide					cemented carbide		
		F	A	R	Pitch (MM)	Teeth per inch (TPI)	KPM30N	KXM15S	KH10M	KMS20	KCN10D		KCN10	
	Type A		KX618TR 040-A	0.4	60°	0.05	0.2~0.75	127~34		●	●			
	KX618TR 080-A		0.8	60°	0.05	0.4~1.25	63~21		●	●				
	Type B		KX618TR 040-B	0.4	60°	0.05	0.2~0.75	127~34		●	●			
	KX618TR 080-B		0.8	60°	0.05	0.4~1.25	63~21		●	●				
	Type N		KX618TR 125-N	1.25	60°	0.1	1.0~1.5	25~17		●	●			

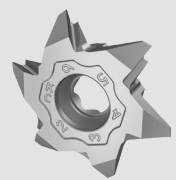
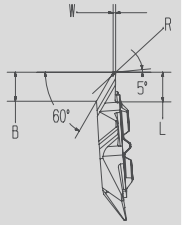
Grades: ◆ Recommended ◇ Suitable ◇ Applicable ● Standard Stock

## Symbols of KX618 Back-turning tools

			005: R0.05		
			010: R0.1		
KX618: KX618 Series	B: Back-turning	R: right handed	015: R0.15		
Series	Insert Type	Insert Direction	Nose Radius	-	with chipbreaking slot
<b>KX618</b>	<b>B</b>	<b>R</b>	<b>005</b>	<b>-</b>	<b>S</b>

## Back-turning tools

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

shape Right Handed Tool	Type	Size				PVD Coated Cemented Carbide					
		W	L	R	B	KPM30N	KXM15S	KHS10M	KMS20	KCN10D	KCN10
 	KX618BR 005-S			<0.05			●	●			
	KX618BR 010-S	0.3	3.5	<0.1	3.5		●	●			
	KX618BR 015-S			<0.15				●	●		


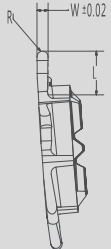
Grades: ◆ Recommended ◇ Suitable ◇ Applicable ● Standard Stock

## Symbols of KX618 Circular Grooving Tools

KX618: KX618 Series	R: Circular Grooving Tools	R: right handed	050: R0.5	150: 1.5
			125: R1.25	200: 2.0
				350: 3.5
Series	Insert Type	Insert Direction	Nose Radius	Effective cutting depth
<b>KX618</b>	<b>R</b>	<b>R</b>	<b>050</b>	<b>200</b>

## Circular Grooving Tools

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

shape Right Handed Tool	Type	Size			PVD Coated Cemented Carbide					
		W	L	R	KPM30N	KXM15S	KH10M	KMS20	KCN10D	KCN10
 	KX618RR 035-150	0.7	1.5	0.35		●	●			
	KX618RR 050-200	1.0	2.0	0.5		●	●			
	KX618RR 060-200	1.2		0.6		●	●			
	KX618RR 075-350	1.5	3.5	0.75		●	●			
	KX618RR 100-350	2.0		1.0		●	●			
	KX618RR 125-350	2.5	1.25		●	●				

Grades: ◆ Recommended ◇ Suitable ◇ Applicable ● Standard Stock

## Symbols of KX618 flat parting tools

KX618: KX618 Series	C: parting tools	R: right handed	050: 0.5	S: R0.03-R0.05
			125: 1.25	P: R0.08
Series	Insert Type	Insert Direction	Edge width	Nose Radius
<b>KX618</b>	<b>C</b>	<b>R</b>	<b>125</b>	<b>S</b>

## symbols of KX618 parting tools with lead angle

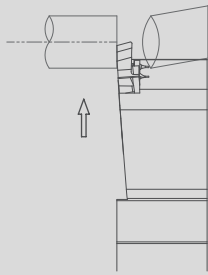
KX618: KX618 Series	C: parting tools	R: right handed	050: 0.5	20D: 20°	N: without chipbreaking slot and nose radius	
			125: 1.25	16D: 16°	S: R0.03-R0.05	
				11D: 11°	P: R0.08	
Series	Insert Type	Insert Direction	edge width	lead angle	lead direction	Nose Radius/other
<b>KX618</b>	<b>C</b>	<b>R</b>	<b>125</b>	<b>16D</b>	<b>R</b>	<b>S</b>

KX618 Stable Clamping Six Heads Inserts



# parting tools

processing diagram



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

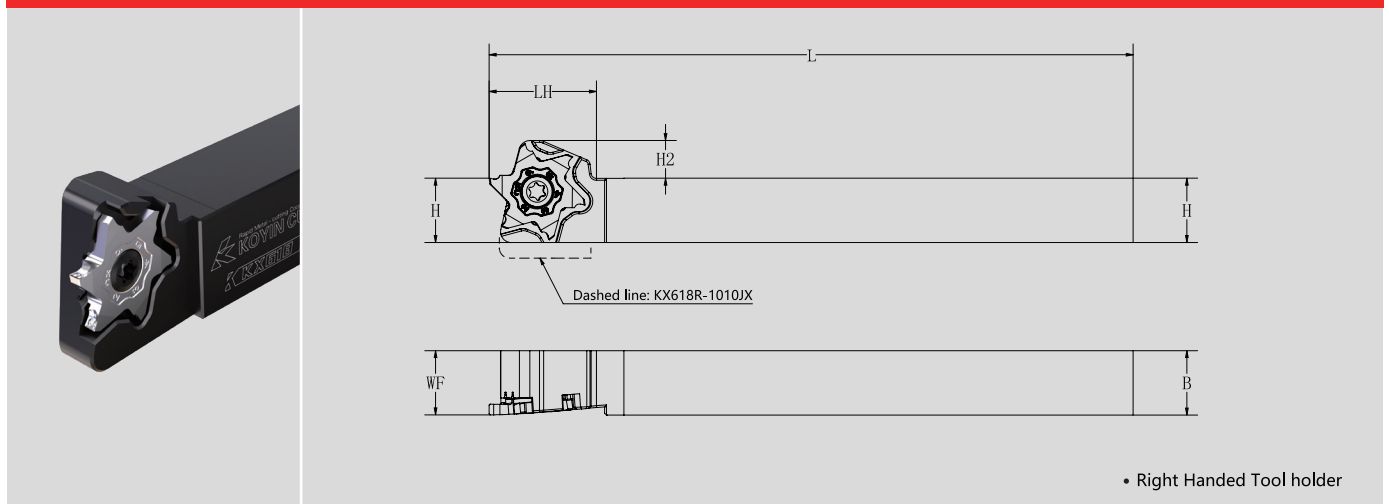
shape	Right Handed Tool	Type	Size				PVD Coated Cemented Carbide					
			W	Maximum Diameter of parting DMax	R	D	KPM30N	KXM15S	KH10M	KMS20	KCN10D	KCN10
flat		KX618CR 050-S	0.5	3	0.03   0.05	0°		●	●			
		KX618CR 070-S	0.7					●	●			
		KX618CR 100-S	1					●	●			
		KX618CR 125-S	1.25					●	●			
		KX618CR 150-S	1.5					●	●			
*flat strengthened edge*		KX618CR 100-P	1.0	7	0.08 ±0.01	0°		●	●			
		KX618CR 125-P	1.25					●	●			
		KX618CR 150-P	1.5					●	●			
with right lead angle		KX618CR 100-11DR-S	1.0	7	0.03   0.05	11°		●	●			
		KX618CR 125-11DR-S	1.25					●	●			
		KX618CR 150-11DR-S	1.5					●	●			
*with right lead angle strengthened edge*		KX618CR 100-11DR-P	1.0	7	0.08 ±0.01	11°		●	●			
		KX618CR 125-11DR-P	1.25					●	●			
		KX618CR 150-11DR-P	1.5					●	●			
with right lead angle		KX618CR 050-16DR-S	0.5	3	0.03   0.05	16°		●	●			
		KX618CR 070-16DR-S	0.7					●	●			
		KX618CR 100-16DR-S	1					●	●			
		KX618CR 125-16DR-S	1.25					●	●			
		KX618CR 150-16DR-S	1.5					●	●			
*with right lead angle strengthened edge*		KX618CR 100-16DR-P	1.0	7	0.08 ±0.01	16°		●	●			
		KX618CR 125-16DR-P	1.25					●	●			
		KX618CR 150-16DR-P	1.5					●	●			
*with right lead angle without chipbreaking slot*		KX618CR 070-20DR-N	0.7	3	0	20°		●	●			
		KX618CR 100-20DR-N	1.0					●	●			
		KX618CR 125-20DR-N	1.25					●	●			
		KX618CR 150-20DR-N	1.5					●	●			

Grades: ◆ Recommended ◇ Suitable ◇ Applicable ● Standard Stock

## Symbols of KX618 tool holders

						M: 150
						JX: 120
						J: 110
						H: 100
KX618: KX618 Series	R: Right handed					
Series	Direction	-	Tool Height	Tool Width	Tool Length	
<b>KX618</b>	<b>R</b>	<b>-</b>	<b>12</b>	<b>12</b>	<b>JX</b>	

## KX618 Tool holders

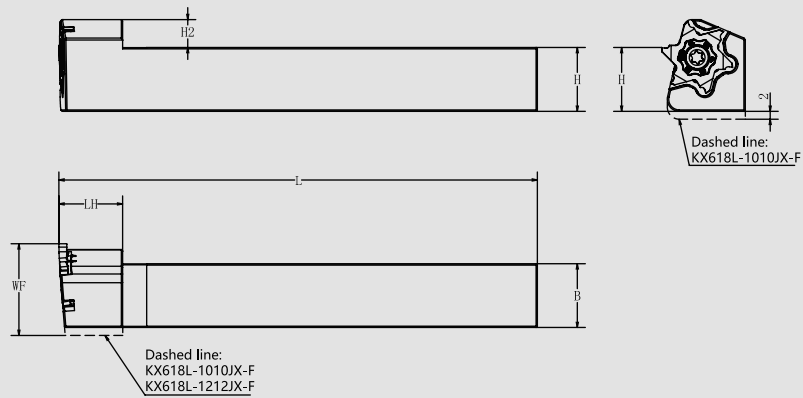


Type	Size(mm)						Accessories		Corresponding Insert
	H	B	L	LH	WF	H2	Screw	Wrenth	
KX618R -1010JX	10	10	120	20	10	7	KS-4008-T	KW-T15	KX618□R □□□
KX618R -1212JX	12	12	120	20	12	7			
KX618R -1616JX	16	16	120	20	16	7			
KX618R -2020JX	20	20	120	20	20	7			
KX618R -2525M	25	25	150	20	25	7			

## Symbols of KX618-F

KX618: KX618 Series		L: Left handed		M: 150		JX: 120		J: 110		H: 100		F: For Row Tools	
Series	Holder Direction	-	Holder Heigh	Holder Width	Tool Length	-	Other						
KX618	L	-	12	12	JX	-	F						

## Tool holder for KX618-F



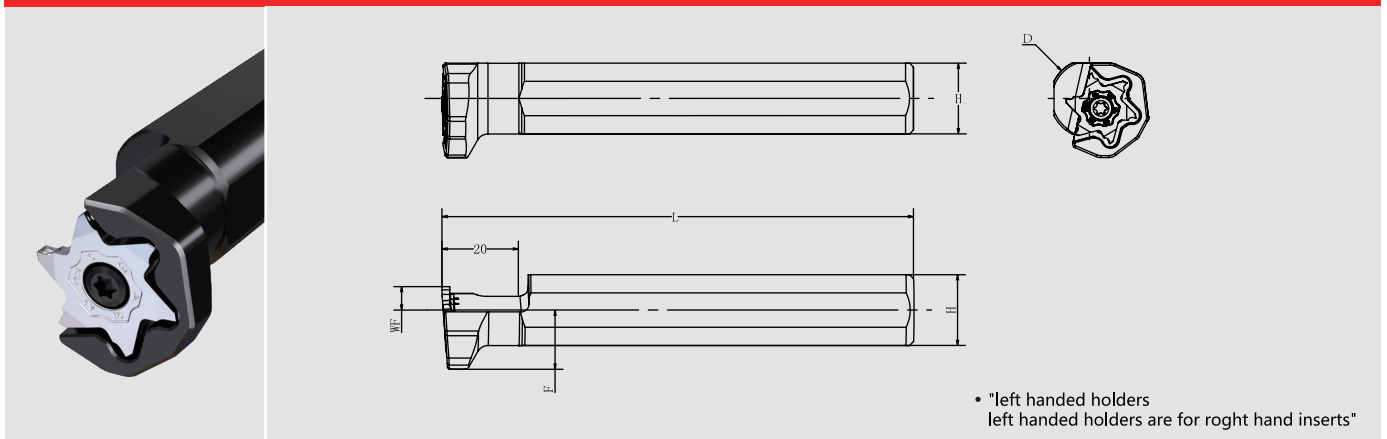
- "left handed holders  
left handed holders are for roght hand inserts"

Type	Size(mm)							Accessories		Corresponding Insert
	H	B	L	LH	H1	H2	WF	Screw	Wrenth	
KX618L-1010JX-F	10	10	120	16	6	9	19	KS-4008-T	KW-T15	KX618□R □□□
KX618L-1212JX-F	12	12	120	16	4	9	19			
KX618L-1616JX-F	16	16	120	16	0	9	21			

## Tool holder for S-KX618-F

	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 locking method	254: Diameter 25.4	H: 100		KX618: KX618 Series	L: Left handed		F: Used for cutting machine
<b>Locking method</b>	<b>Knife diameter</b>	<b>Tool Length</b>	<b>-</b>	<b>Series</b>	<b>Direction</b>	<b>-</b>	<b>Other</b>
<b>S</b>	<b>20</b>	<b>JX</b>	<b>-</b>	<b>KX618</b>	<b>L</b>	<b>-</b>	<b>F</b>

## Tool holder for S-KX618-F (socket holder for external machining)



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

## Recommend Application Parameter

### KX618 SERIES

Machined Materials	Carbon Steel, Alloy Steel	Stainless Steel		Cast Iron	Heat Resisting Alloy/Titanium Alloy		Nonferrous	
Insert Grades	KPM30N	KXM15S	KHS10M	KHS10M	KXM15S	KMS20	KCN10D	KCN10
Cutting Speed Vc(m/min)	60-180	60-180	60-130	80-200	30-60	30-80	240-450	150-300
Edge Width of Grooving Tools	0.5-1.2	1.25-2.5						
Feeding Speed f(mm/rev)	0.02-0.06	0.03-0.07						
Threading Tools	Type A	Type B	Type N					
Cutting Depth Ap(mm)	0.02-0.05	0.02-0.05	0.03-0.08					
Back-turning tools								
Cutting Depth Ap(mm)	0.05-3.5							
Threading Tools f(mm/rev)	0.02-0.08							
parting tools								
edge width	0.5-1.0	1.25-1.5						
Feeding Speed f(mm/rev)	0.008-0.04	0.015-0.06						