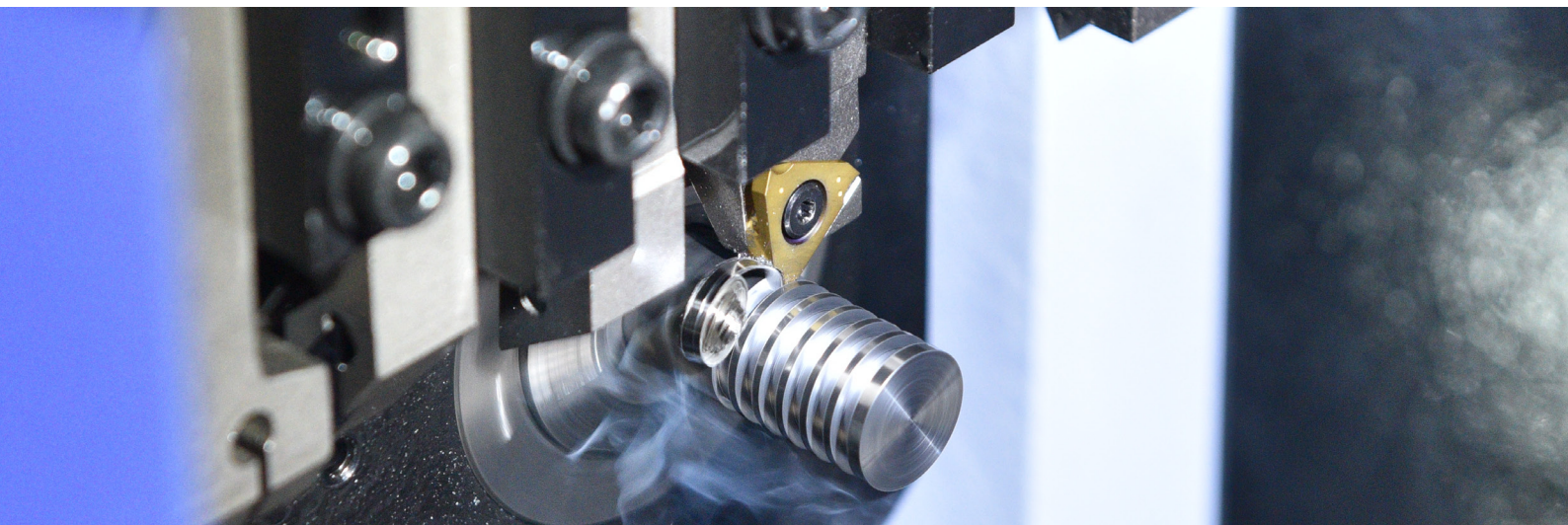


**NEW  
PRODUCT!**

# Grooving tools for automatic lathe ASG 32





High precision width tolerance  
 $\pm 0.025\text{mm}$

Grade AP301U

Ensuring stable and efficient  
performance with longer tool life



## ● Geometry

Geometry	Insert	Shape of cutting edge	Features	Insert width (mm)
				External Machining
ASG			<ul style="list-style-type: none"> <li>● Precision insert</li> <li>● Versatile triangular design</li> <li>● Large rake angle and sharp edge design ensures good surface quality</li> </ul>	0.33-2.5

## ● Tool holder

Tool holder		Size (mm)	Cutting depth (mm)	Insert (ASG)	Insert width (mm)	Cutting depth (mm)
ASGHR/L		10	2.5		0.33	0.8
		1			1	
		25			2.5	2.5
S...ASGHL		12	2.5		0.33	0.8
		1			1	
		25.4			2.5	2.5

## ● Grade application range and cutting parameter recommendation

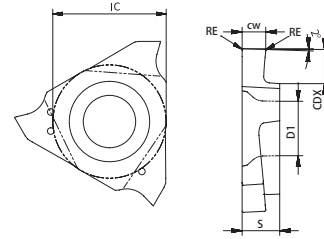
Workpiece material	Steel					Stainless steel				
	Finishing ← → Roughing					Finishing ← → Roughing				
ISO Range	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40
AP301U		<b>AP301U</b>					<b>AP301U</b>			

Workpiece material		Hardness	Cutting speed (m/min)
P	Unalloyed steel	HB 125-350	80-180
	Low alloyed steel		
	High alloyed steel and tool steel		
M	Austenitic	HB 200-300	60-150
	Austenitic/ferritic, duplex		



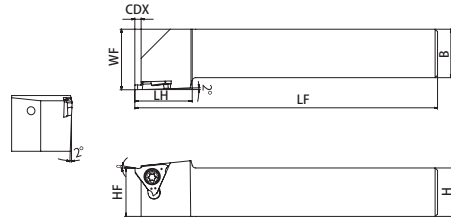
**Insert**

Insert	IC	S	D1
ASG 32-	9.525	3.18	4.6

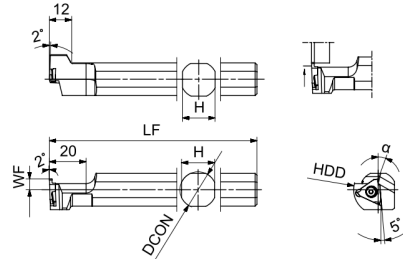
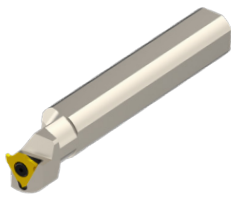


Product code		Cutting Parameter	Dimensions			AP301U
		Plunge f (mm/rev)	CW	RE	CDX	
	050T12-R005	0.01-0.05	0.50	0.05	1.2	●
	075T20-R010	0.02-0.07	0.75	0.10	2.0	●
	095T20-R010	0.02-0.07	0.95	0.10	2.0	●
	100T20-R010	0.03-0.08	1.00	0.10	2.0	●
	120T20-R010	0.03-0.08	1.20	0.10	2.0	●
	125T20-R010	0.03-0.08	1.25	0.10	2.0	●
	140T20-R010	0.03-0.08	1.40	0.10	2.0	●
	145T20-R010	0.03-0.08	1.45	0.10	2.0	●
	150T20-R010	0.03-0.08	1.50	0.10	2.0	●
	175T20-R010	0.03-0.08	1.75	0.10	2.0	●
	200T25-R010	0.03-0.08	2.00	0.10	2.5	●
	250T25-R010	0.03-0.08	2.50	0.10	2.5	●

## Tool holder



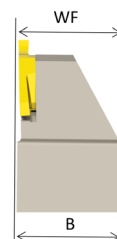
Product code		Dimension /mm					Spare parts	
		H	B	LF	LH	CDX	Screw	Wrench
ASGHR/L	1010JX-32F	10	10	120	18.5	2.5	SP040700	FT-TP08
	1212FX-32F	12	12	85	18.5	2.5		
	1212JX-32F	12	12	120	18.5	2.5		
	1616JX-32F	16	16	120	18.5	2.5		
	2020JX-32F	16	16	120	18.5	2.5		
	1010F-32	10	10	80	18.5	2.5		
	1212H-32	12	12	100	18.5	2.5		
	1616H-32	16	16	100	18.5	2.5		
	2020K-32	20	20	125	20	2.5		
	2525M-32	25	25	150	20	2.5		



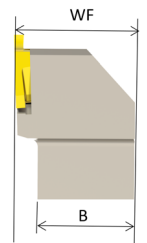
Product code		Dimension /mm				Spare parts		
		DCON	LF	WF	HDD	DMIN	Screw	Wrench
	S12F-ASGHL32	12	80	6	11	27	SP040700	FT-TP08
	S14H-ASGHL32	14	100		13			
	S15.0H-ASGHL32	15.875			15.875			
	S16H-ASGHL32	16	120		17.6			
	S19.0JX-ASGHL32	19.05	120		18.6			
	S20JX-ASGHL32	20	120		23.6			
	S22JX-ASGHL32	22	120		23.6			
	S25JX-ASGHL32	25	120	10	37			
	S25.0JX-ASGHL32	25.4	120					

### Different applications between ASGH-32F( without offset) and ASGH-32(with offset)

For some automatic lathes where the turret almost touches the chuck, if an offset tool holder is used, the distance between B and WF is too large, which may cause interference between tool holder and chuck, so the tool holder without offset type is required.

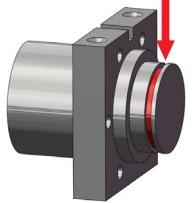
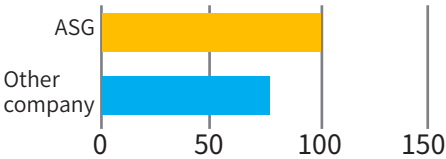


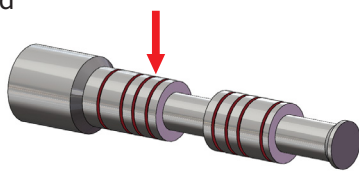
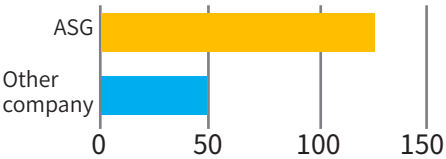
ASGH-32F(without offset)

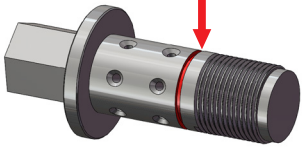
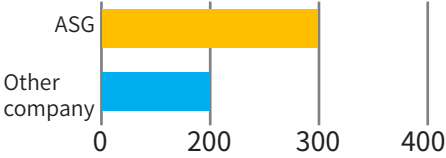


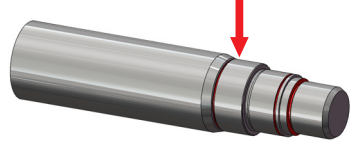
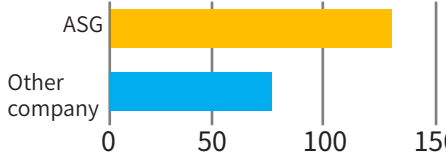
ASGH-32(with offset)

**Success stories**

Insert	ASG 32R150T20-R010 AP301U
Workpiece	Internal seat tube 
Workpiece material	SUS316
Cutting speed	70m/min
Feed	0.05mm/rev
Cutting depth	0.5mm
Coolant	Oil-based coolant
Result	 ASG shows stable performance, tool life increased by <b>+25%</b>

Insert	ASG 32R033T08-R005 AP301U
Workpiece	Valve rod 
Workpiece material	42CrMn
Cutting speed	92m/min
Feed	0.03mm/rev
Cutting depth	0.5mm
Coolant	Oil-based coolant
Result	 ASG shows stable performance, tool life increased by <b>+140%</b>

Insert	ASG 32R200T25-R010 AP301U
Workpiece	Bolt 
Workpiece material	35CrMn
Cutting speed	100m/min
Feed	0.05mm/rev
Cutting depth	1mm
Coolant	Oil-based coolant
Result	 ASG shows stable performance, tool life increased by <b>+17%</b>

Insert	ASG 32R150T20-R010 AP301U
Workpiece	Axle 
Workpiece material	20CrMnTi
Cutting speed	113m/min
Feed	0.05mm/rev
Cutting depth	1.5mm
Coolant	Oil-based coolant
Result	 ASG shows stable performance, tool life increased by <b>+47%</b>