

**NEW
PRODUCT!**

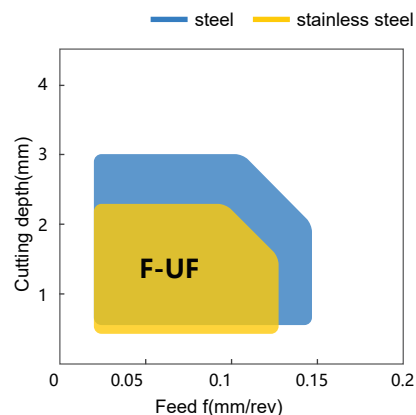
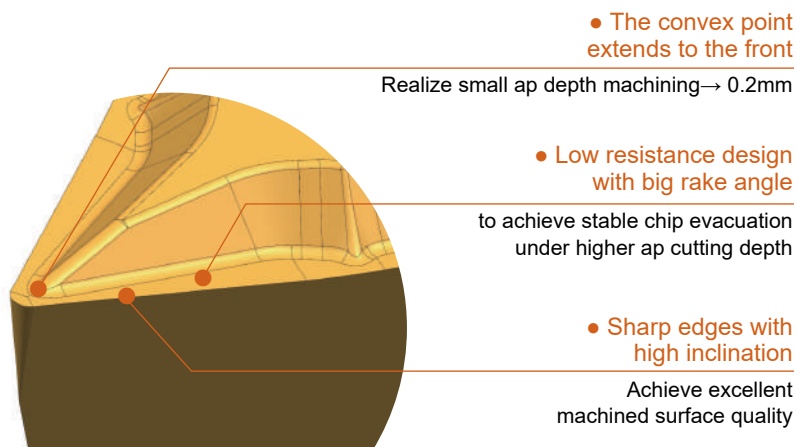
Tools for small size automatic lathe

F-UF Chipbreaker

Suitable for steel and stainless steel machining



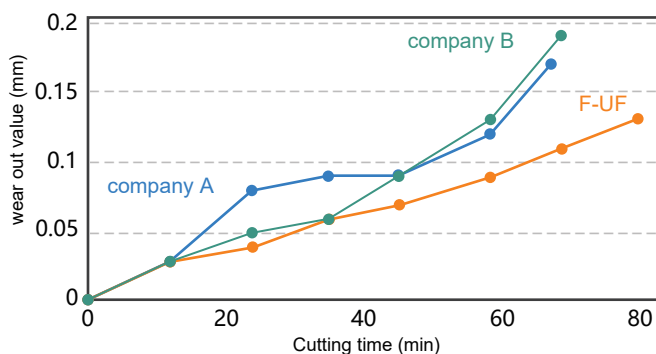
Chipbreaker introduction



Cutting performances

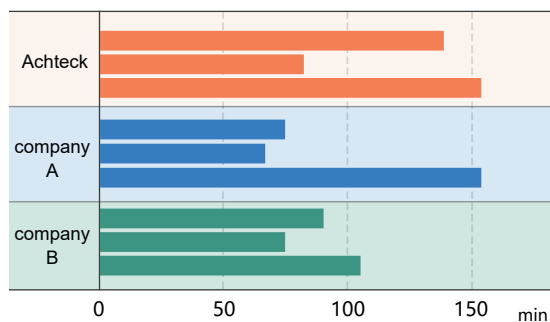
Wear resistance performance

alloy steel (40CrNiMo) continuous cutting



contrast to other companines in tool life

stainless steel (SUS316L) continuous cutting



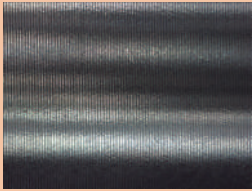
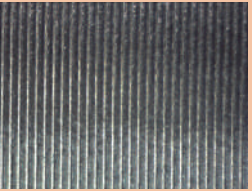
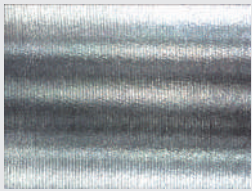
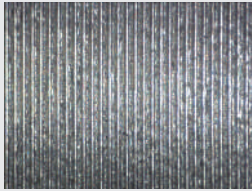
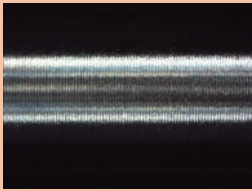
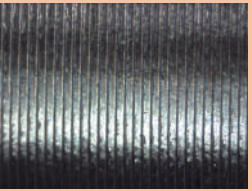
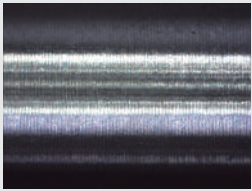
<Cutting conditions>

Inserts type	DCGT 11T302F-UF AP301M
Cutting speed	100m/min
Feed	0.05mm/min
Cutting depth	1.0mm
Coolant type	water-solubility

<Cutting conditions>

Inserts type	DCGT 11T302F-UF AP301M
Cutting speed	100m/min
Feed	0.08mm/min
Cutting depth	1.0mm
Coolant type	water-solubility

machined surfaces quality comparison

	ACHTECK F-UF		Other company	
	visual check	40X	visual check	40X
Initial stage machining				
20 minutes later			The surface is dark not shining 	

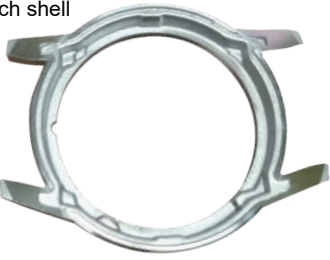
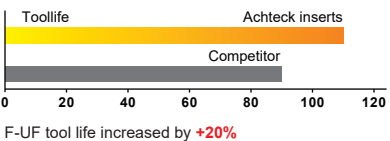
【Cutting conditions】 Materials:SUS304 Ø50mm Vc=150m/min f=0.1mm/rev ap=0.5mm wet cutting

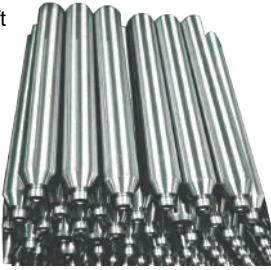
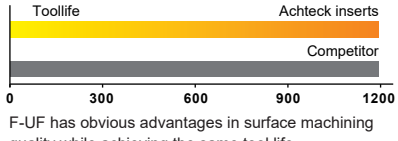
Chips comparison

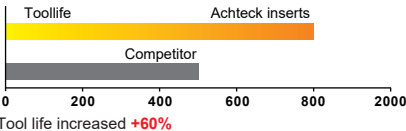
ACHTECK F-UF				
Cutting depth Ap(mm)	3.0			
	2.0			
	1.0			
	0.5			
	0.25			
Feed f(mm/rev)				
0.03 0.05 0.10 0.13				
【Cutting conditions】 Materials: SUS304 Vc=100m/min wet cutting				

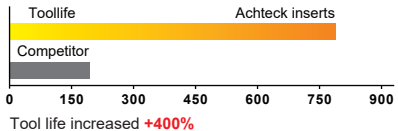
Other company				
Cutting depth Ap(mm)	3.0			
	2.0			
	1.0			
	0.5			
	0.25			
Feed f(mm/rev)				
0.03 0.05 0.10 0.13				
【Cutting conditions】 Materials: SUS304 Vc=100m/min wet cutting				

Case study

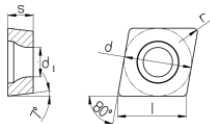
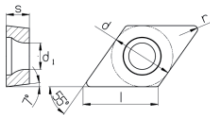
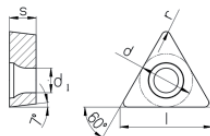
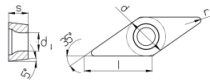
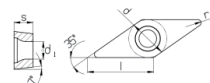
Inserts type	VBGT 110302F-UF AP301M
Workpiece	Watch shell 
Materials	SUS316L
Cutting speed	226m/min
Feed	0.035mm/rev
Cutting depth	0.2mm
Coolant type	Oil
Result	 F-UF tool life increased by +20%

Inserts type	DCGT 11T302F-UF AP301M
Workpiece	motor shaft 
Materials	SUJ2
Cutting speed	31.4m/min
Feed	0.2mm/rev
Cutting depth	0.5mm
Coolant type	Wet
Result	 F-UF has obvious advantages in surface machining quality while achieving the same tool life

Inserts type	DCGT 11T302F-UF AP301M
Workpiece	Output shaft 
Materials	GCr15
Cutting speed	104m/min
Feed	0.06~0.15mm/rev
Cutting depth	0.5~1.0mm
Coolant type	Oil
Result	 Tool life increased +60%

Inserts type	VBGT110301F-UF AP301M
Workpiece	screw 
Materials	SUS304
Cutting speed	61m/min
Feed	0.05mm/rev
Cutting depth	0.03mm
Coolant type	Oil
Result	 Tool life increased +400%

● Products list

Application	Inserts	Designation	Recommended parameters		Dimensions					Grade	shape
			Feed (mm/rev)	Cutting depth (mm)	d (mm)	l (mm)	s (mm)	d1 (mm)	r (mm)	PVD Coating	
										AP301M	
精加工		CCGT 060201F-UF	0.02-0.15	0.10-1.4	6.35	6.45	2.38	2.8	0.1	●	
		CCGT 060202F-UF	0.02-0.15	0.10-1.4	6.35	6.45	2.38	2.8	0.2	●	
		CCGT 060204F-UF	0.03-0.20	0.10-1.4	6.35	6.45	2.38	2.8	0.4	●	
		CCGT 09T301F-UF	0.02-0.15	0.10-2.4	9.53	9.67	3.97	4.4	0.1	●	
		CCGT 09T302F-UF	0.02-0.15	0.10-2.4	9.53	9.67	3.97	4.4	0.2	●	
		CCGT 09T304F-UF	0.03-0.20	0.10-2.4	9.53	9.67	3.97	4.4	0.4	●	
		CCGT 09T308F-UF	0.03-0.25	0.10-2.4	9.53	9.67	3.97	4.4	0.8	●	
		DCGT 070201F-UF	0.02-0.15	0.10-1.4	6.35	7.75	2.38	2.8	0.1	●	
		DCGT 070202F-UF	0.02-0.15	0.10-1.4	6.35	7.75	2.38	2.8	0.2	●	
		DCGT 070204F-UF	0.03-0.20	0.10-1.4	6.35	7.75	2.38	2.8	0.4	●	
		DCGT 11T301F-UF	0.02-0.15	0.10-2.4	9.53	11.62	3.97	4.4	0.1	●	
		DCGT 11T302F-UF	0.02-0.15	0.10-2.4	9.53	11.62	3.97	4.4	0.2	●	
		DCGT 11T304F-UF	0.03-0.20	0.10-2.4	9.53	11.62	3.97	4.4	0.4	●	
		TCGT 110201F-UF	0.02-0.15	0.10-2.4	6.35	11.00	2.38	2.8	0.1	●	
		TCGT 110202F-UF	0.02-0.15	0.20-2.4	6.35	11.00	2.38	2.8	0.2	●	
		TCGT 110204F-UF	0.03-0.20	0.20-2.4	6.35	11.00	2.38	2.8	0.4	●	
		TCGT 16T304F-UF	0.03-0.20	0.20-2.4	9.53	16.50	3.97	2.8	0.4	●	
		VBGT 110301F-UF	0.02-0.15	0.10-1.4	6.35	11.07	3.18	2.8	0.1	●	
		VBGT 110302F-UF	0.02-0.15	0.20-1.4	6.35	11.07	3.18	2.8	0.2	●	
		VBGT 110304F-UF	0.03-0.20	0.20-1.4	6.35	11.07	3.18	2.8	0.4	●	
		VBGT 160401F-UF	0.02-0.15	0.10-1.4	9.53	16.61	4.76	4.4	0.1	●	
		VBGT 160402F-UF	0.02-0.15	0.20-1.4	9.53	16.61	4.76	4.4	0.2	●	
		VCGT 110301F-UF	0.02-0.15	0.10-1.4	6.35	11.07	3.18	4.4	0.1	●	
		VCGT 110302F-UF	0.02-0.15	0.20-1.4	6.35	11.07	3.18	4.4	0.2	●	
		VCGT 110304F-UF	0.03-0.20	0.20-1.4	6.35	11.07	3.18	4.4	0.4	●	