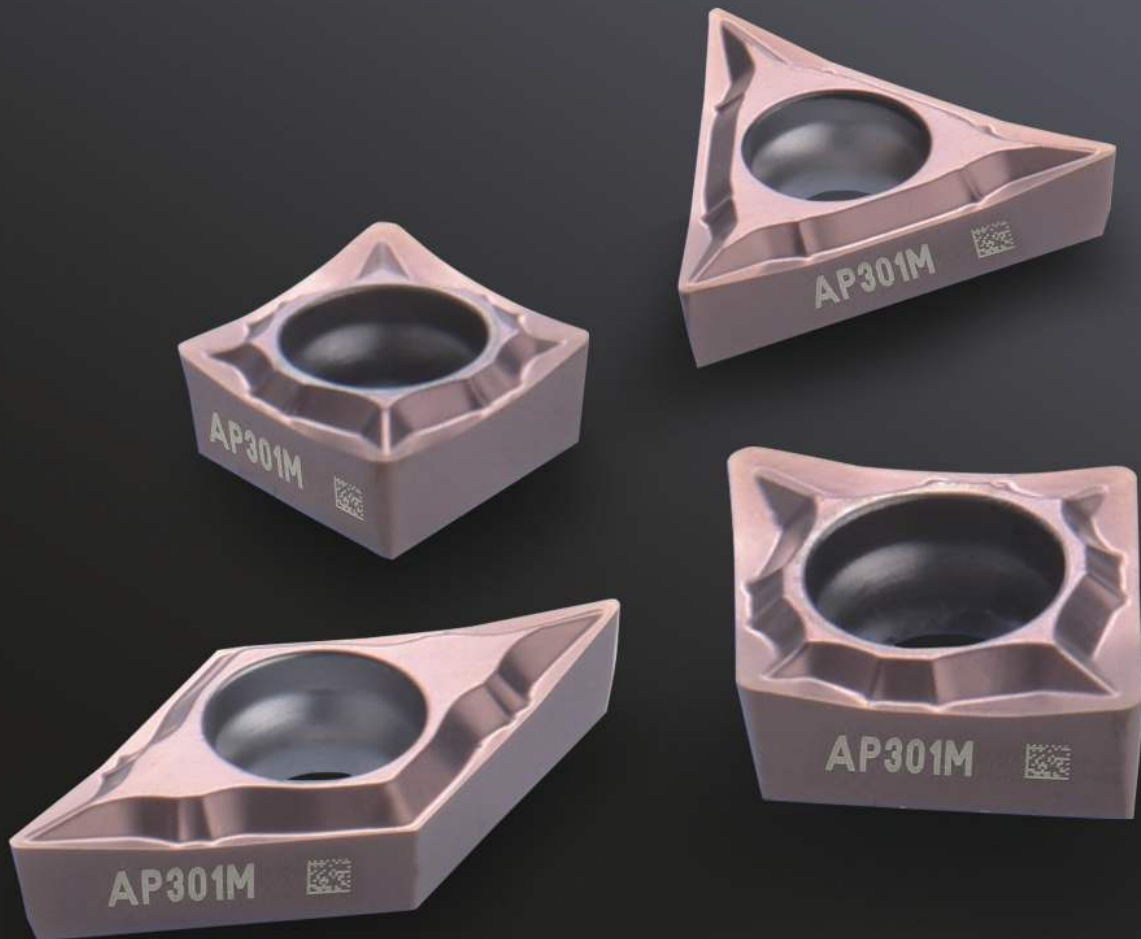


**NEW
PRODUCT!**

E-UF

New chip breaker E-UF with high precision tolerance insert



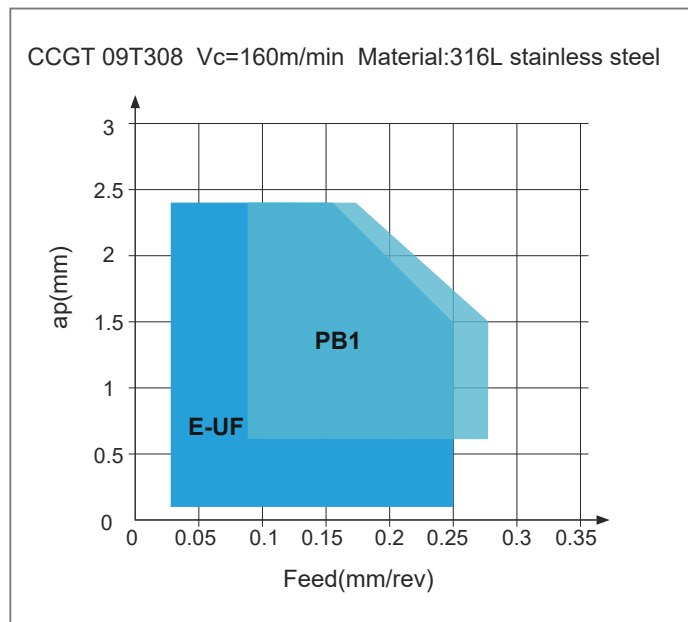
Achteck is launching a new chip breaker E-UF which is positive turning insert with precision tolerance.

E-UF chip breaker is suitable for super finishing to finishing with very excellent chip control at low feed rate and small depth of cut. The E-UF chip breaker has good combination with AP301M 、 AP100S grade which supply excellent performance on stainless steel and super alloys.

◆ E-UF chip breaker features

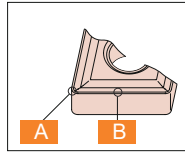
- ◆ For super finishing to finishing
- ◆ Excellent chip breaking at low feed rate and small depth of cut
- ◆ Periphery grinded insert with high precision tolerance
- ◆ Better surface finish and longer tool life
- ◆ For stainless steel and super alloys
- ◆ Insert radius supplied with 0.1mm,0.2mm,0.4mm and 0.8mm

◆ Chip breaker range



◆ Chip breaker features

Positive insert



Chip breaker	Edge preparation		Application
E-UF			<ul style="list-style-type: none"> • For super finishing to finishing • For stainless steel and super alloys

◆ Grade application

Grade	Coating	Material					
		P	M	K	S	N	H
AP301M	PVD		●		●		
AP100S	PVD		●		●		

● Marked: 1st Choice ● Marked: 2nd Choice

◆ Recommended cutting speed by materials

Material	Material Type		Cutting speed (m/min)		
			Feed(low)	Feed(medium)	Feed(high)
Stainless steel	Austenite+ Ferrite	300 series	180	140	110
	Martensite	400 series	200	160	130
	Precipitated dispersion hardened stainless steel	P.H.	160	130	70
High temperature alloys	Iron base alloy	-	150	90	40
	Cobalt base alloy	Waspalloy	80	50	30
	Nickel base alloy	Inconel	80	50	30
	Titanium alloy	Ti6Al4V	160	90	35

Remark) The recommended cutting speed always refer to general conditons. These cutting speed should be adjusted according to the practical machine rigidity, tools, work piece clamping and coolants.(The feed rate refer corner radius)

◆ Case stories

Component description: Conrod rod

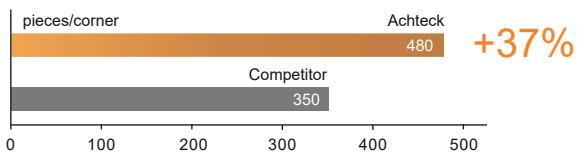
Material: Powder metallurgy

Insert: CCGT 060204E-UF AP301M

Competitor: CCGT 060204-MN2

Cutting Parameters: $V_c=220\text{m/min}$, $f=0.1\text{mm/r}$,
 $a_p=0.15\text{mm}$, wet cutting

Internal fine boring



Component description: Axis

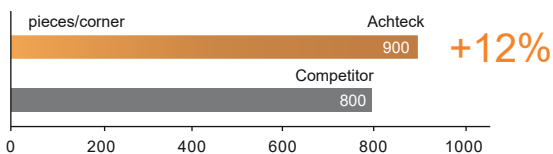
Material: 430F stainless steel

Insert: VBGT 110302E-UF AP301M

Competitor: VBGT 110302-SA


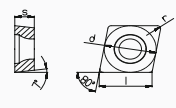
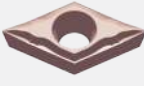
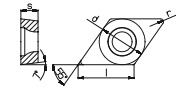

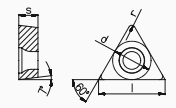

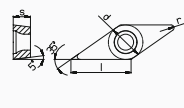

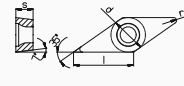
Cutting Parameters: $V_c=110\text{m/min}$, $f=0.05\text{mm/r}$,
 $a_p=0.1\text{mm}$, wet cutting

External finishing



◆ Stock items

Positive insert

Insert	Item designation	Dimension(mm)				Recommended cutting parameters		PVD coating		Geometry
		d	l	s	r	Feed (mm/rev)	ap (mm)	AP301M	AP100S	
	CCGT 060201E-UF	6.35	6.45	2.38	0.1	0.02-0.15	0.10-1.4	●	●	
	CCGT 060202E-UF	6.35	6.45	2.38	0.2	0.02-0.15	0.10-1.4	●	●	
	CCGT 060204E-UF	6.35	6.45	2.38	0.4	0.03-0.20	0.10-1.4	●	●	
	CCGT 09T301E-UF	9.53	9.67	3.97	0.1	0.02-0.15	0.10-2.4	●	●	
	CCGT 09T302E-UF	9.53	9.67	3.97	0.2	0.02-0.15	0.10-2.4	●	●	
	CCGT 09T304E-UF	9.53	9.67	3.97	0.4	0.03-0.20	0.10-2.4	●	●	
	CCGT 09T308E-UF	9.53	9.67	3.97	0.8	0.03-0.25	0.10-2.4	●	●	
	DCGT 070201E-UF	6.35	7.75	2.38	0.1	0.02-0.15	0.10-1.4	●	●	
	DCGT 070202E-UF	6.35	7.75	2.38	0.2	0.02-0.15	0.10-1.4	●	●	
	DCGT 070204E-UF	6.35	7.75	2.38	0.4	0.03-0.20	0.10-1.4	●	●	
	DCGT 11T301E-UF	9.53	11.62	3.97	0.1	0.02-0.15	0.10-2.4	●	●	
	DCGT 11T302E-UF	9.53	11.62	3.97	0.2	0.02-0.15	0.10-2.4	●	●	
	DCGT 11T304E-UF	9.53	11.62	3.97	0.4	0.03-0.20	0.10-2.4	●	●	
	TCGT 110201E-UF	6.35	11.00	2.38	0.1	0.02-0.15	0.10-2.4	●	●	
	TCGT 110202E-UF	6.35	11.00	2.38	0.2	0.02-0.15	0.20-2.4	●	●	
	TCGT 110204E-UF	6.35	11.00	2.38	0.4	0.03-0.20	0.20-2.4	●	●	
	TCGT 16T304E-UF	9.53	16.50	3.97	0.4	0.03-0.20	0.20-2.4	●	●	
	VBGT 110301E-UF	6.35	11.07	3.18	0.1	0.02-0.15	0.10-1.4	●	●	
	VBGT 110302E-UF	6.35	11.07	3.18	0.2	0.02-0.15	0.20-1.4	●	●	
	VBGT 110304E-UF	6.35	11.07	3.18	0.4	0.03-0.20	0.20-1.4	●	●	
	VBGT 160401E-UF	9.53	16.61	4.76	0.1	0.02-0.15	0.10-1.4	●	●	
	VBGT 160402E-UF	9.53	16.61	4.76	0.2	0.02-0.15	0.20-1.4	●	●	
	VCGT 110301E-UF	6.35	11.07	3.18	0.1	0.02-0.15	0.10-1.4	●	●	
	VCGT 110302E-UF	6.35	11.07	3.18	0.2	0.02-0.15	0.20-1.4	●	●	
	VCGT 110304E-UF	6.35	11.07	3.18	0.4	0.03-0.20	0.20-1.4	●	●	

● Marked: represent for standard stock