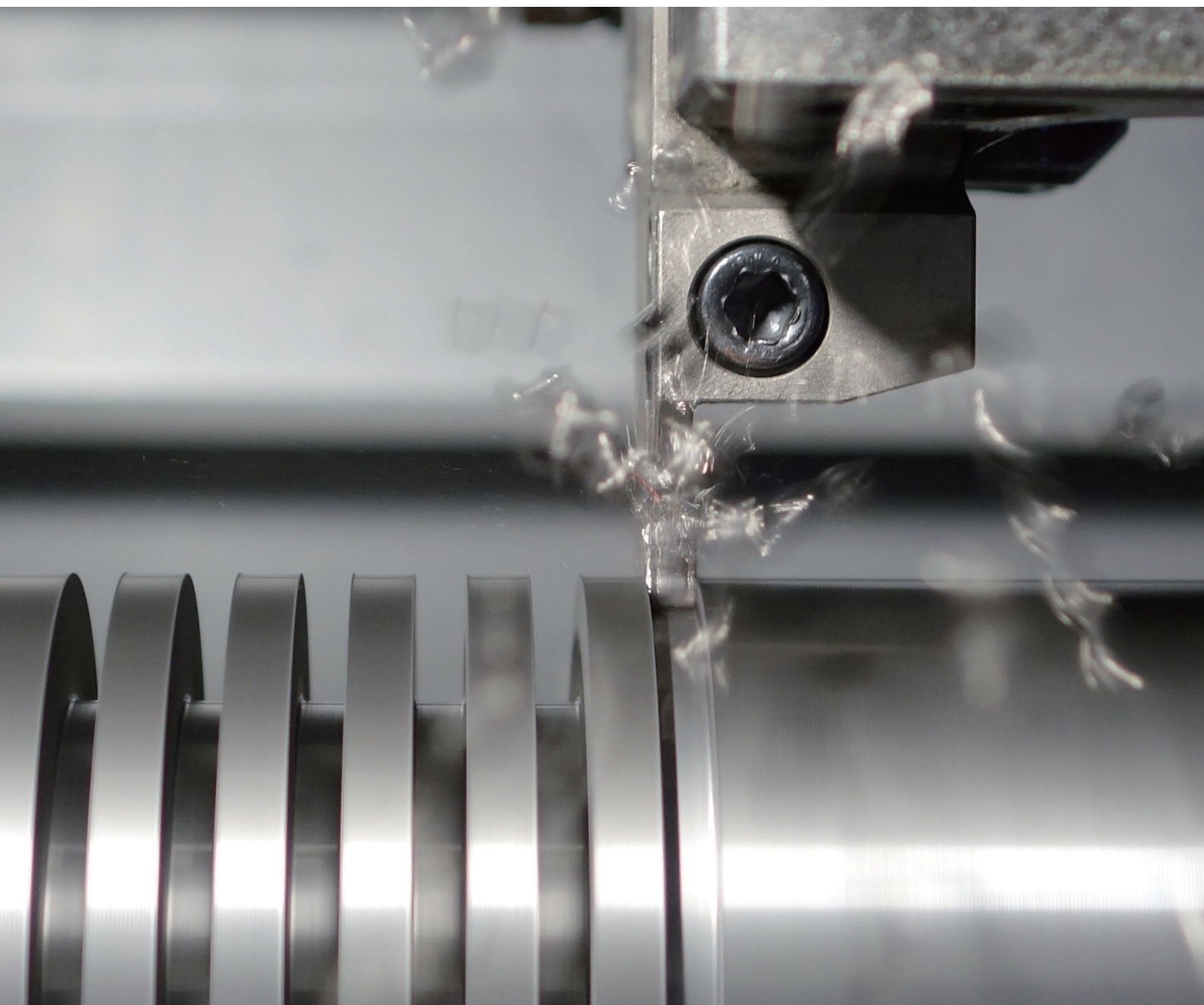


NEW
PRODUCT!

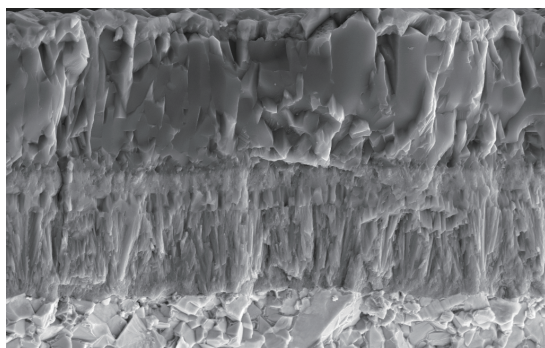
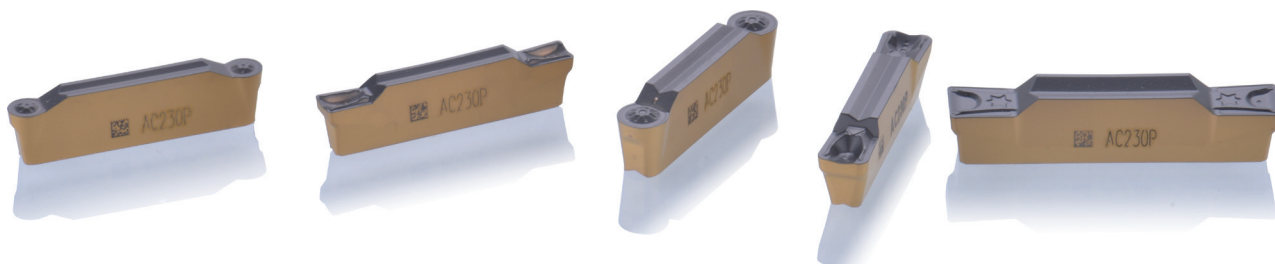
AC230P

**New Generation of CVD Coating Grade
For Grooving**



• Grooving Grade Features

Grooving, turning and profiling at high cutting speed --- excellent wear resistance



●AC230P is the first CVD grade for grooving in Achteck, is suitable for steel, grey and nodular cast iron grooving, turning and profiling at high cutting speed.

●The coated inserts with gradient structured substrate and equiaxed nano structured coating offer better toughness, wear resistance and stability during machining.

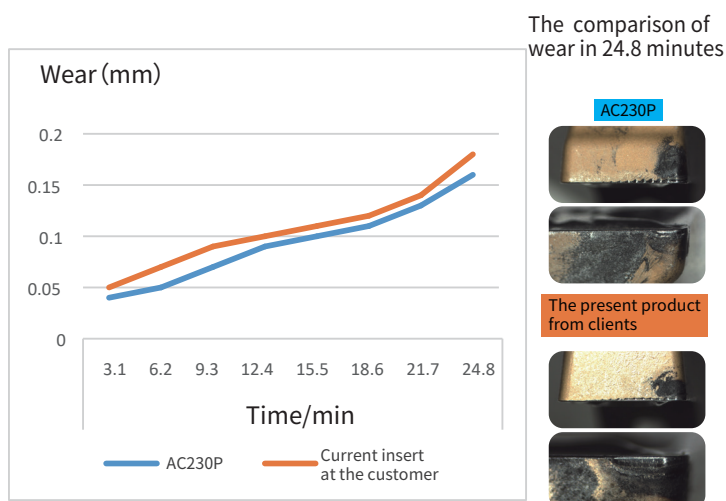
●The gradient structured transition layer in the coating provides excellent peeling resistance, which greatly improves the tool life.

• Application Range and Cutting Conditions

Machining materials	Steel					Cast iron					
Applications	Finishing ↔ Roughing					Finishing ↔ Roughing					
ISO Classification	P01	P10	P20	P30	P40	K01	K10	K20	K20	K30	K40
NEW AC230P		AC230P							AC230P		

Machining materials		Hardness	Cutting speed
K	Gray cast iron	HB 220-260	120-220
	Nodular cast iron		
	Malleable cast iron		
P	Non-alloyed steel	HB 180-280	100-250
	Alloyed steel	HB 200-415	

• The Wear resistance comparison in GGG40 grooving



<Cutting conditions>

Insert: ATD 404-TM

Vc=200m/min

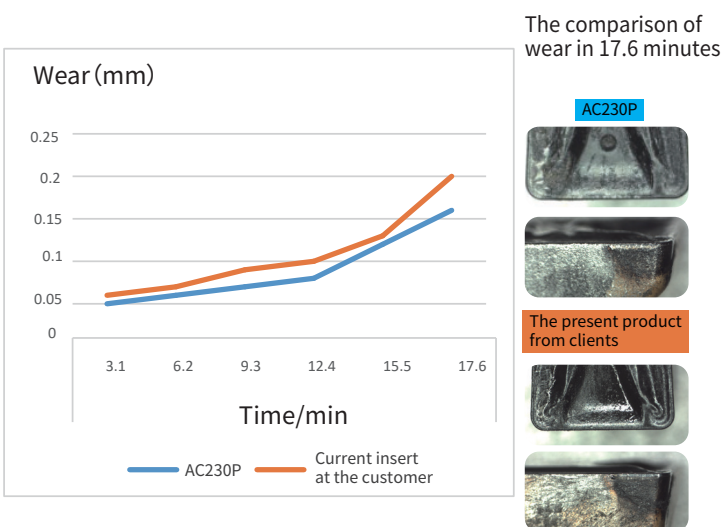
f=0.25mm/rev

ap=1mm

Workpiece material: GGG40

Coolant: Wet cutting

• The Wear resistance comparison in 40CrNiMo grooving



<Cutting conditions>

Insert: ATD 404-TM

Vc=250m/min

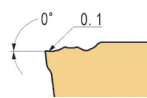
f=0.2mm/rev

ap=1.0mm

Workpiece material: 40CrNiMo

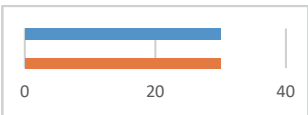
Coolant: Wet cutting

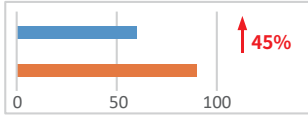
• The geometry Introduction

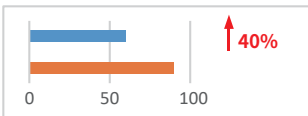
Geometry	Insert	Cutting edge	Features	Geometry Width (mm)								
				External machining					Face grooving		Internal machining	
				Grooving	Parting off	Turning	Profiling	Under cut	Grooving	Turning	Grooving	Turning
TS			1.Multi-purpose geometry 2.Superior chip control 3.Low to medium feed 4.A wider diameter range in internal and face machining	2.0	2.0	2.0	-	-	3.0	3.0	2.0	2.0
				3.0	3.0	3.0			4.0	4.0	3.0	3.0
				4.0	4.0	4.0			5.0	5.0	4.0	4.0
				5.0	5.0	5.0			6.0	6.0	5.0	5.0
				6.0	6.0	6.0					6.0	6.0
				8.0	8.0	8.0						8.0
TM			1.Multi-purpose geometry 2.Strong cutting edge design 3.Medium feed 4.A wider diameter range in internal and face machining	2.0	2.0	2.0	-	-	3.0	3.0	2.0	2.0
				3.0	3.0	3.0			4.0	4.0	3.0	3.0
				4.0	4.0	4.0			5.0	5.0	4.0	4.0
				5.0	5.0	5.0			6.0	6.0	5.0	5.0
				6.0	6.0	6.0					6.0	6.0
				8.0	8.0	8.0						8.0
RM			1.The geometry is suitable for external machining, grooving, turning and profiling 2.Medium feed	2.0	-	2.0	2.0	3.0	3.0	2.0	2.0	
				3.0		3.0	3.0	4.0	4.0	3.0	3.0	
				4.0		4.0	4.0	5.0	5.0	4.0	4.0	
				5.0		5.0	5.0	6.0	6.0	5.0	5.0	
				6.0		6.0	6.0			6.0	6.0	
				8.0		8.0	8.0				8.0	

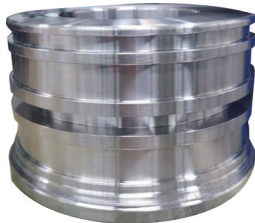
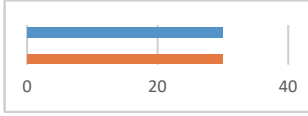


Cases

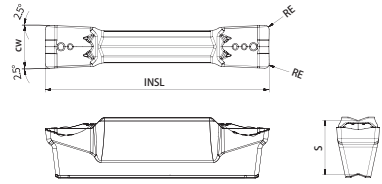
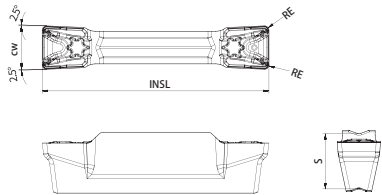
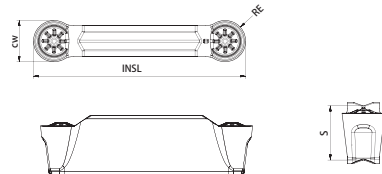
Tool	ATD 404-TM AC230P
Workpiece	108 Ring gear 
Material	GGG60
Cutting speed	286m/min
Feed	0.08mm/rev
ap	3mm
Coolant	Oil
Result	Current insert Achteck  AC230P machines stably, and gets lower tooling cost in the same tool life.

Tool	ATD 404-TM AC230P
Workpiece	Belt pulley 
Material	GG25
Cutting speed	141m/min
Feed	0.27mm/rev
ap	5mm
Coolant	Oil
Result	Current insert Achteck  AC230P machines stably, and increases the tool life 45%.

Tool	ATD 404-TM AC230P
Workpiece	Turbine housing 
Material	Cast iron
Cutting speed	216m/min
Feed	0.1mm/rev
ap	0.2mm
Coolant	Oil
Result	Current insert Achteck  AC230P machines stably, and increases the tool life 40%.

Tool	ATD 404-TM AC230P
Workpiece	Cylinder piston 
Material	C45
Cutting speed	380m/min
Feed	0.15mm/rev
ap	0.2-0.3mm
Coolant	Oil
Result	Current insert Achteck  AC230P's tool life is stable. In the same tool life, it can reduce the cost per part.

Product list

Insert	Drawing	Product code	Dimension(mm)				P	K
			CW	RE	INSL	S	AC230P	
		ATD 203-TS	2	0.3	20.7	5.1	●	
		ATD 303-TS	3	0.3	20.7	5.1	●	
		ATD 404-TS	4	0.4	20.7	5.1	●	
		ATD 408-TS	4	0.8	20.7	5.1	●	
		ATD 504-TS	5	0.4	25.7	5.0	●	
		ATD 508-TS	5	0.8	25.7	5.0	●	
		ATD 604-TS	6	0.4	25.7	5.0	●	
		ATD 608-TS	6	0.8	25.7	5.0	●	
		ATD 808-TS	8	0.8	31.5	6.1		
		ATD 304-TM	3	0.4	20.7	5.1		●
		ATD 404-TM	4	0.4	20.7	5.1		●
		ATD 408-TM	4	0.8	20.7	5.1		●
		ATD 504-TM	5	0.4	25.7	5.0		●
		ATD 508-TM	5	0.8	25.7	5.0		●
		ATD 604-TM	6	0.4	25.7	5.0		●
		ATD 608-TM	6	0.8	25.7	5.0		●
		ATD 808-TM	8	0.8	31.5	6.1		
		ATD 812-TM	8	1.2	31.5	6.1		
		ATD 210-RM	2	1	20.7	5.1		
		ATD 315-RM	3	1.5	20.7	5.1	●	
		ATD 420-RM	4	2	20.7	5.1	●	
		ATD 525-RM	5	2.5	25.7	5.0	●	
		ATD 630-RM	6	3	25.7	5.0		
		ATD 840-RM	8	4	31.5	6.1		

●:Stocked