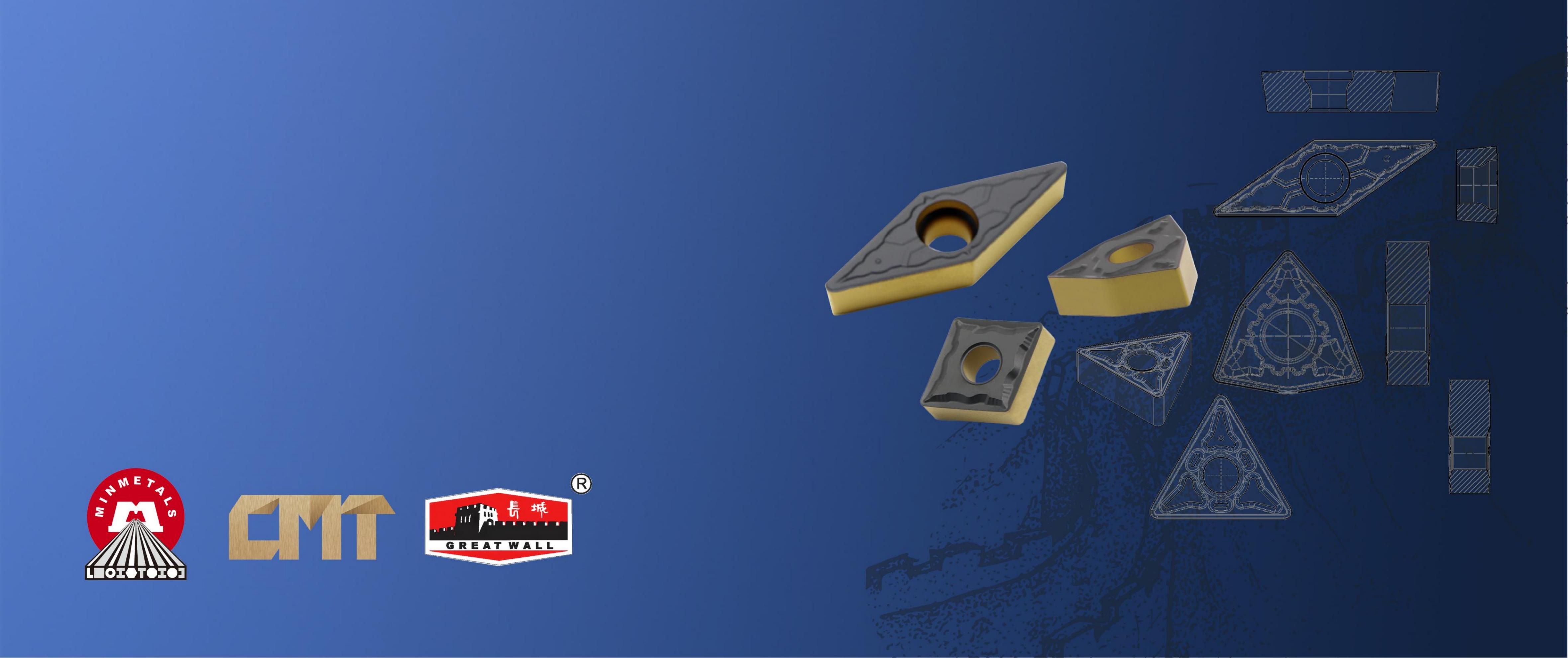


TURNING INSERTS FOR HARDENED STEEL





CHENGDU GREATWALL CUTTING TOOLS CO.,LTD





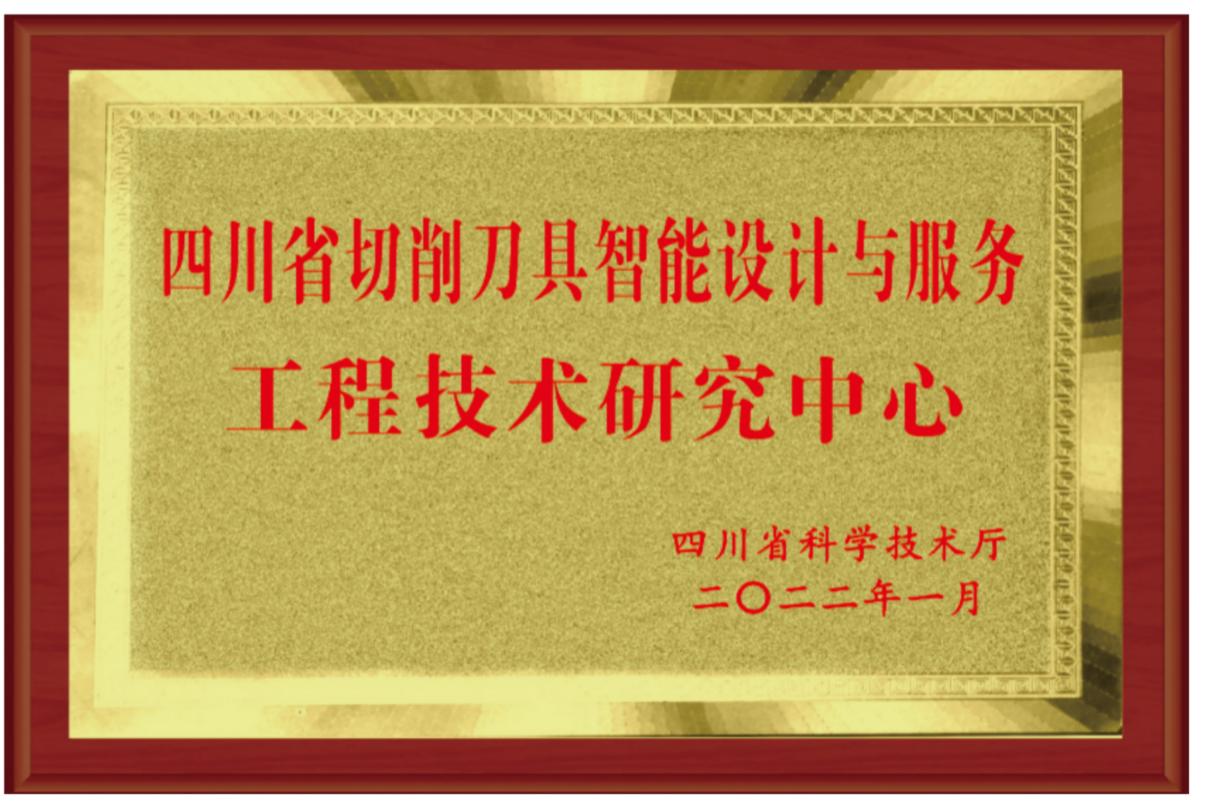




- Affiliated with China Minmetals
 Corporation, a Fortune Global 500 company.
- The company boasts two specialized production lines for blades and cutting tools.
- Integrating the research and development of carbide insert and tool materials, structural design, coating technology, as well as testing and analysis.









QUALITY ACCOMPLISHES THE FUTURE

Main Products

The company's main products include indexable CNC inserts, solid carbide cutting tools, and machine-clamped or welded conventional blades. It owns the cutting tool brand "Great Wall," which covers a wide range of machining applications including turning, milling, drilling, reaming, and broaching. The products are renowned for their consistent quality, superior performance, and are extensively applied in industries such as aerospace, defense, automotive manufacturing, wind power generation, and mold making. As a long-term supplier to numerous aerospace enterprises and leading automotive brands, the company holds a prominent position in its sector.



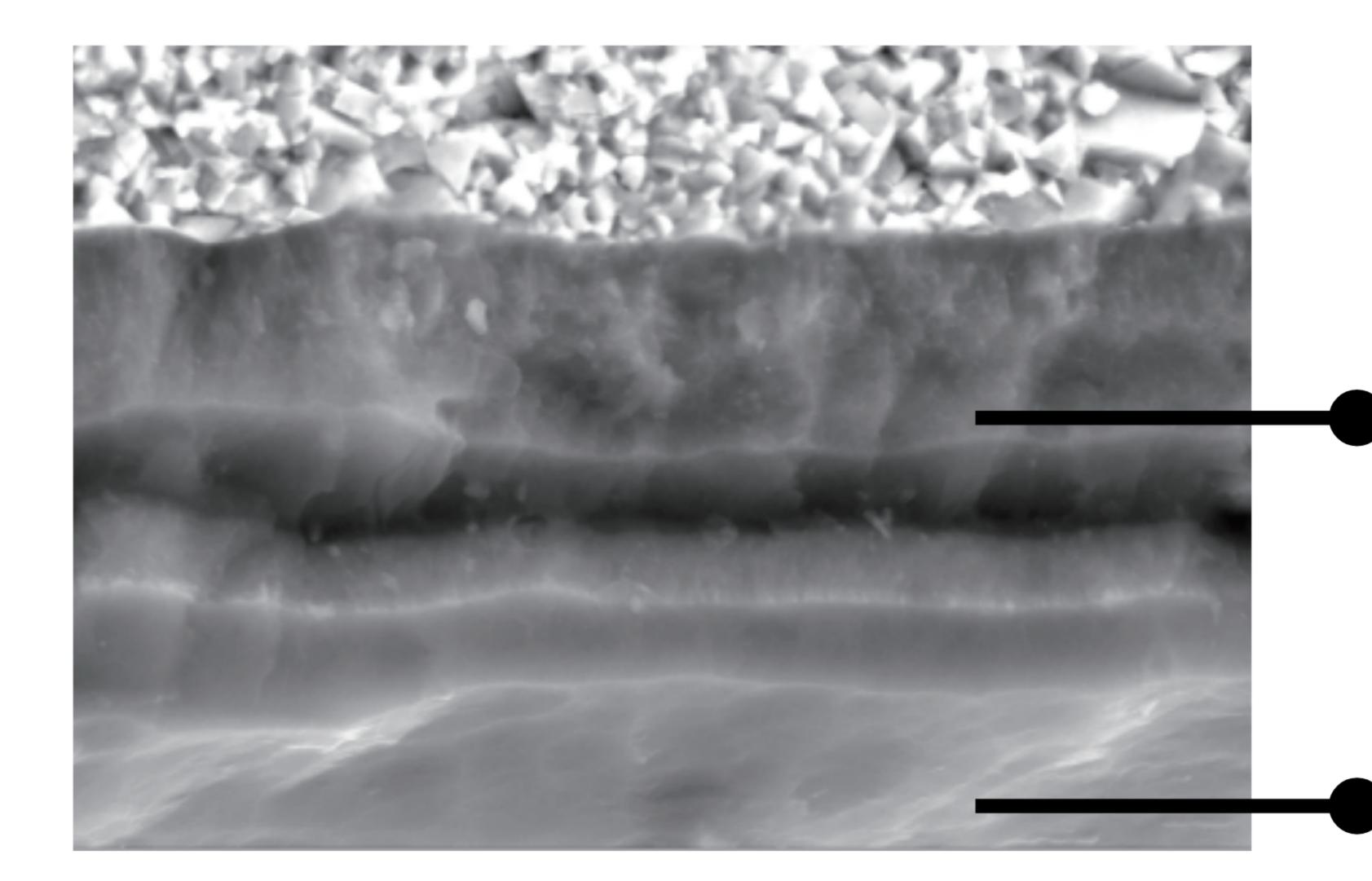




GRADE INTRODUCTION

AP105

- High wear resistance.
- Suitable for continuous turning of hardened steel materials.

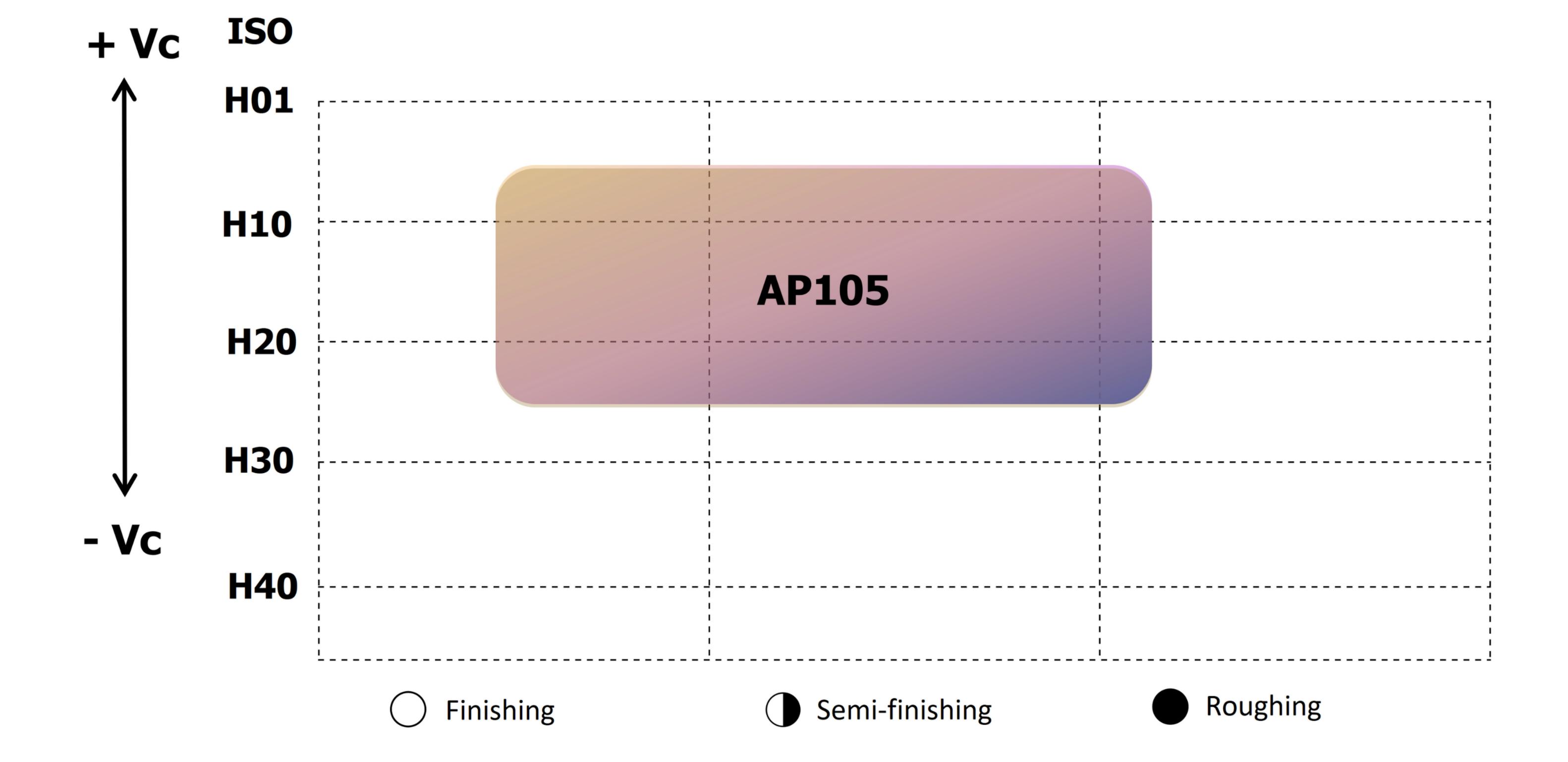


PVD coating

Application range: H10-H20

 High-chromium coating, featuring very high wear resistance and resistance to plastic deformation.

Ultra-hard particle substrate.



QUALITY ACCOMPLISHES THE FUTURE

GW8110

- High wear resistance and good fracture toughness.
- Suitable for medium-to-high speed milling of steel materials with HRC 30-50.

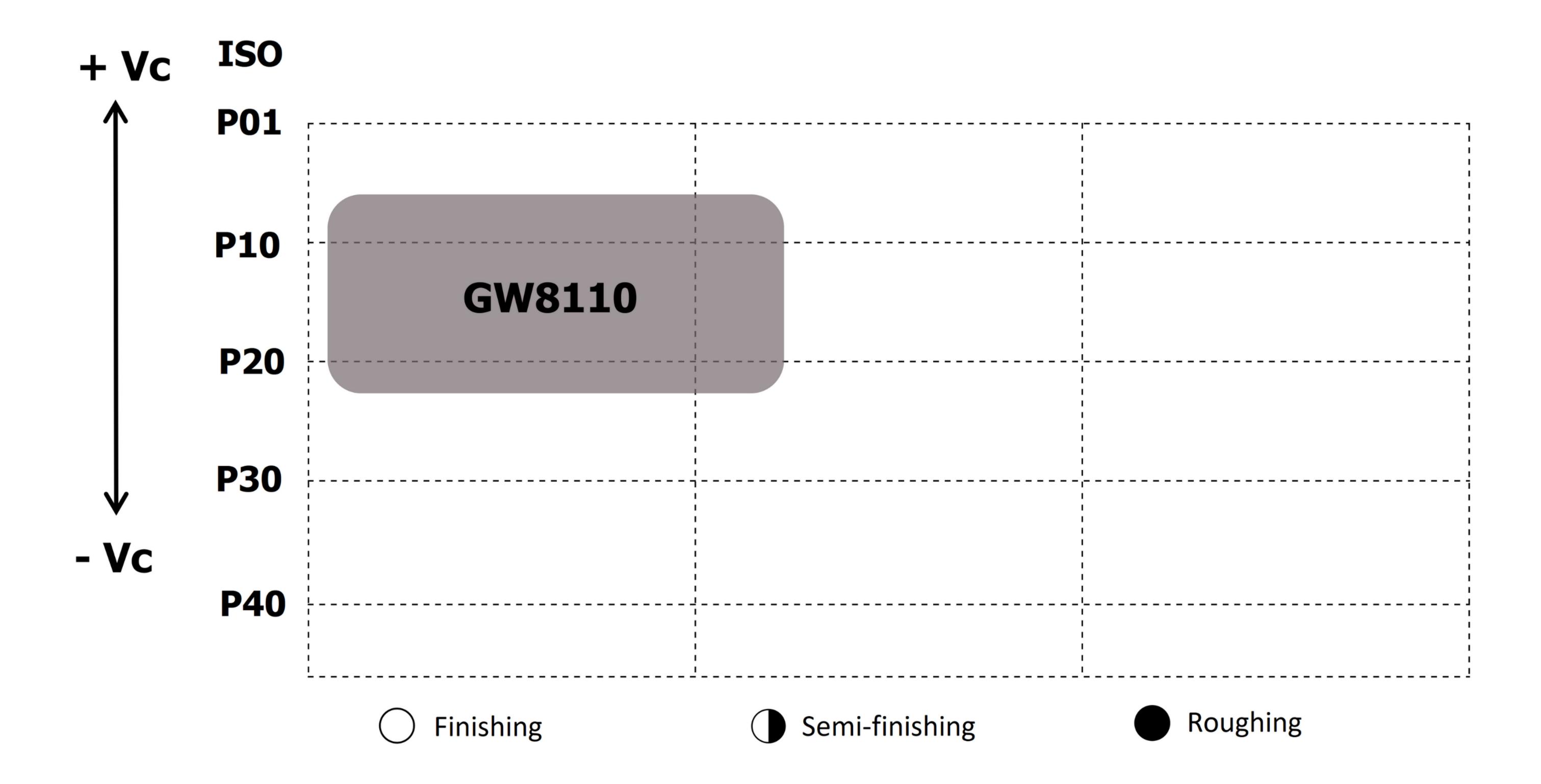


PVD coating

Application range: H10-H20

Nanomultilayer coating, featuring high wear resistance and high-temperature resistance.

Fine-grained, high-hardness substrate.

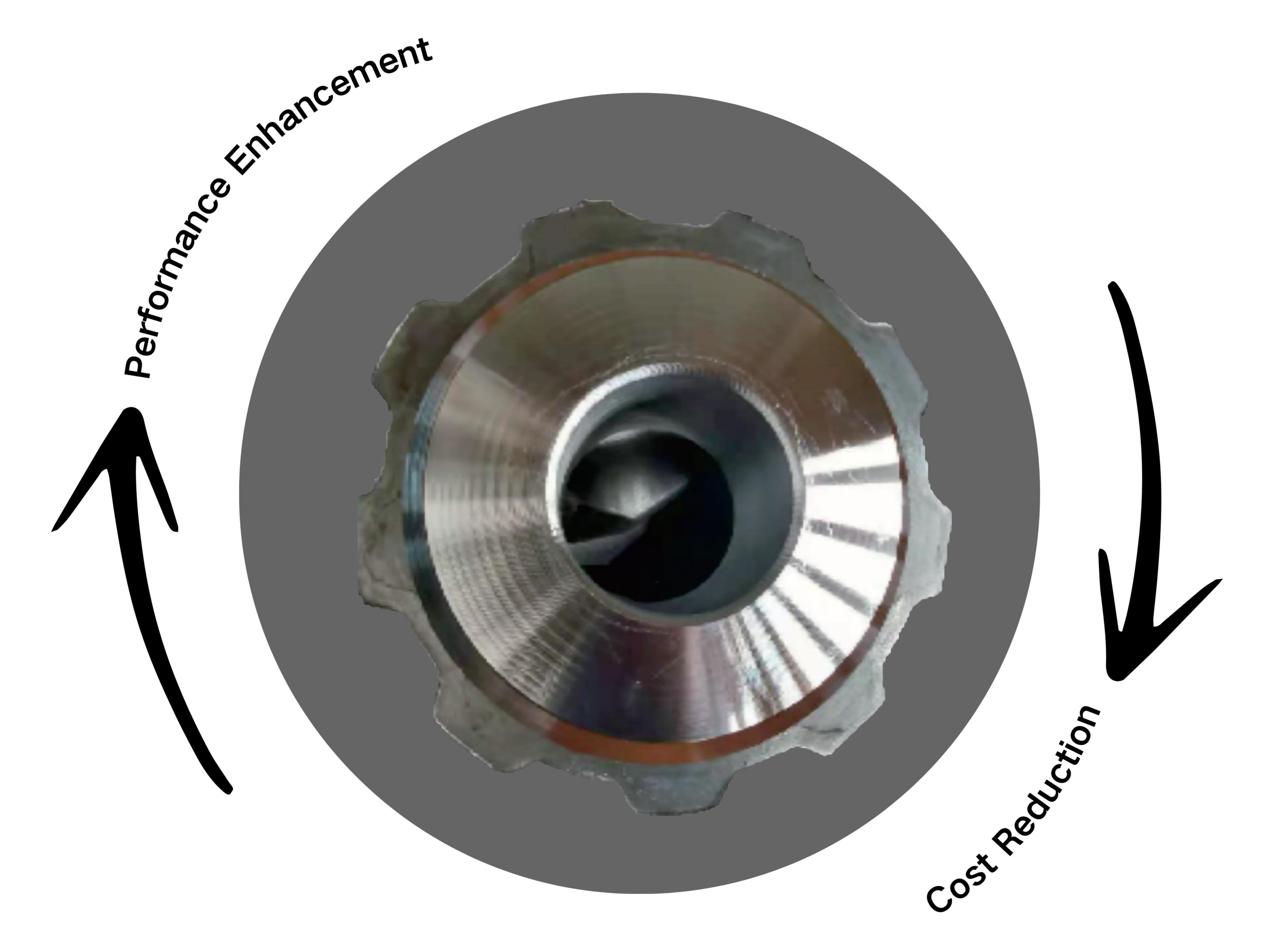




GROOVE INTRODUCTION

Groove	Illustration	Features	Suggested	
			Feed rate	Cut depth
BF2		I Large lead angle design, low cutting force, resulting in good surface quality. II Suitable for light interrupted finishing of hard-to-machine materials such as quenched steel.	0.11-0.15-0.22	0.3-0.8-1.5
BM1		I General-purpose chip breaker geometry, wide chip breaking range. II Suitable for light interrupted finishing and semi-finishing of hard-to-machine materials such as quenched steel.	0.12-0.15-0.30	0.5-1.0-3.0
BM2		I Double lead angle design, wide chip breaking range. II Suitable for interrupted semi-finishing and roughing of hard-to-machine materials such as quenched steel.	0.15-0.20-0.40	1.5-2.0-4.0
HPM		I Positive angle insert matched with a unique three-dimensional design, resulting in good surface finish. II Suitable for continuous finishing and hole machining of hard-to-machine materials such as quenched steel.	0.07-0.1-0.20	0.2-0.4-1.0
ZMF		I Positive angle insert with unique three-dimensional design, resulting in good surface finish. II Suitable for continuous finishing and hole machining of hard-to-machine materials such as quenched steel.	0.07-0.1-0.20	0.2-0.4-1.0

Manufacturing Example



Compare

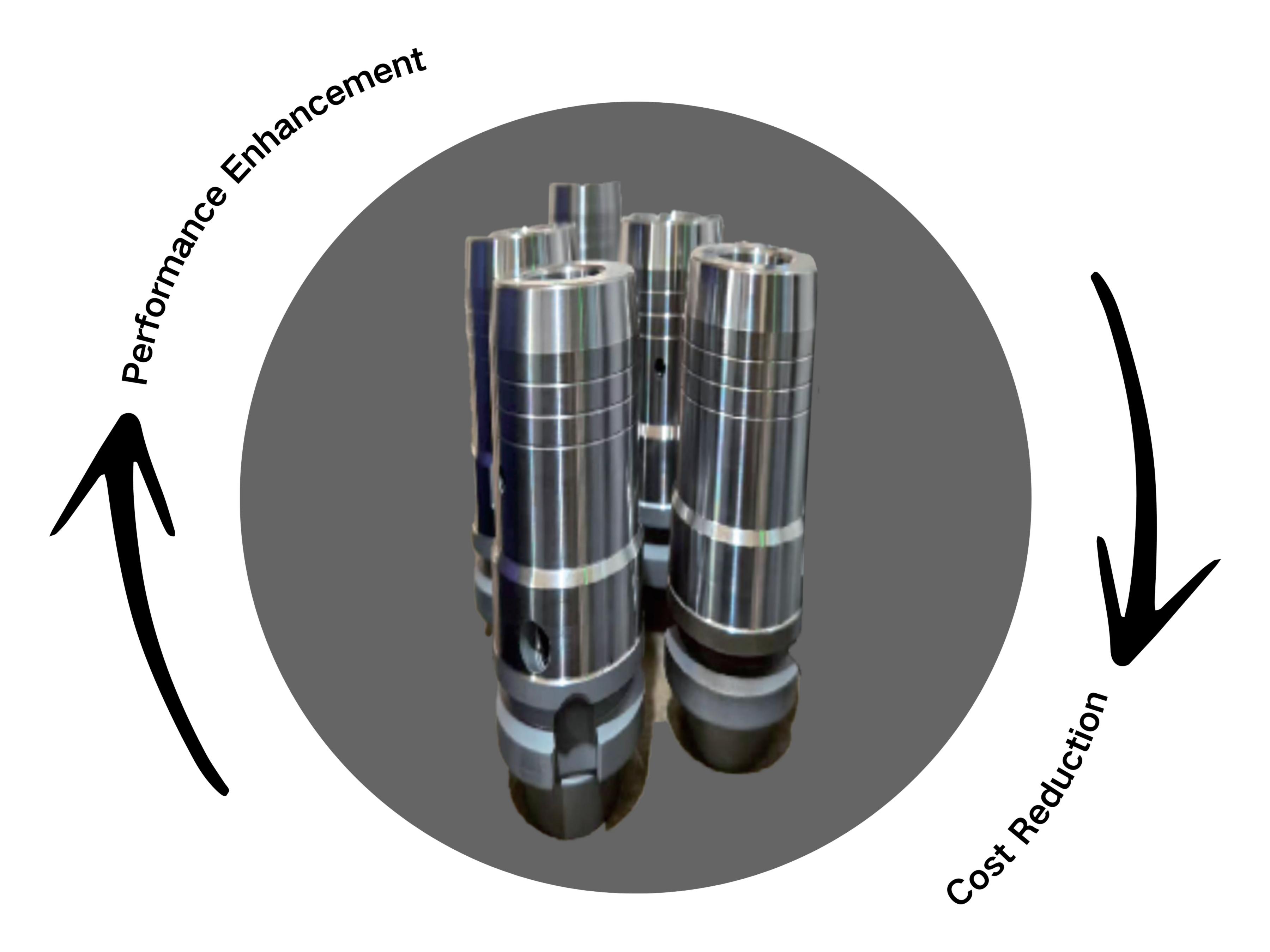
A leading international brand equivalent performance
610 pieces

equivalent performance
608pieces

Workpiece material	20CrMnTi(HRC62)
Insert Grade	AP105
Insert Size	WNMGO80408-BM2
Cutting parameters	Vc=38-56m/min;f=0.15mm;Ap=0.15mm



GROOVE INTRODUCTION



Compare

A leading international brand 305 pieces

equivalent performance	

Great wall 308 pieces

Workpiece material	GCr15(HRC18-20)
Insert Grade	AP105
Insert Size	WNMGO80408-BM2
Cutting parameters	Vc=100m/min;f=0.02-0.03mm;Ap=0.15mm

CN									
S		Si	ze(mi			Grade			
Insert shape	Size	IC	S	L	d	ľ	AP105		
	CNMG120404-BF2	12.7	4.76	12.9	5.16	0.4			
	CNMG160612-BM2	15.875	6.35	16.1	6.35	1.2			



DC									
		Size(mm)					Grade		
Insert shape	Size	IC	S	L	d	r	AP105		
	DCGT11T304-HPM	9.525	3.97	11.6	4.4	0.4			

DN										
S	r 80°			Grade						
Insert shape	Size	IC	S	L	d	r	AP105			
	DNMG150408-BM1	12.7	4.76	12.9	5.16	0.4				



SNU									
S		Si	ze(mi	n)		Grade			
Insert shape	Size	IC	S	L	d	ľ	AP105		
	SNMG120404-BF2	12.7	4.76	12.9	5.16	0.4			
	SNMG120408-BF2	12.7	4.76	12.9	5.16	0.8			
	SNMG120412-BF2	12.7	4.76	12.9	5.16	1.2			

TC									
60.	S Z		Size(mm)						
Insert shape	Size	IC	S	L	d	r	AP105		
	TCGT110204-ZMF	6.35	2.38	11	2.8	0.4	*		



S		Si	ze(mi	n)		Grade				
Insert shape	Size	IC	S	L	d	ľ	AP105			
	TNMG160404-BF2	9.525	4.76	16.5	3.18	0.4				
	TNMG160408-BF2	9.525	4.76	16.5	3.18	0.8				
	TNMG160408-BM2	9.525	4.76	16.5	3.18	0.8	*			

VN 🗆 🗆										
S I (Grade							
Insert shape	Size	IC	S	L	d	ľ	AP105			
	VNMG160404-BF2	9.525	4.76	16.6	3.81	0.4				
	VNMG160408-BF2	9.525	4.76	16.6	3.81	0.8				



WN									
S - S	10 10		Si	ze(mi	n)		Grade		
Insert shape	Size	IC	S	L	d	r	AP105		
	WNMG080408-BF2	12.7	4.76	8.7	5.16	0.8			
	WNMG080408-BM2	12.7	4.76	8.7	5.16	0.8			

AP								
IC S			Grade					
Insert shape	Size	IC	S	L	d	ľ	GW8110	
	APMT1135PDR-M	6.2	3.5	11.30	2.8	0.8		
	APMT160408PDR-M	9.24	4.76	17.18	4.4	0.8		
	APMT1135PDR-DL	6.2	3.5	11.25	2.8	1.0		
	APMT160408PDR-DL	9.35	5.2	17.35	4.4	0.8		
	APMT1135PDR-H	6.2	3.5	11.20	2.8	0.8		
	APMT160408PDR-H	9.3	4.76	17.08	4.4	0.8		



RD								
IC S			Grade					
Insert shape	Size	IC	S	L	d	r	GW8110	
	RDMT10T300-HM	10.0	3.97	_	4.1	—		
	RDMT120400-HM	12.0	4.76	_	4.4	_		
	RDMW1003MO	10.0	3.18	_	4.6	_		
	RDMW10T3MO	10.0	3.97		4.1			
	RDMW1204MO	12.0	4.76	_	4.4	_		
	RDMW1605MO	16.0	5.56	_	5.56	_		

RP 🗆 🗆								
				Grade				
Insert shape	Size	IC	S	L	d	r	GW8110	
	RPMT0803MO-M	8.0	3.18	_	3.4	-		
	RPMT10T3MO-M	10.0	3.97	_	4.6	—		
	RPMT1204MO-M	12.0	4.76	_	4.1	—		
	RPMW0803MO-M	8.0	3.18	_	3.4	—		
	RPMW10T3MO-M	10.0	3.97	_	4.6	_		
	RPMW1204MO-M	12.0	4.76	_	4.1	-		



WN								
			Grade					
Insert shape	Size	IC	S	L	d	r	GW8110	
	WNMU080608PEN-F	14	6.65	08	6.2	0.8		
	WNMU080608PEN-M	14	6.65	08	6.2	0.8	*	
	WNMU080608PEN-R	14	6.65	08	6.2	0.8	*	

Face milling insert								
IC A IC		Grade						
Insert shape	Size	IC	S	L	d	r	GW8110	
	SNEG1205ANR-M	12	5.88	_	4.6	0.6		
	SEKR1203AFN-M	12.7	3.18	—	2.8	1.6		
	SEKR1504AFN-M	15.875	4.76	_	2.8	1.6		
	SEMR1203AFN-M	12.7	3.18	-	2.8	1.6		
	SOMT1205-M	12.7	5.56	-	4.5	1.2		
	SOMT1505-M	15.875	5.56	-	4.5	1.2		



Contact Information
(028) 88432471

CHENGDU
GREATWALL CUTTING TOOLS
CO.,LTD

Professional marketing team and technical service team, to provide personalized professional products and complete solutions.





