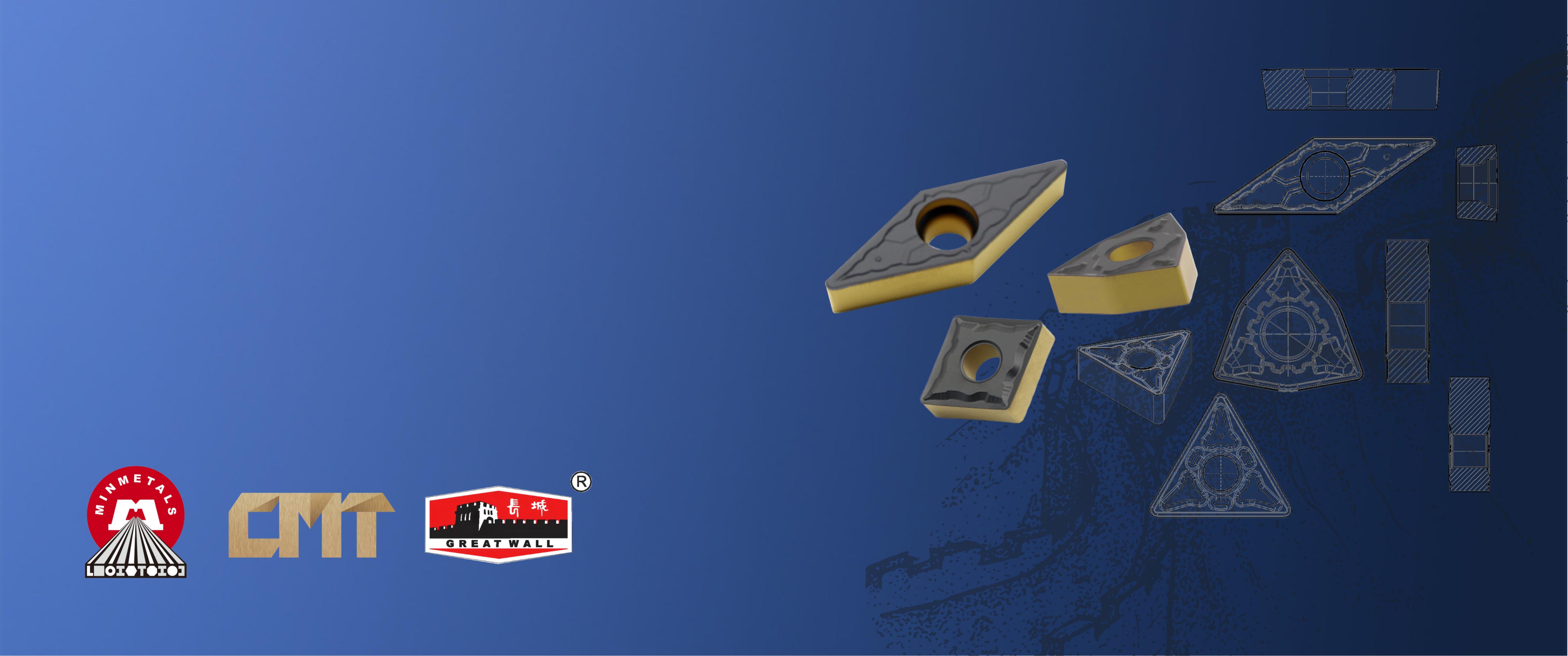


# TURNING INSERTS FOR CAST IRON





## CHENGDU GREATWALL CUTTING TOOLS CO.,LTD





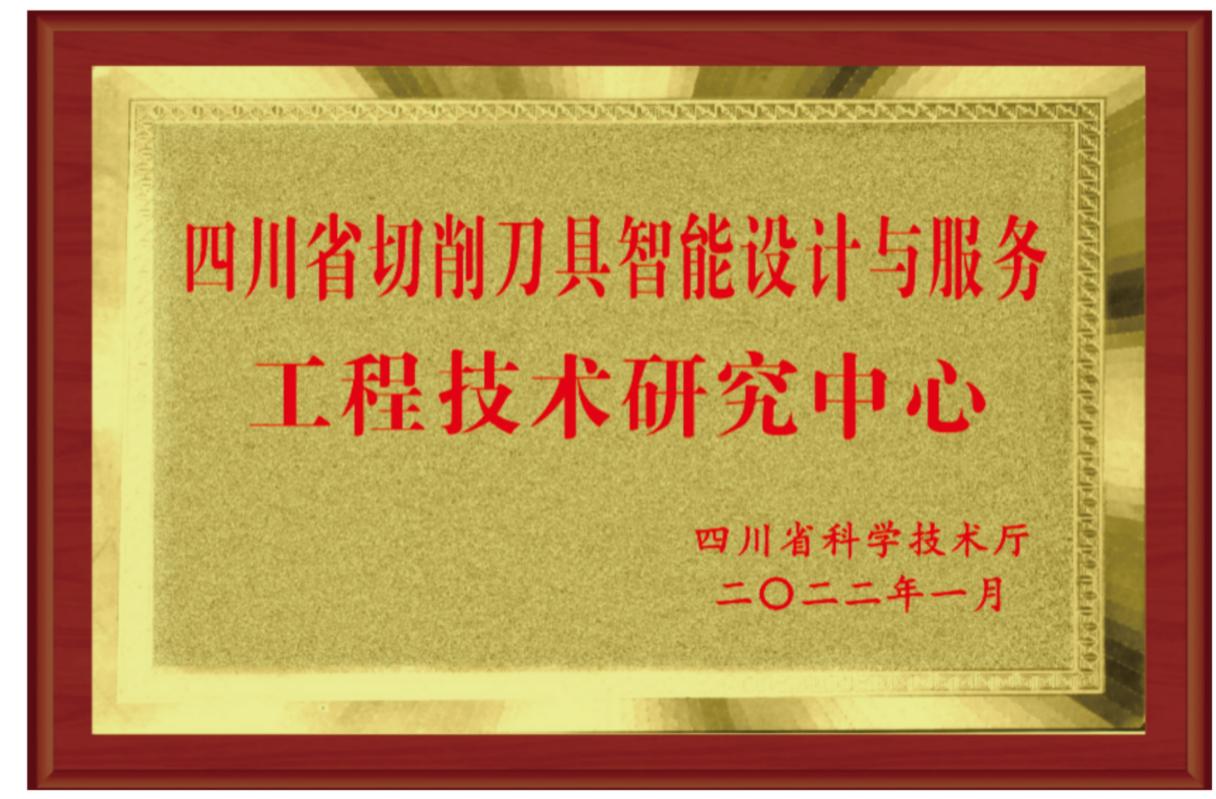


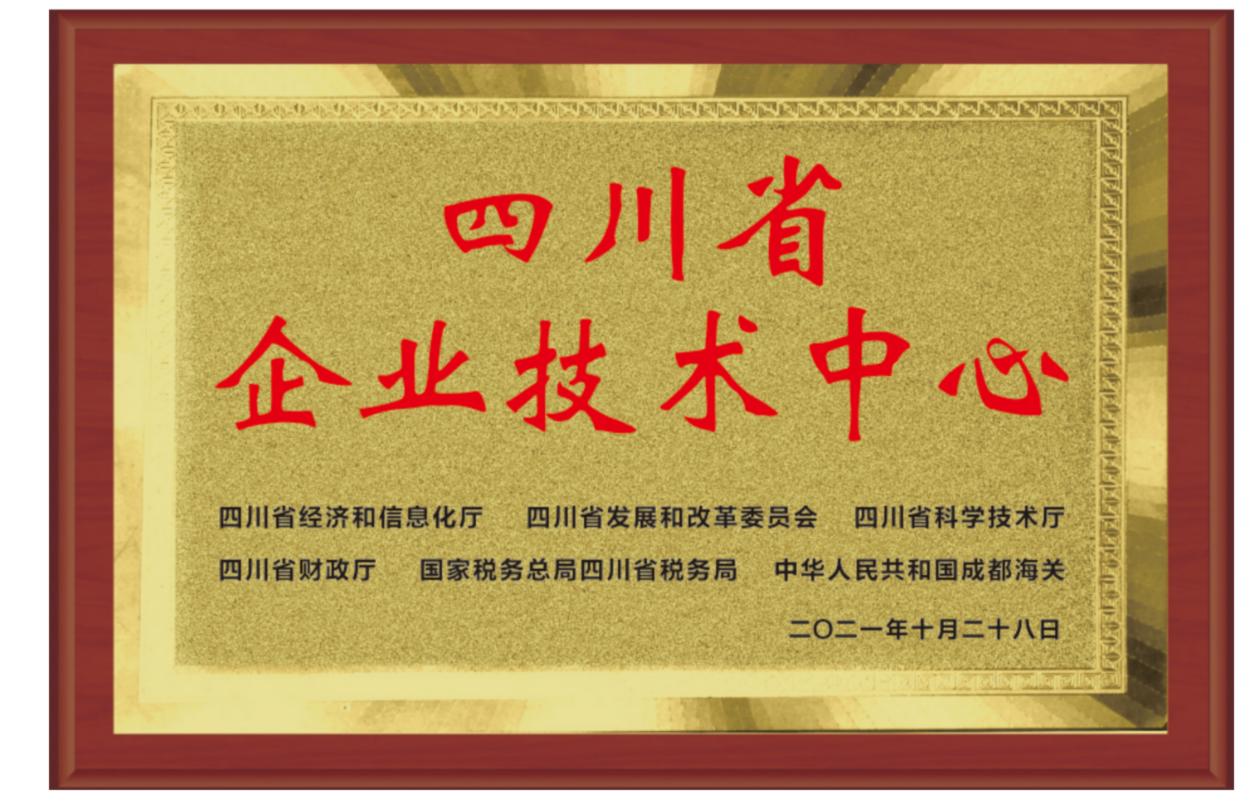


- Affiliated with China Minmetals
   Corporation, a Fortune Global 500 company.
- The company boasts two specialized production lines for blades and cutting tools.
- Integrating the research and development of carbide insert and tool materials, structural design, coating technology, as well as testing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





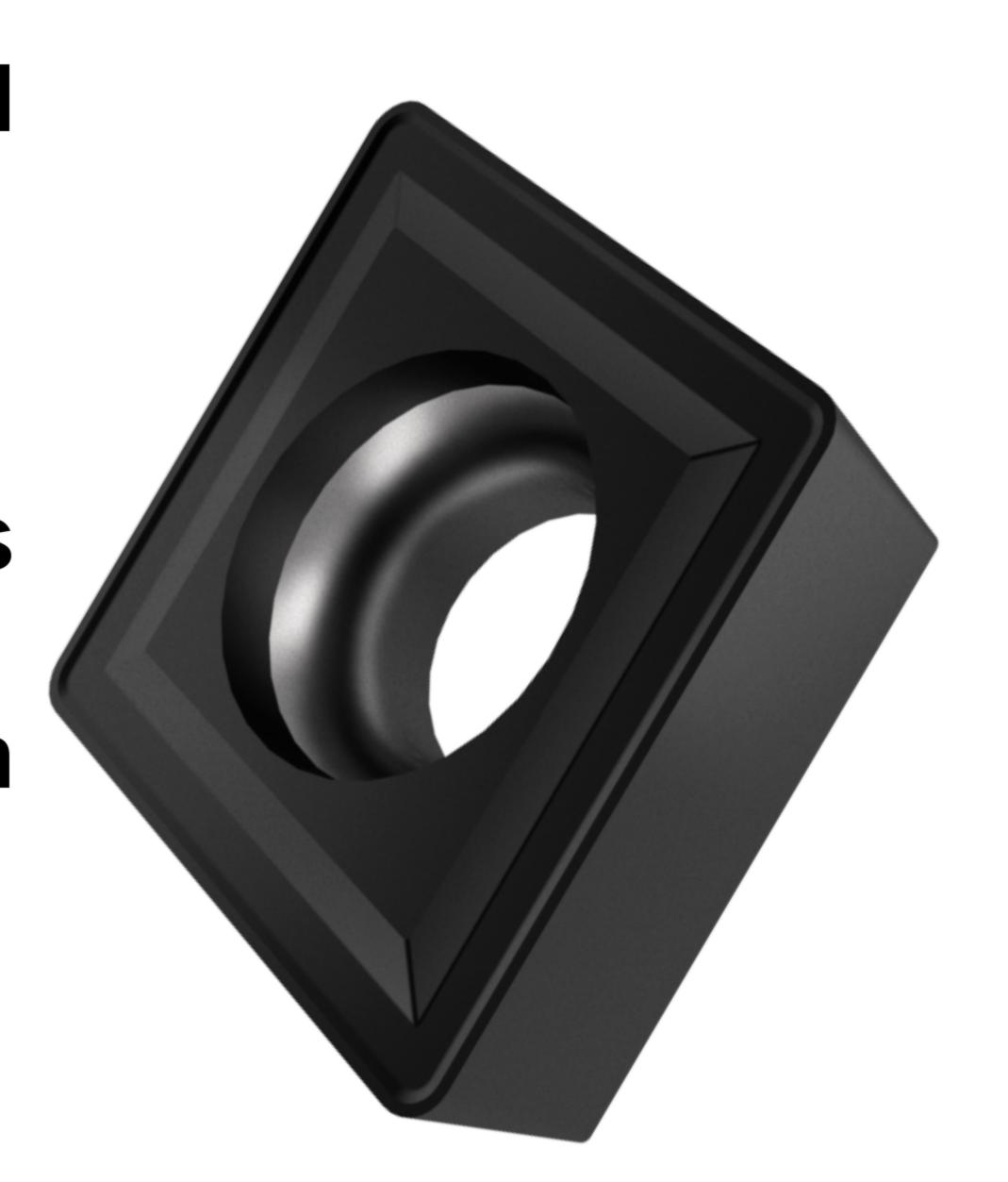


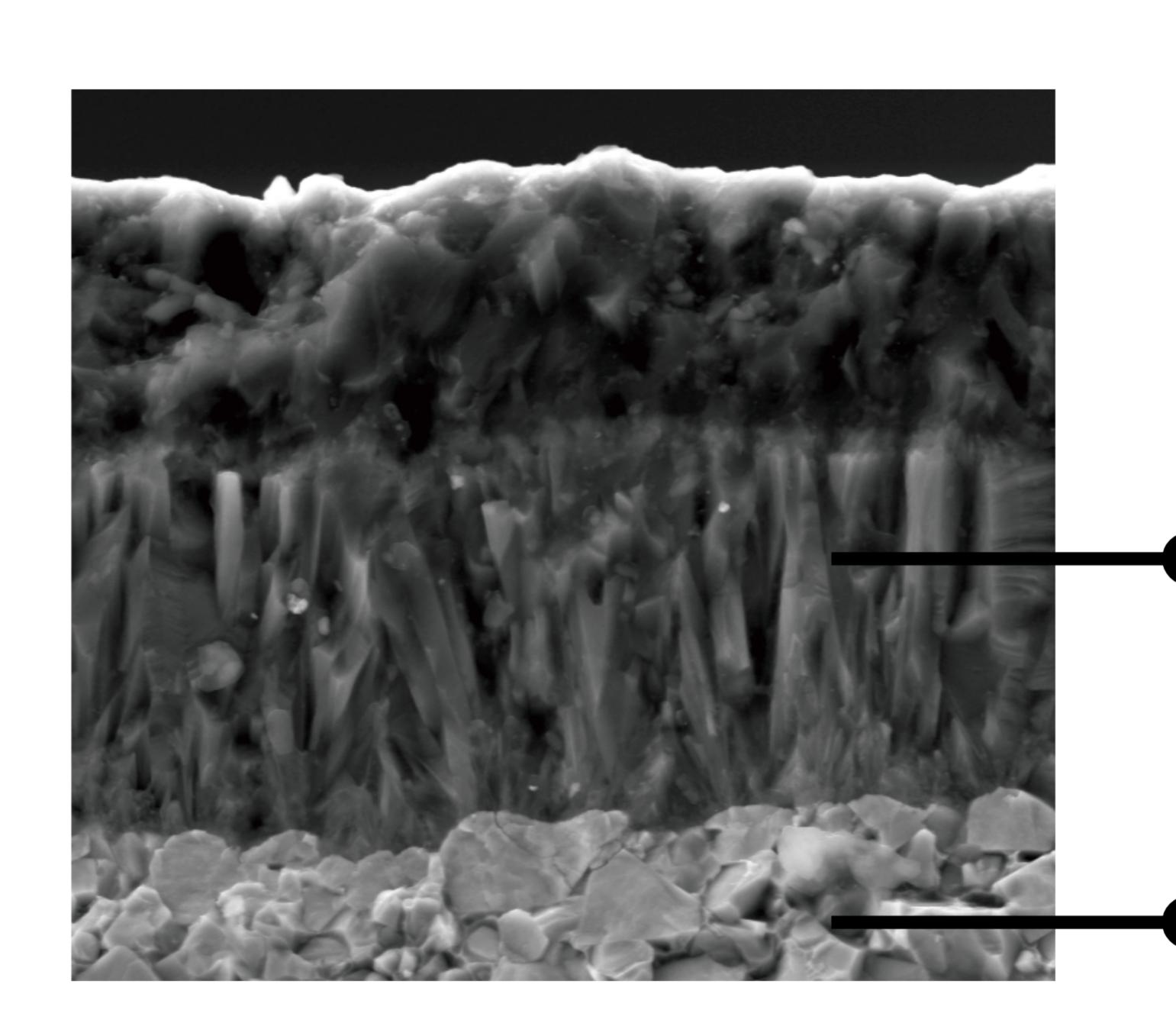
## GRADE INTRODUCTION

### GV5005

- High-speed continuous turning has high toughness and resistance to plastic deformation.
- Using a thick TiCN + thick Al<sub>2</sub>O<sub>3</sub> CVD coating, it has undergone special surface post-treatment, providing high wear resistance and high-temperature oxidation resistance.







CVD coating

Application range: K05-K20

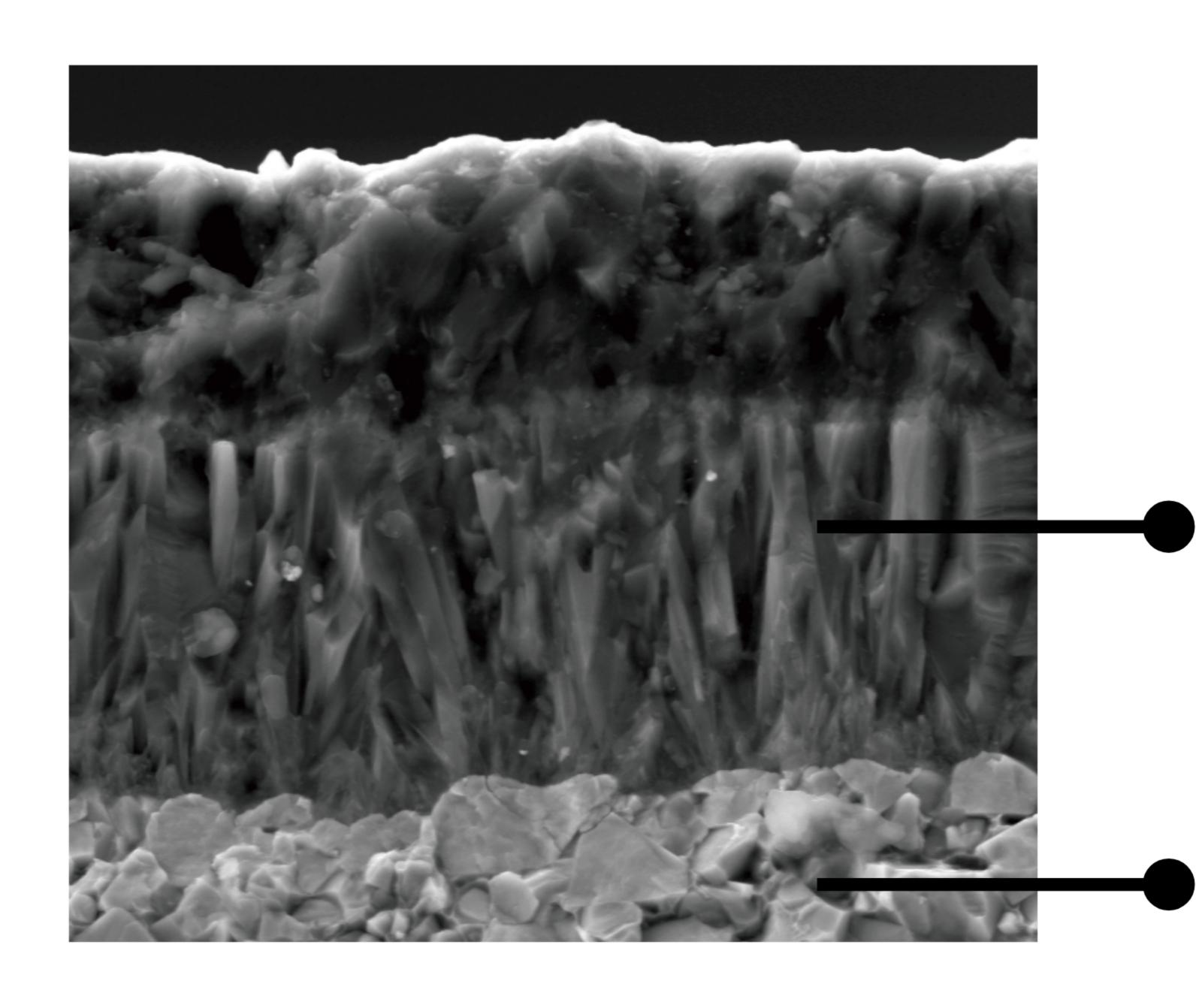
An excellent high-temperature resistant ultra-thick aluminum oxide coating, featuring high wear resistance and high-temperature oxidation resistance.

A substrate combining hardness and toughness.

# QUALITY ACCOMPLISHES THE FUTURE

## GV5015

- A substrate that combines hardness and toughness, featuring high wear resistance and resistance to plastic deformation.
- Using a thick TiCN + thick  $Al_2O_3$  CVD coating, it has undergone special surface post-treatment, providing high wear resistance and high-temperature oxidation resistance.
- Suitable for medium-to-high speed machining of gray iron and ductile iron, as well as milling of various cast iron materials.



CVD coating

Application range: K15-K30

An excellent high-temperature resistant ultra-thick

aluminum oxide coating, featuring high wear

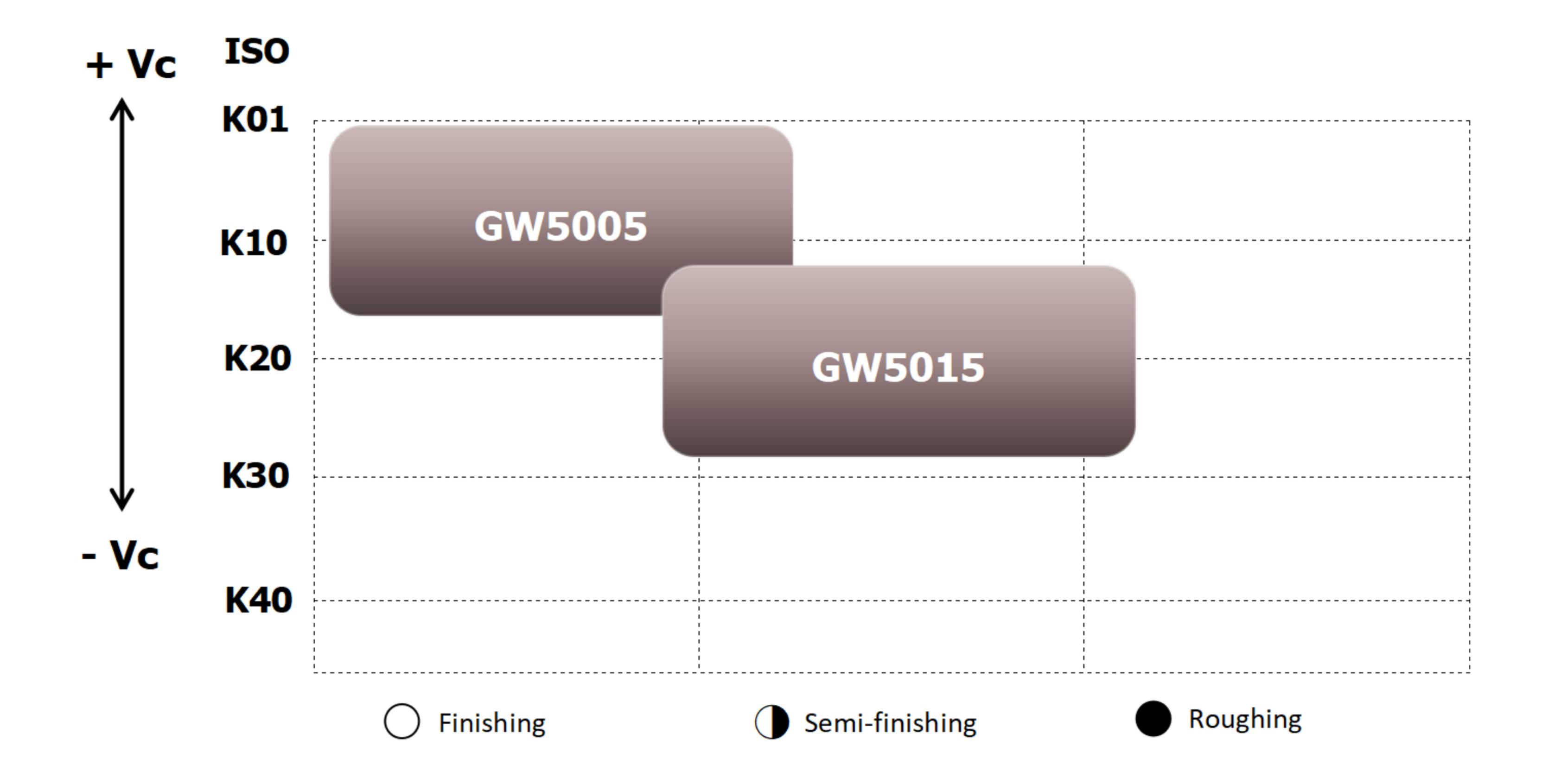
resistance and high-temperature oxidation resistance.

A substrate combining hardness and toughness.



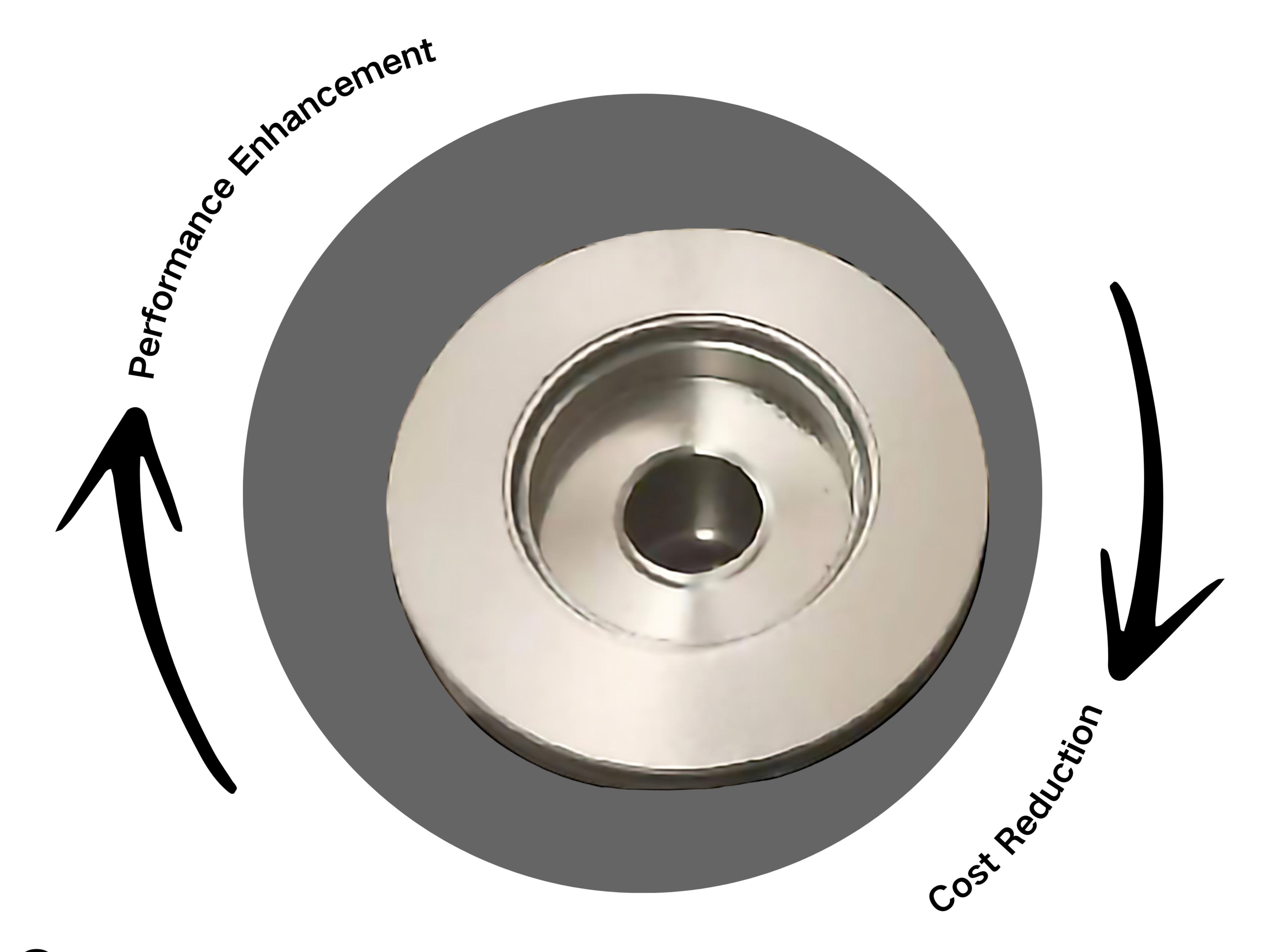
## GROOVE INTRODUCTION

#### Table of Grade Machining Precision Ranges



Gro	oove	Illustration	Features	Suggeste	
				Feed rate	Cut depth
	TC			0.1-0.3-0.6	0.05-2.0-6.0

# Manufacturing Example



# Compare

A leading brand in China 55 pieces

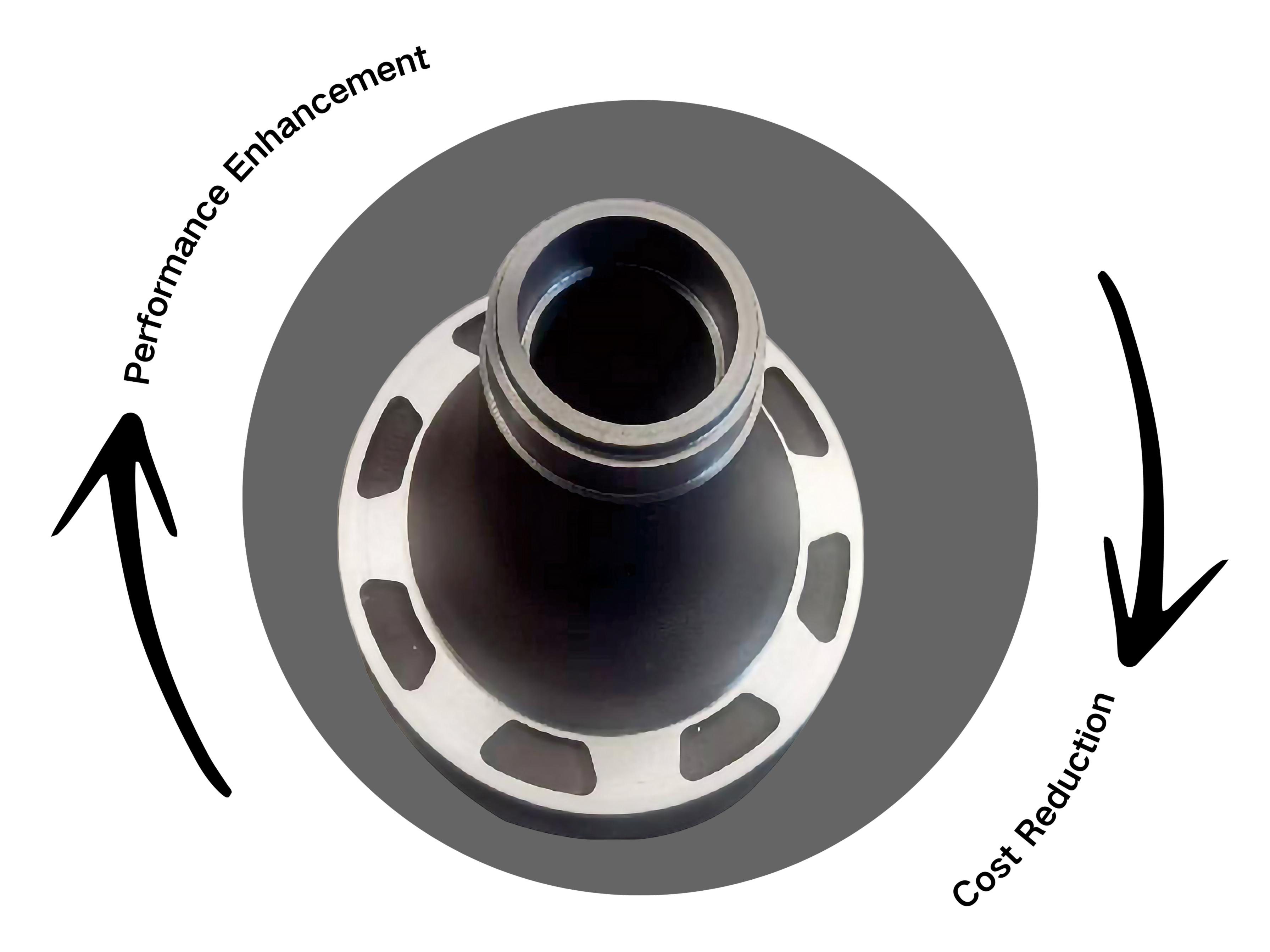
Extended tool life 13%

Great wall 62 pieces

Workpiece material	Brake disc(HT250)
Insert Grade	GW5015
Insert Size	WNMGO80408
Cutting parameters	Vc=250m/min;f=0.2mm;Ap=2mm
Cooling method	Air cooling



## GROOVE INTRODUCTION



# Compare

A leading international brand 9 pieces

equivalent performance

Great wall 9 pieces

Workpiece material	QT450
Insert Grade	GW5015
Insert Size	WNMG080408
Cutting parameters	Vc=130m/min;f=0.2mm;Ap=2mm
Cooling method	Air cooling

CC								
		Si	Grade					
Insert shape	Size	IC	S	L	d	r	GW5005	GW5015
	CCMT060204-TC	6.35	2.38	6.4	2.8	0.4		*
	CCMT120404-TC	12.7	4.76	12.9	5.56	0.4		*
	CCMT120408-TC	12.7	4.76	12.9	5.56	0.8		*



CN													
S IC L 80°			Si	Grade									
Insert shape	Size	IC	S	L	d	r	GW5005	GW5015					
	CNMG120404-TC	12.7	4.76	12	5.16	0.4		*					
	CNMG120408-TC	12.7	4.76	12	5.16	0.8		*					
	CNMG120412-TC	12.7	4.76	12	5.16	1.2		*					
	CNMG120416-TC	15.875	6.35	16.1	6.35	0.8		*					
	CNMG160608-TC	15.875	6.35	16.1	6.35	1.2		*					
	CNMG160612-TC	15.875	6.35	16.1	6.35	1.6		*					
	CNMG160616-TC	19.05	6.35	19.3	7.94	0.8		*					

DN												
S IC L 80°			Si	Grade								
Insert shape	Size	IC	S	L	d	r	GW5005	GW5015				
	DNMA150404	12.7	4.76	15	5.16	0.4		*				
	DNMA150408	12.7	4.76	15	5.16	0.8		*				
	DNMA150412	12.7	4.76	15	5.16	1.2		*				
	DNMA150604	12.7	6.35	15	5.16	0.4		*				
	DNMA150608	12.7	6.35	15	5.16	0.8		*				
	DNMA150612	12.7	6.35	15	5.16	1.2		*				
	DNMA150616	12.7	6.35	15	5.16	1.6		*				



SNU													
S IC r P P P P P P P P P P P P P P P P P P			Si	Grade									
Insert shape	Size	IC	S		d	r	GW5005	GW5015					
	SNMA120408	12.7	4.76	12	5.16	0.4		*					
	SNMA120412	12.7	4.76	12	5.16	0.8		*					
	SNMA120416	12.7	4.76	12	5.16	1.2							
	SNMA150608	15.875	6.35	15	6.35	0.8		*					
	SNMA150612	15.875	6.35	15	6.35	1.2		*					
	SNMA190612	19.05	6.35	19	7.93	1.2		*					
	SNMA190616	19.05	6.35	19	7.93	1.6							

TN												
S		Si	ze(mi	m)		Grade						
Insert shape	Size	IC	S	L	d	r	GW5005	GW5015				
	TNMG160404-TC	9.525	4.76	16	3.81	0.4	*	*				
	TNMG160408-TC	9.525	4.76	16	3.81	0.8	*	*				
	TNMG160412-TC	9.525	4.76	16	3.81	1.2	*	*				
	TNMG220412-TC	12.7	4.76	22	5.16	0.8		*				
	TNMG220416-TC	12.7	4.76	22	5.16	1.2	*	*				



VN 🗆 🗆													
S I (	35°		Si	ze(mi			Gra	ade					
Insert shape	Size	IC	S	L	d	r	GW5005	GW5015					
	VNMG160404-TC	9.525	4.76	16	3.81	0.4	*	*					
	VNMG160408-TC	9.525	4.76	16	3.81	0.8	*	*					
	VNMG160412-TC	9.525	4.76	16	3.81	1.2	*						

WN												
S		Si	ze(mi			Gra	ade					
Insert shape	Size	IC	S	L	d	ľ	GW5005	GW5015				
	WNMG080404-TC	12.7	4.76	8	5.16	0.4		*				
	WNMG080408-TC	12.7	4.76	8	5.16	0.8	*	*				
	WNMG080412-TC	12.7	4.76	8	5.16	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.





