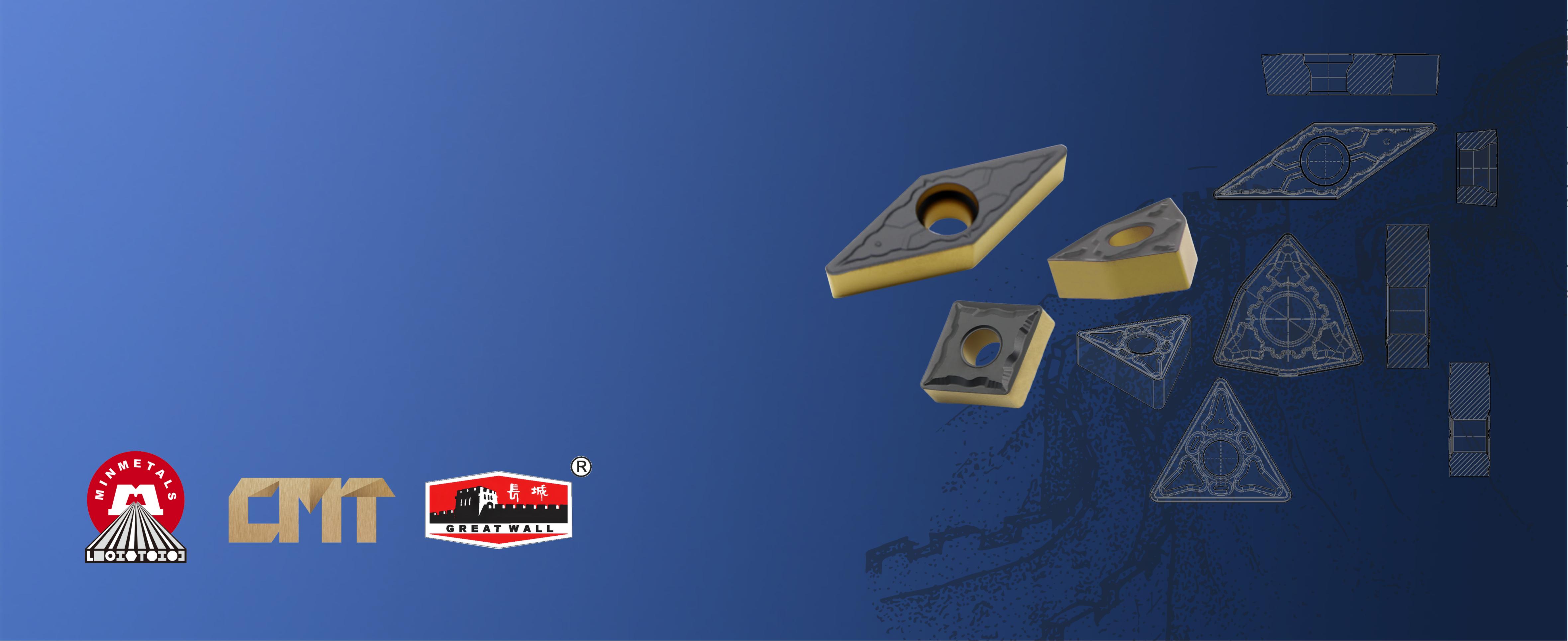


# TURNING INSERTS FOR STAINLESS STEEL





#### CHENGDU GREATWALL CUTTING TOOLS CO.,LTD





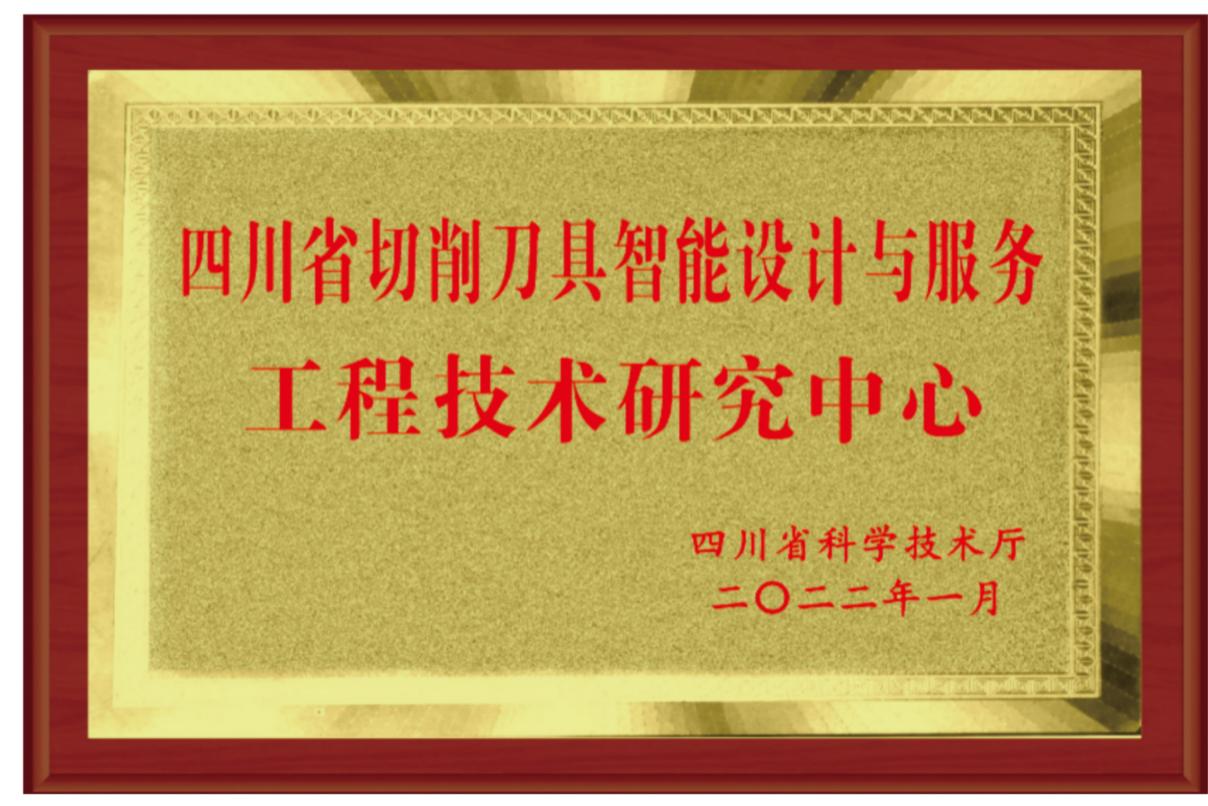




- Affiliated with China Minmetals
   Corporation, a Fortune Global 500 company.
- The company boasts two specialized production lines for blades and cutting tools.
- Integrating the research and development of carbide insert and tool materials, structural design, coating technology, as well as testing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



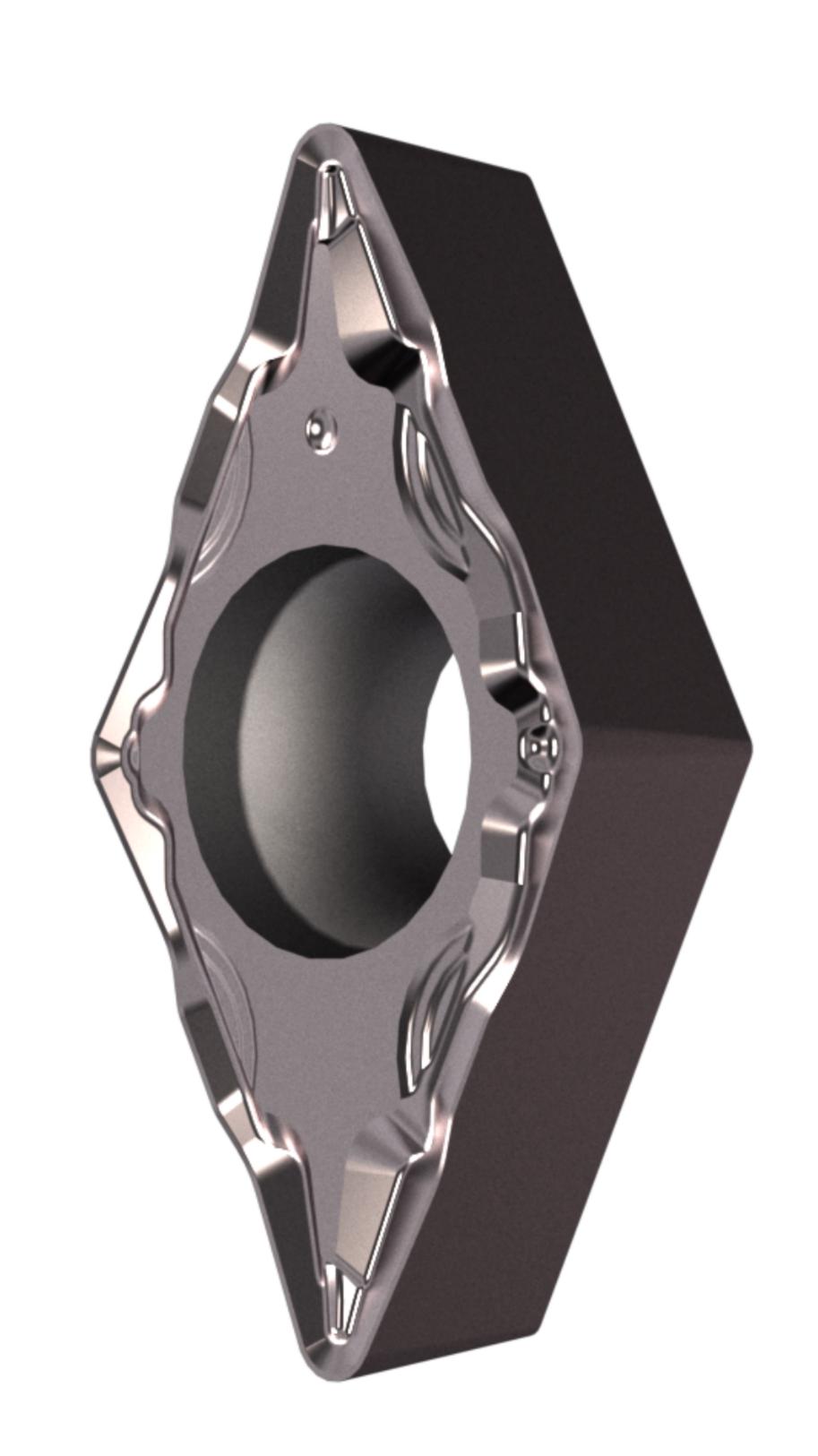


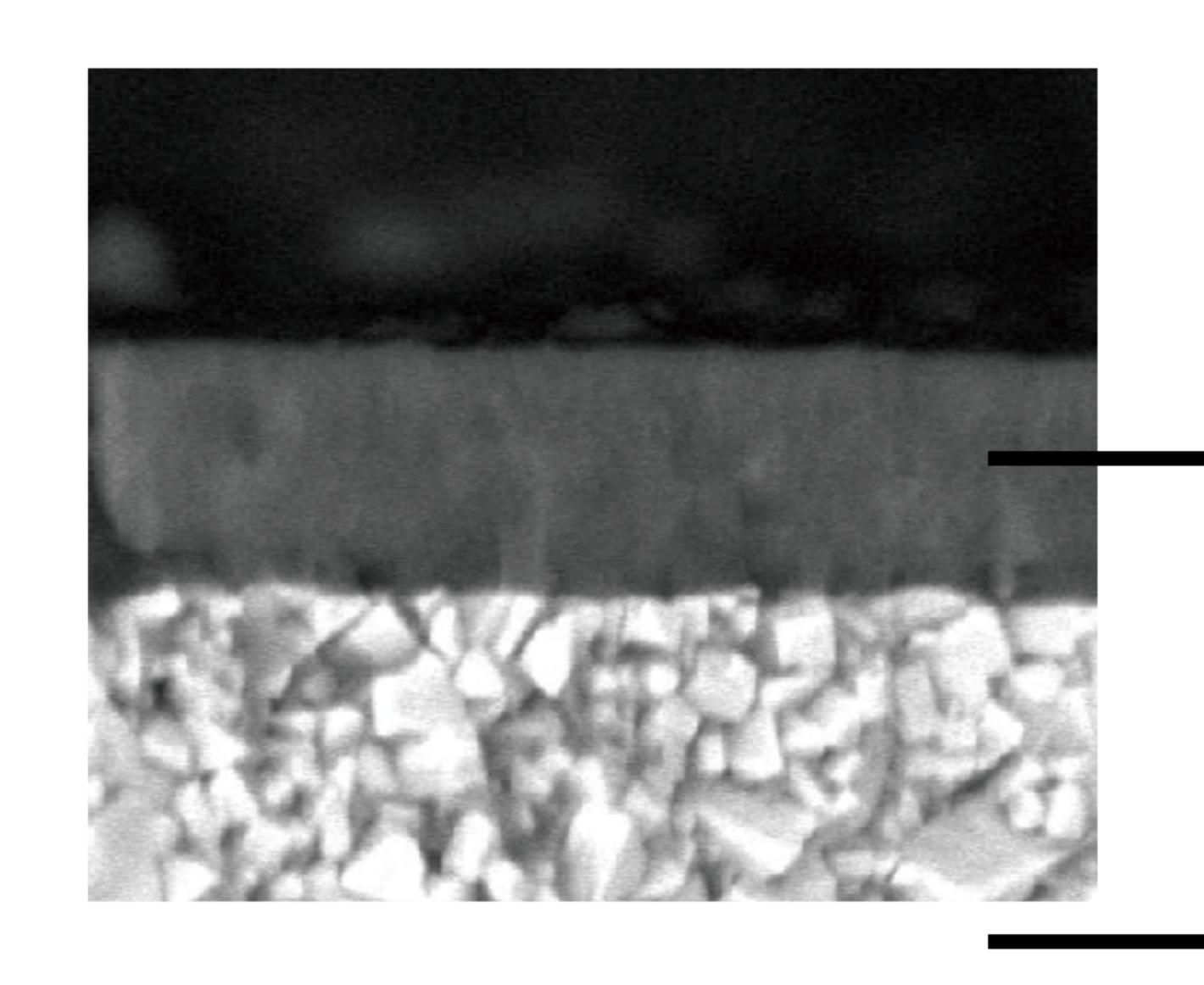


#### GRADE INTRODUCTION

#### GW2020

- High-hardness substrate paired with a new nano-composite
   PVD coating process, featuring high wear resistance.
- Combined with a variety of flute geometries, it achieves efficient cutting under multiple working conditions.
- Suitable for continuous and light interrupted turning of stainless steel.



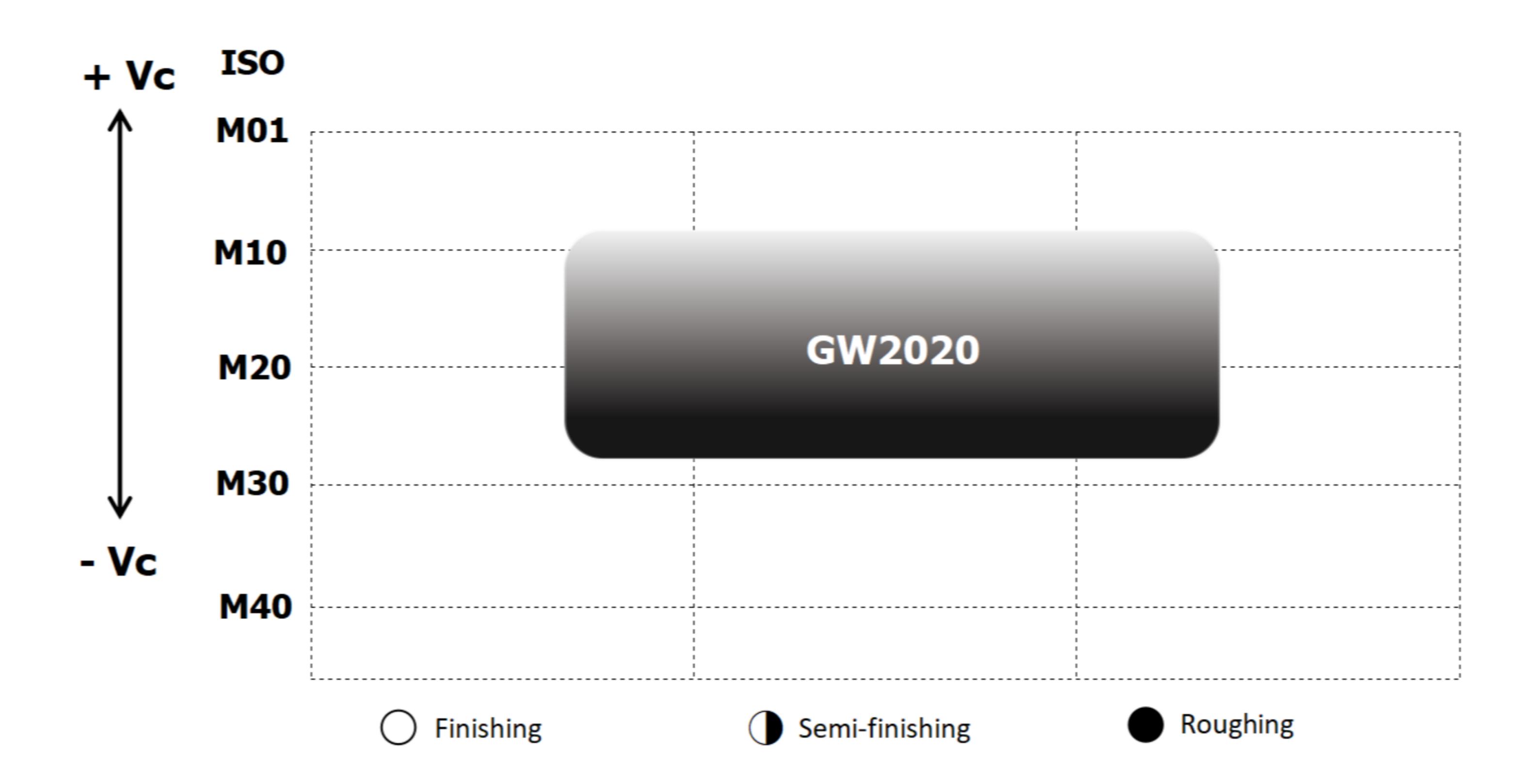


PVD coating

Application range: M20-M30

Nanstructured multilayer coating, with good wear resistance and high-temperature performance.

Fine-grained, general-purpose substrate.

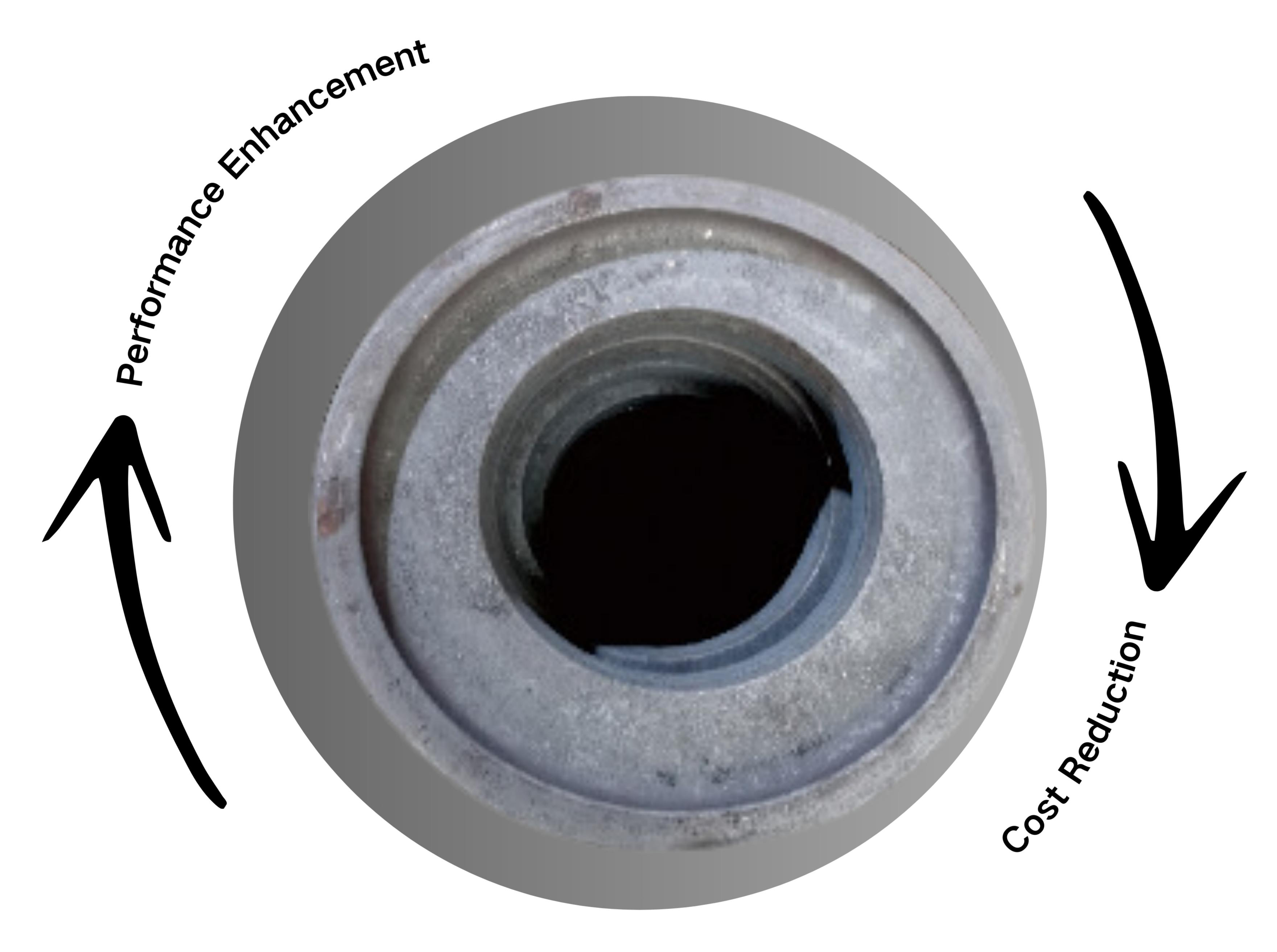


#### GROOVE INTRODUCTION

Groove	Illustration	Features	Suggested	
	IIIGSCIGCIOII	I Catules	Feed rate	Cut depth
MM2		I Double large lead angle design, ensuring the product is sharp with low cutting resistance and excellent anti-adhesion properties, while maintaining reasonable application strength.  II Chip control is stable, preventing chip tangling. Within the recommended processing parameters, it can achieve no chip tangling, resulting in a bright workpiece surface.  III Suitable for semi-finishing of stainless steel.	0.15-0.20-0.25	0.8-1.2-1.5



# Manufacturing Example 1



#### Compare

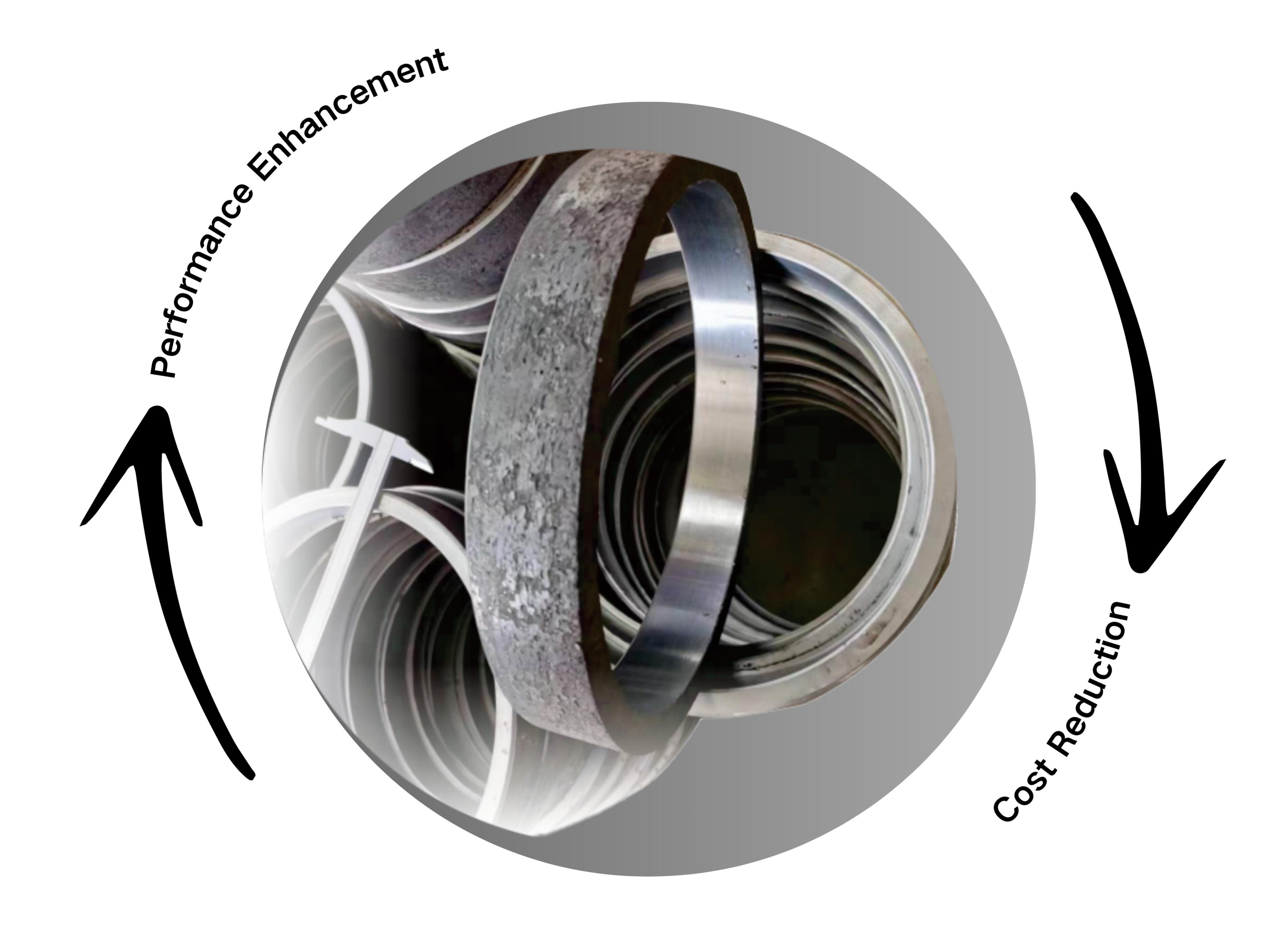
A leading brand in China 7 pieces

Extended tool life 70%

Great wall 12 pieces

Workpiece name	316L
Insert Grade	GW2020
Insert Size	WNMGO80408-MM2
Cutting parameters	Vc=104m/min;f=0.2mm;Ap=3mm
Cooling method	Emulsion
Machining method	Continuous \ Interrupted turning

# Manufacturing Example II



#### Compare

A leading brand in China 2 pieces

Extended tool life 50%

Great wall 3 pieces

Workpiece material	9Cr18						
Insert Grade	GW2020						
Insert Size	WNMGO80408-MM2						
Cutting parameters	Vc=130m/min;f=0.2mm;Ap=1.2mm						
Cooling method	Emulsion						
Machining method	Interrupted turning						



CC									
			Grade						
Insert shape	Size	IC	S	L	d	r	GW2020		
	CCMT060204-MM2	6.35	2.38	06	2.8	0.4	*		
	CCMT060208-MM2	6.35	2.38	06	2.8	0.8	*		
	CCMT09T304-MM2	9.525	3.97	09	4.4	0.4	*		
	CCMT09T308-MM2	9.525	3.97	09	4.4	0.8	*		
	CCMT120404-MM2	12.7	4.76	12	5.56	0.4	*		
	CCMT120408-MM2	12.7	4.76	12	5.56	0.8	*		

★Featured Grade ○ Make-to-Order

CN								
S		Si	ze(mi	<b>n</b> )		Grade		
Insert shape	Size	IC	S	L	d	r	GW2020	
	CNMG120404-MM2	12.7	4.76	12	5.16	0.4	*	
	CNMG120408-MM2	12.7	4.76	12	5.16	0.8	*	
	CNMG120412-MM2	12.7	4.76	12	5.16	1.2	*	



DC									
		Si	ze(mi	n)		Grade			
Insert shape	Size	IC	S	L	d	r	GW2020		
	DCMT070204-MM2	6.35	2.38	07	2.8	0.4	*		
	DCMT070208-MM2	6.35	2.38	07	2.8	0.8	*		
	DCMT11T304-MM2	9.525	3.97	11	4.4	0.4	*		
	DCMT11T308-MM2	9.525	3.97	11	4.4	0.8	*		

DN								
S	r 80°		Grade					
Insert shape	Size	IC	S	L	d	r	GW2020	
	DNMG150404-MM2	12.7	4.76	15	5.16	0.4	*	
	DNMG150408-MM2	12.7	4.76	15	5.16	0.8	*	
	DNMG150412-MM2	12.7	4.76	15	5.16	1.2		



SC									
99	IC S		Si	ze(mi	m)		Grade		
Insert shape	Size	IC	S	L	d	r	GW2020		
	SCMT09T304-MM2	9.525	3.97	09	4.4	0.4	*		
	SCMT09T308-MM2	9.525	3.97	09	4.4	0.8	*		
	SCMT120404-MM2	12.7	4.76	12	5.56	0.4			
	SCMT120408-MM2	12.7	4.76	12	5.56	0.8			

SN								
S		Si	ze(mi	m)		Grade		
Insert shape	Size	IC	S	L	d	r	GW2020	
	SNMG120404-MM2	12.7	4.76	8	5.16	0.4	*	
	SNMG120408-MM2	12.7	4.76	8	5.16	0.8	*	
	SNMG120412-MM2	12.7	4.76	8	5.16	1.2		



TC									
S S S P			Si	Grade					
Insert shape	Size	IC	S	L	d	r	GW2020		
	TCMT090204-MM2	5.56	2.38	09	2.5	0.4	*		
	TCMT090208-MM2	5.56	2.38	09	2.5	0.8	*		
	TCMT110204-MM2	6.35	2.38	11	2.8	0.4	*		
	TCMT110208-MM2	6.35	2.38	11	2.8	0.8	*		
	TCMT16T304-MM2	9.525	3.97	16	4.4	0.4	*		
	TCMT16T308-MM2	9.525	3.97	16	4.4	0.8	*		

TN								
S P		Si	ze(mi	m)		Grade		
Insert shape	Size	IC	S	L	d	r	GW2020	
	TNMG160404-MM2	9.525	4.76	16	3.81	0.4		
	TNMG160408-MM2	9.525	4.76	16	3.81	0.8		
	TNMG160412-MM2	9.525	4.76	16	3.81	1.2		



<b>VB</b>								
1C 1C			Si	ze(mi	<b>n</b> )		Grade	
Insert shape	Size	IC	S	L	d	r	GW2020	
	VBMT160404-MM2	9.525	4.76	16	4.4	0.4	*	
	VBMT160408-MM2	9.525	4.76	16	4.4	0.8	*	

VN 🗆 🗆							
S IC L 35°			Grade				
Insert shape	Size	IC	S	L	d	r	GW2020
	VNMG160404-MM2	9.525	4.76	16	3.81	0.4	*
	VNMG160408-MM2	9.525	4.76	16	3.81	0.8	
	VNMG160412-MM2	9.525	4.76	16	3.81	1.2	*



WN							
S	IC r		Si	ze(mi	m)		Grade
Insert shape	Size	IC	S	L	d	r	GW2020
	WNMG080404-MM2	12.7	4.76	8	5.16	0.4	
	WNMG080408-MM2	12.7	4.76	8	5.16	0.8	*
	WNMG080412-MM2	12.7	4.76	8	5.16	1.2	*

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Contact Information
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CHENGDU
GREATWALL CUTTING TOOLS
CO.,LTD

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





