

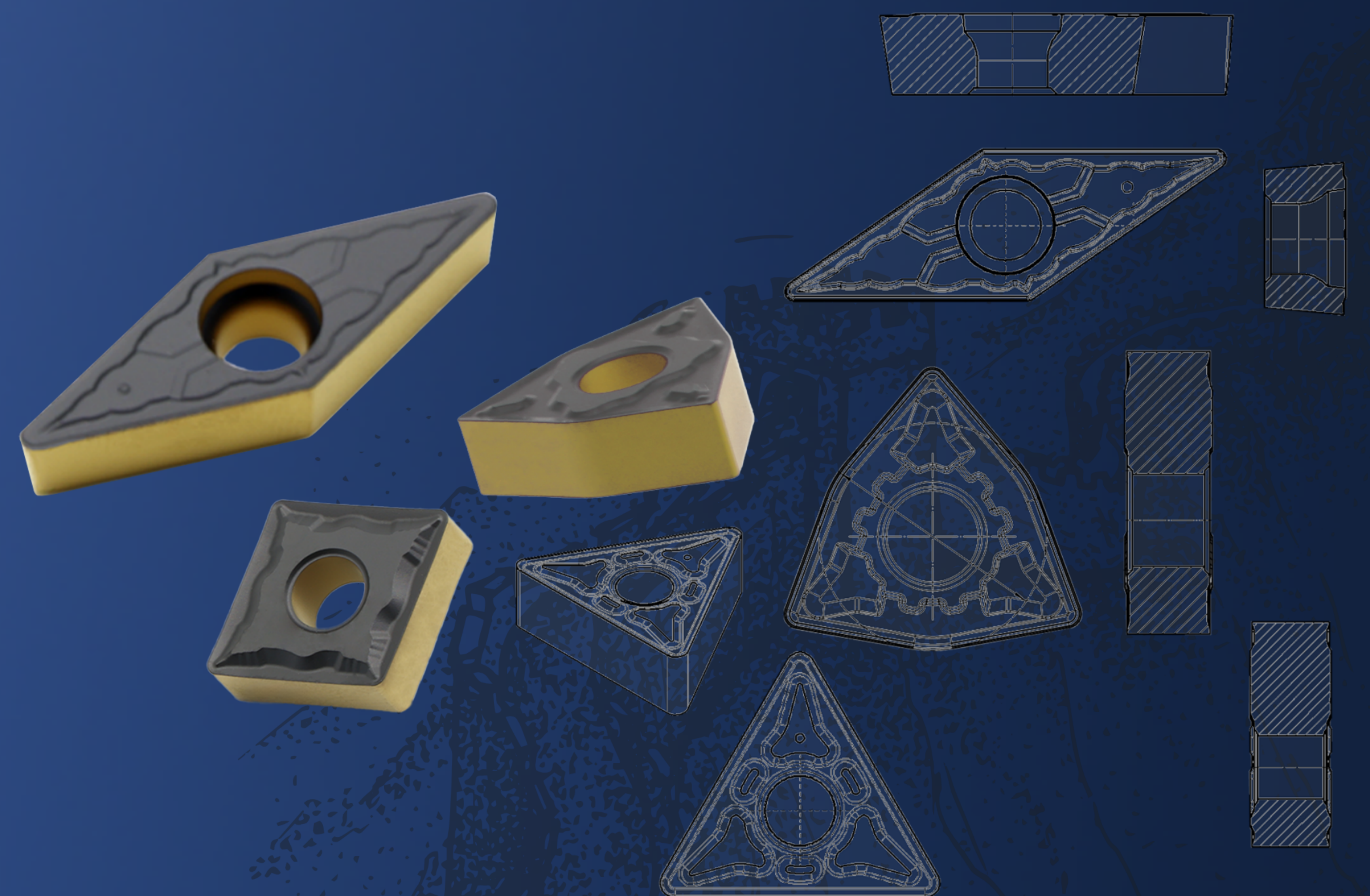
成都长城切削刀具有限责任公司



CHENGDU
GREATWALL CUTTING TOOLS
CO.,LTD



TURNING INSERTS FOR STEEL

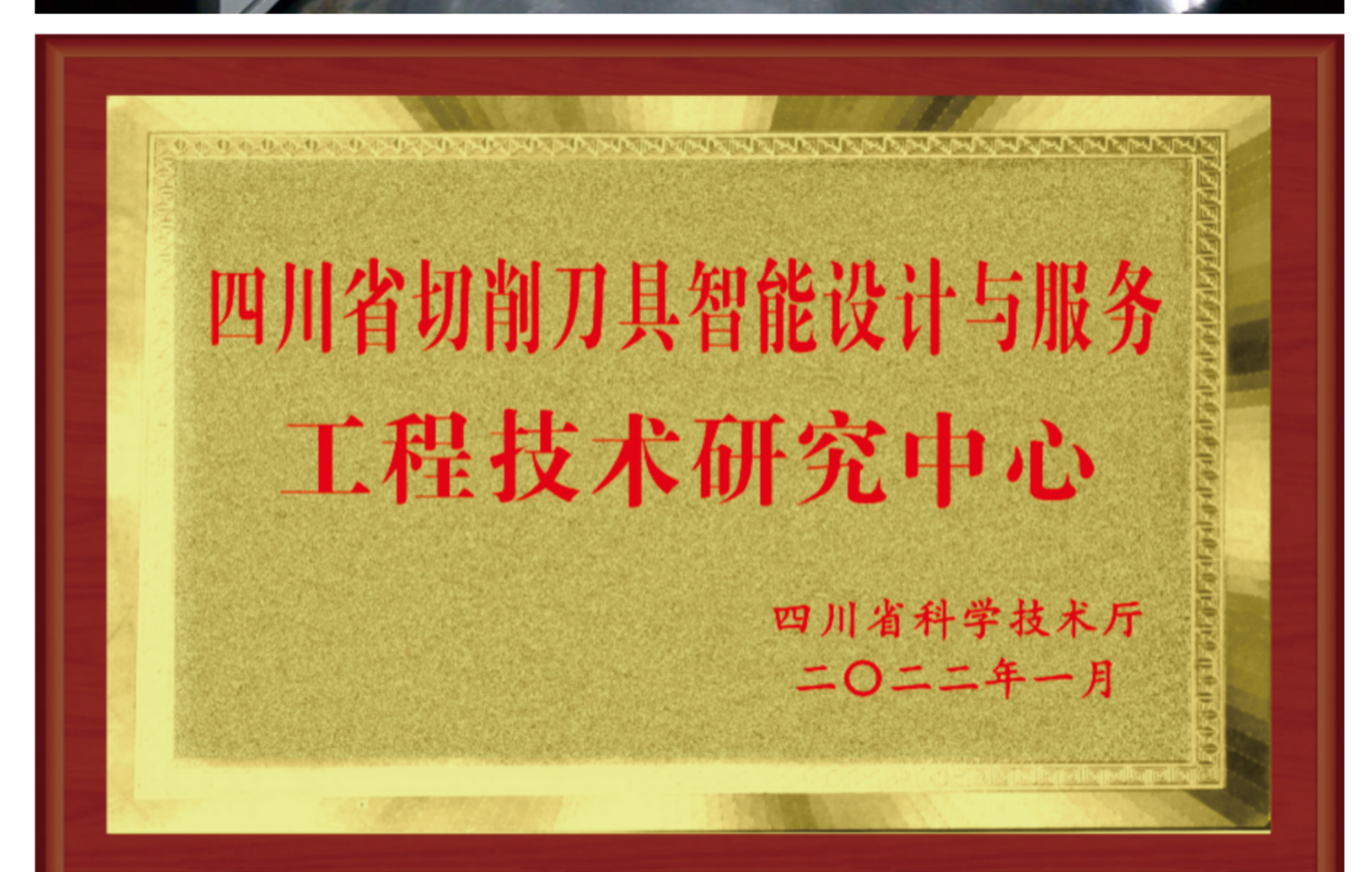




CHENGDU GREATWALL CUTTING TOOLS CO.,LTD



- 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

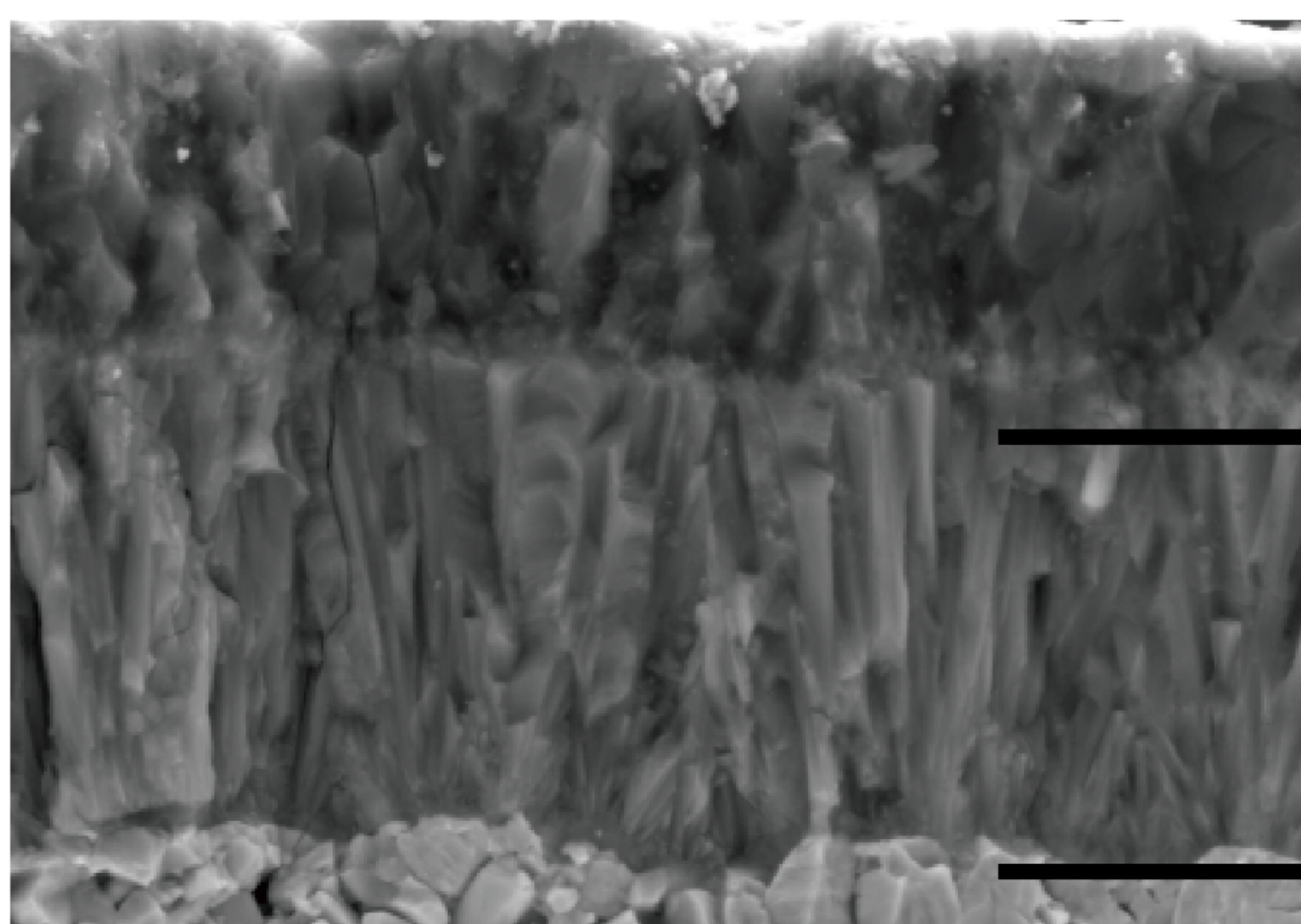
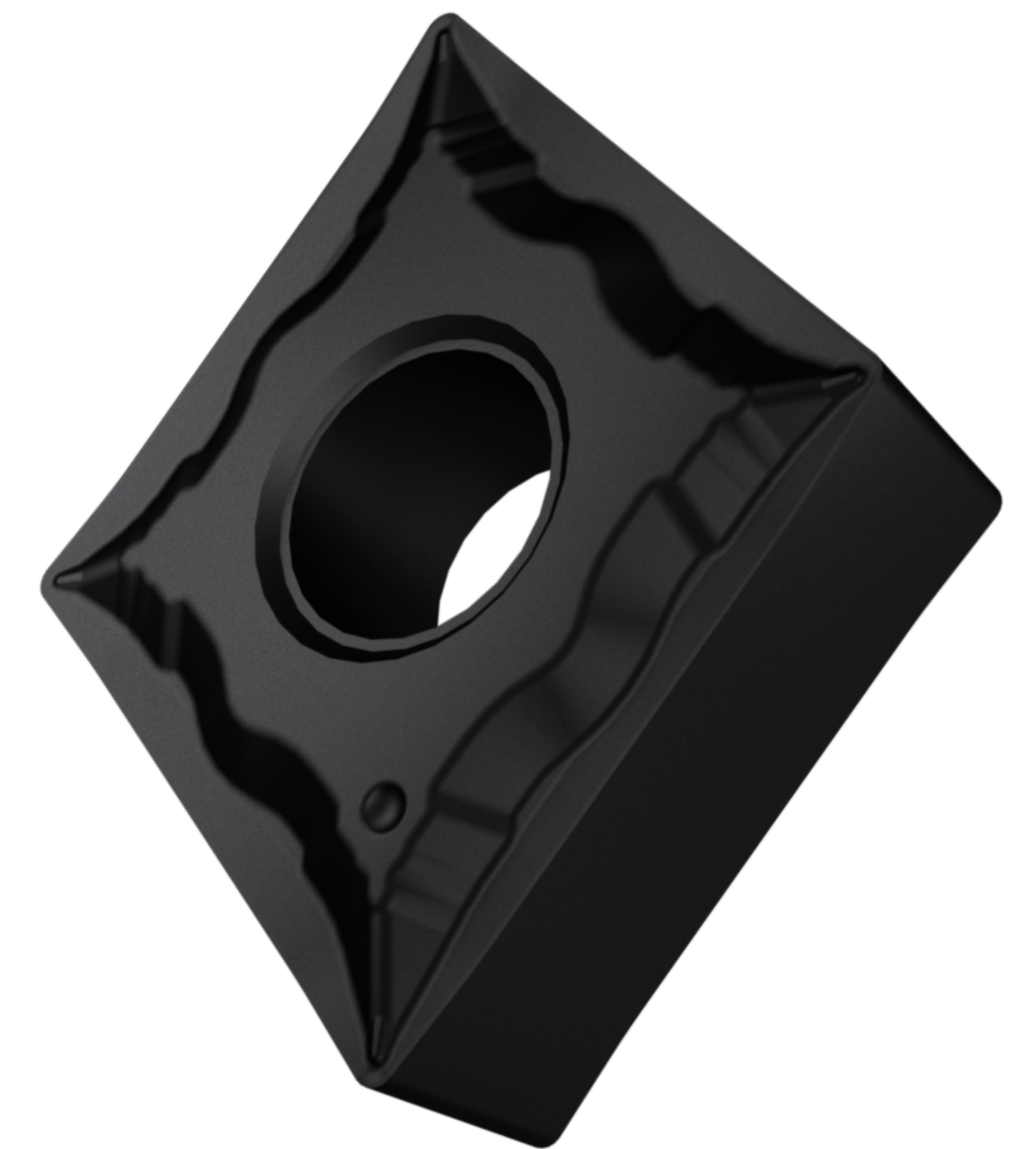
The company's main products include indexable CNC inserts, solid carbide cutting tools, and machine-clamped or welded conventional blades. It owns the cutting tool brand "Great Wall," which covers a wide range of machining applications including turning, milling, drilling, reaming, and broaching. The 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

GW3015

- A hard metal substrate with a high cubic phase content gradient structure, exhibiting excellent high-temperature performance and wear resistance.
- Employing an ultra-thick MT-TiCN plus a thick Al_2O_3 and TiN CVD coating, and after undergoing special surface treatment, it has good surface finish.
- Suitable for finishing of steel materials.



CVD coating

Application range : P10-P20

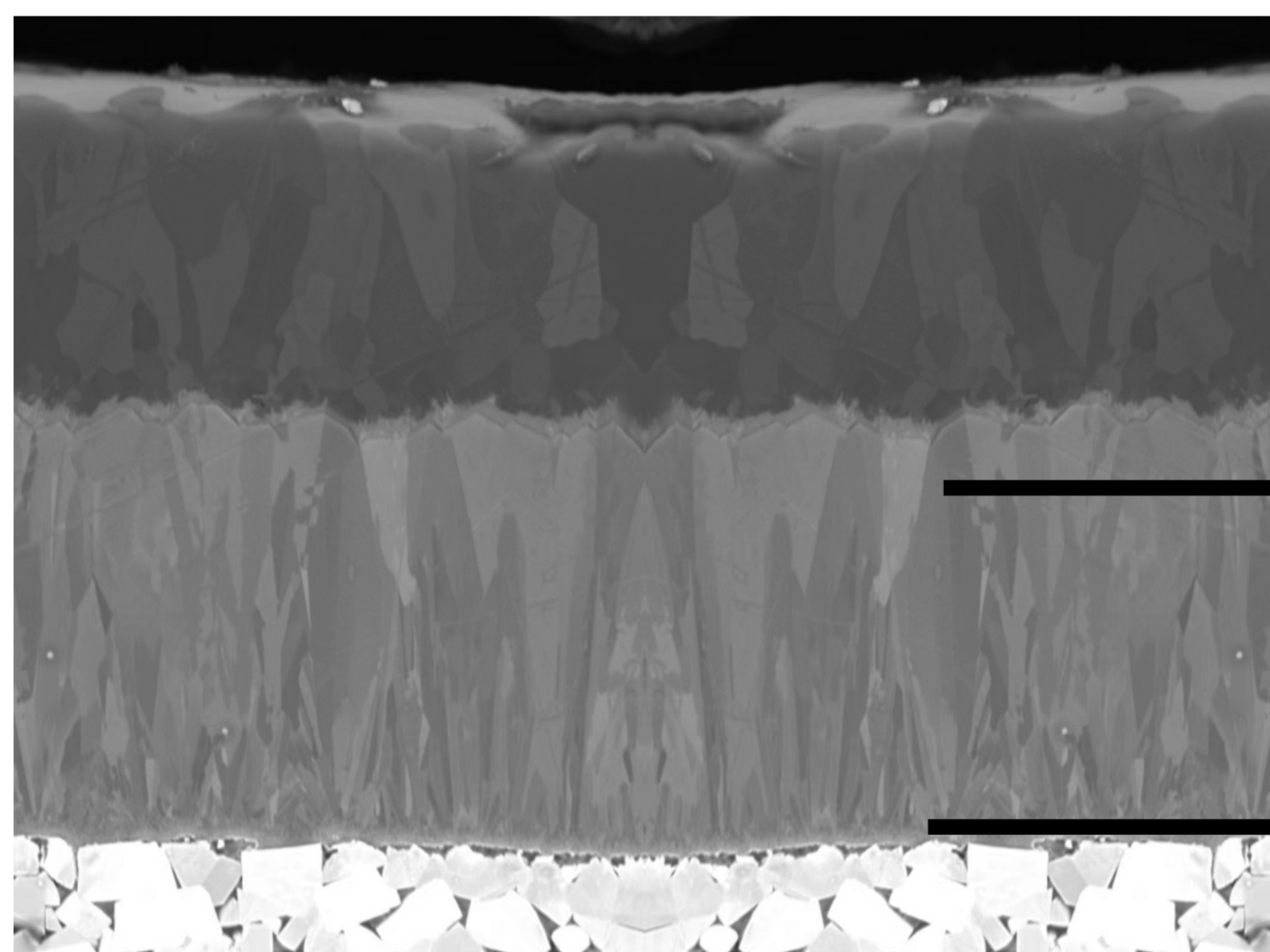
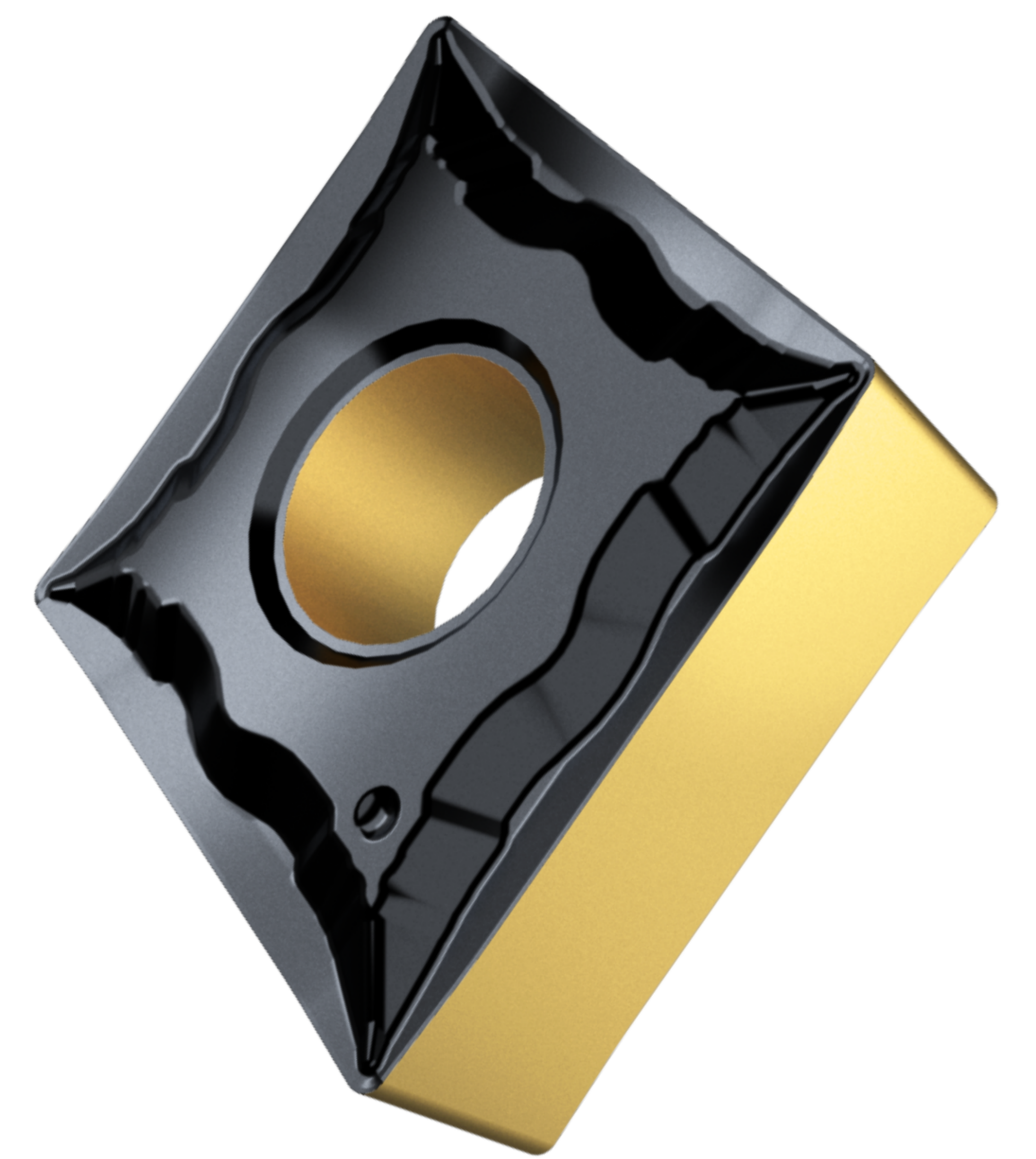
- MT-TiCN and Al_2O_3 coatings, possessing high wear resistance and high-temperature performance.

- Gradient structure substrate

QUALITY ACCOMPLISHES
THE FUTURE

GW3025

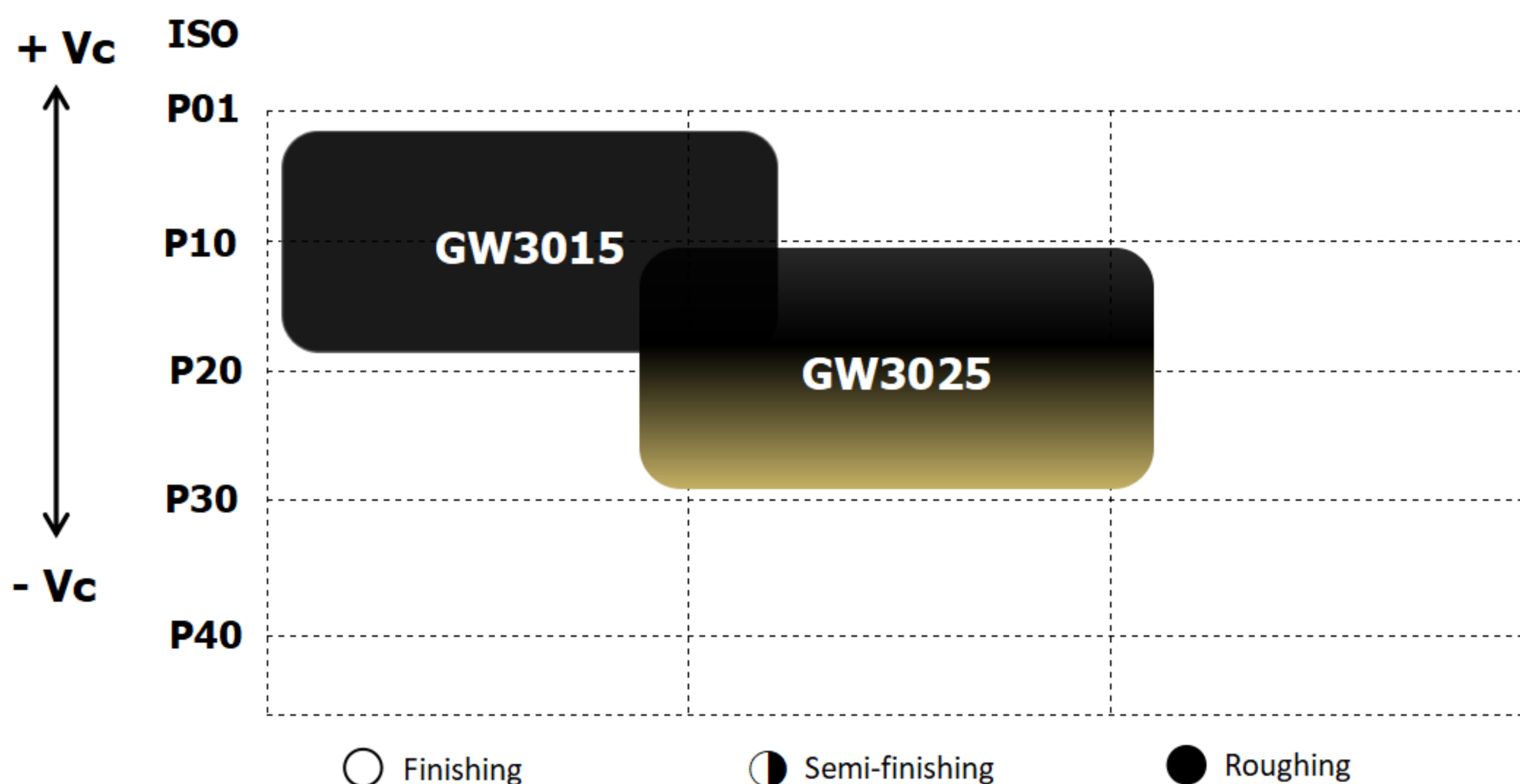
- A gradient structure hard metal substrate, featuring good edge chipping resistance and wear resistance.
- Employing an ultra-thick MT-TiCN plus Al_2O_3 and TiN CVD dual-color coating, and after undergoing special surface treatment, it has good surface finish.
- Suitable for semi-finishing of steel materials.




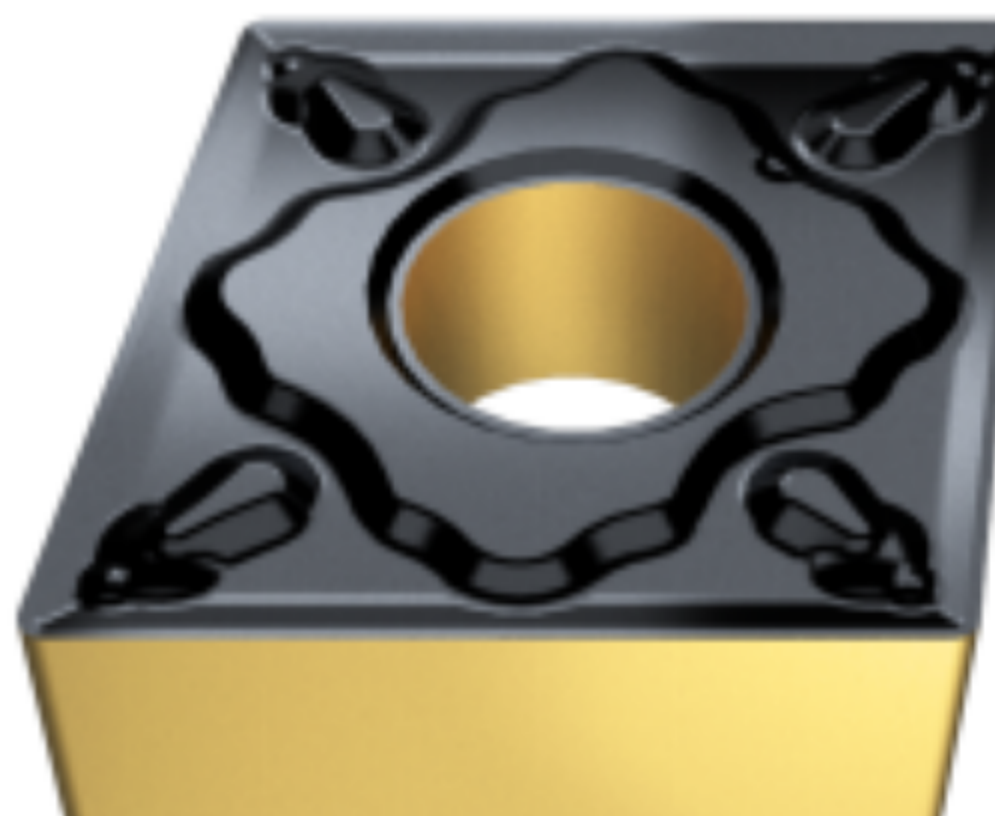

CVD coating

Application range : P20-P30

- Ultra-thick TiCN and thick Al_2O_3 coatings, with good edge chipping resistance and wear performance.
- Gradient structure substrate



GROOVE INTRODUCTION

Groove	Illustration	Features	Suggested usage amount	
			Feed rate	Cut depth
PF		<p>I The design combining dual rake angles with an optimized blade relief angle enables swift and effortless cutting, leading to enhanced surface finish quality.</p> <p>II When utilized with shallow depths of cut and minimal feed rates, it demonstrates exceptional chip control, characterized by consistent chip curling and stability. This ensures that the workpiece is protected from scratches or other forms of damage during the machining process.</p> <p>III Ideally tailored for precision machining applications involving steel alloys, it guarantees optimal results in fine finishing operations.</p>	0.10-0.15-0.20	0.3-0.5-1
PM		<p>I The dual rake angle design enhances the sharpness of the cutting edge, reducing cutting resistance and minimizing tool adhesion during machining.</p> <p>II Featuring a three-dimensional protrusion at the tip, this design effectively manages chip curling and facilitates efficient chip breaking with a large chip evacuation space. This ensures smooth chip flow even when operating with greater depths of cut and higher feed rates.</p> <p>III This tool configuration is particularly well-suited for semi-finish machining operations on steel materials, offering a balance between productivity and surface finish quality.</p>	0.10-0.20-0.30	0.5-1.0-1.5
PR		<p>I The wide, dual-rake angle design reduces cutting resistance significantly, enabling smoother operation.</p> <p>II With a robust and resilient tip coupled with a strong cutting edge, the tool boasts wide gullets and shallow flute depths, allowing for substantial chip volume accommodation. This leads to effective chip breaking, even when generating larger chips during medium-depth cuts, ensuring good chip curling performance.</p> <p>III Specifically tailored for rough machining of steel components, this design optimizes material removal rates while maintaining acceptable surface integrity prior to subsequent finishing operations.</p>	0.10-0.20-0.30	1.0-1.5-2.5

Manufacturing Example



Compare

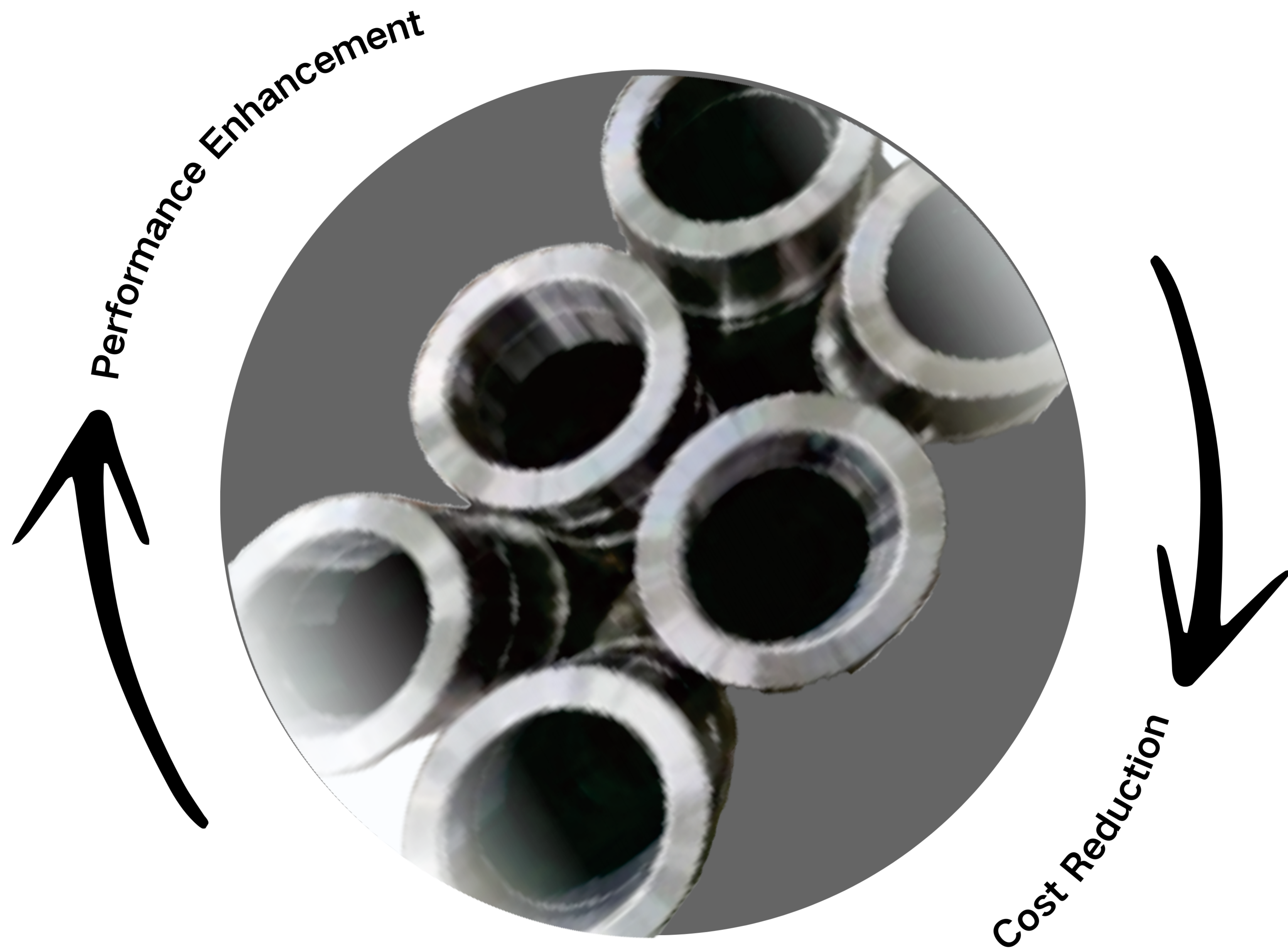
A leading brand in China
5 pieces

Extended tool life 12%

Great wall
6 pieces

Workpiece material	50(Tempering hardness HRC28)
Insert Grade	GW3025
Insert Size	CNMG190616-PR
Cutting parameters	Vc=150m/min;f=0.6mm;Ap=4mm
Cooling method	Air cooling

GROOVE INTRODUCTION



Compare

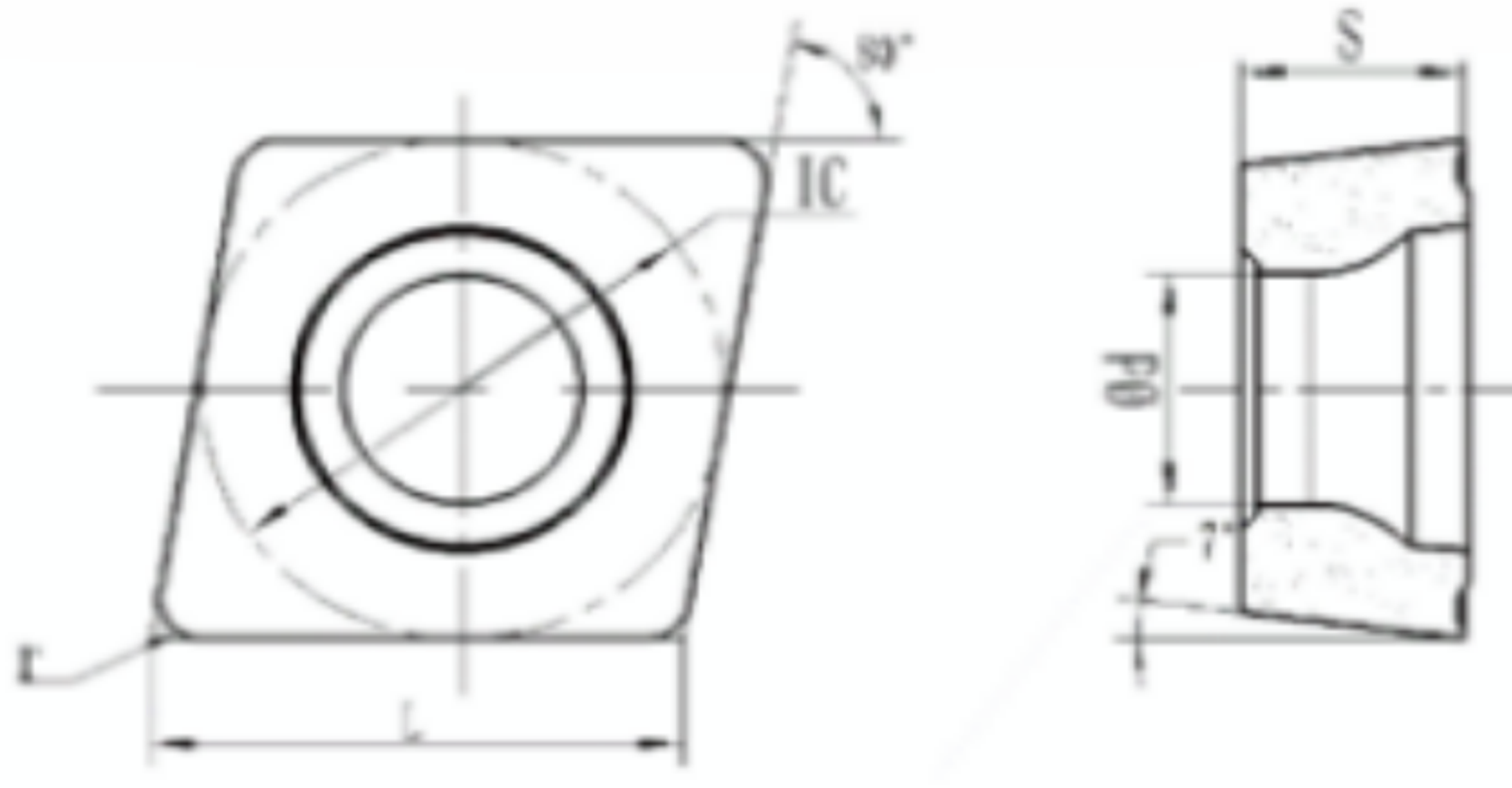
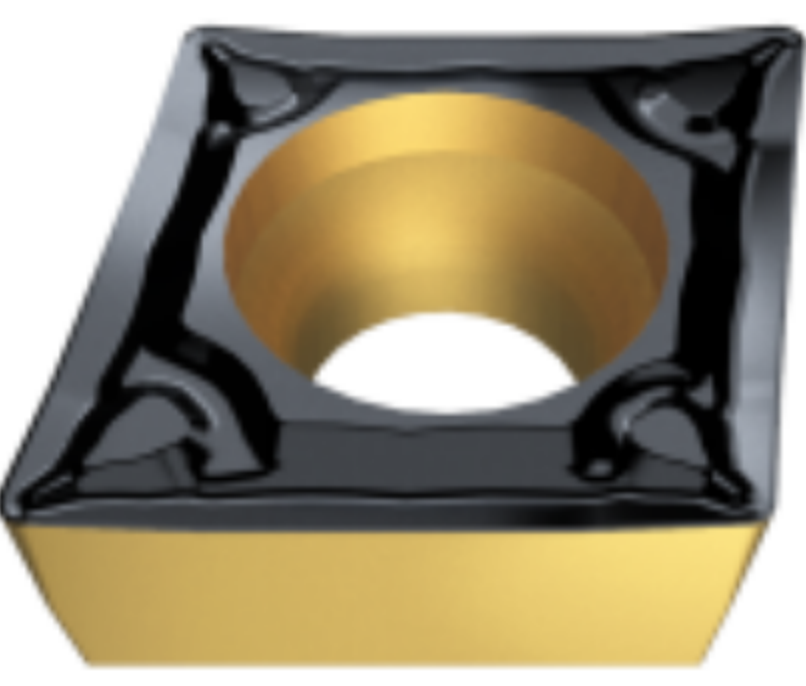
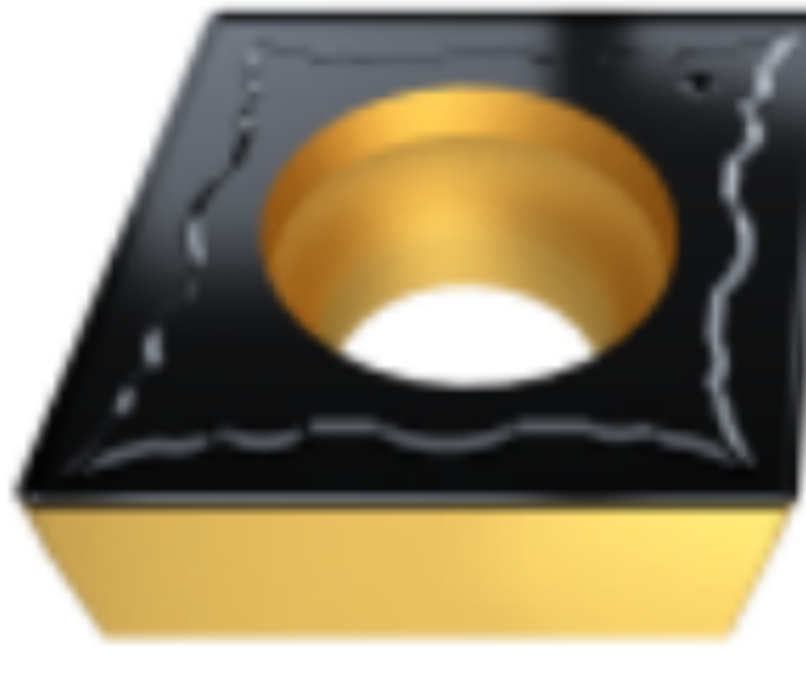
A leading brand in China
5 pieces

Extended tool life 35% →

Great wall
6 pieces

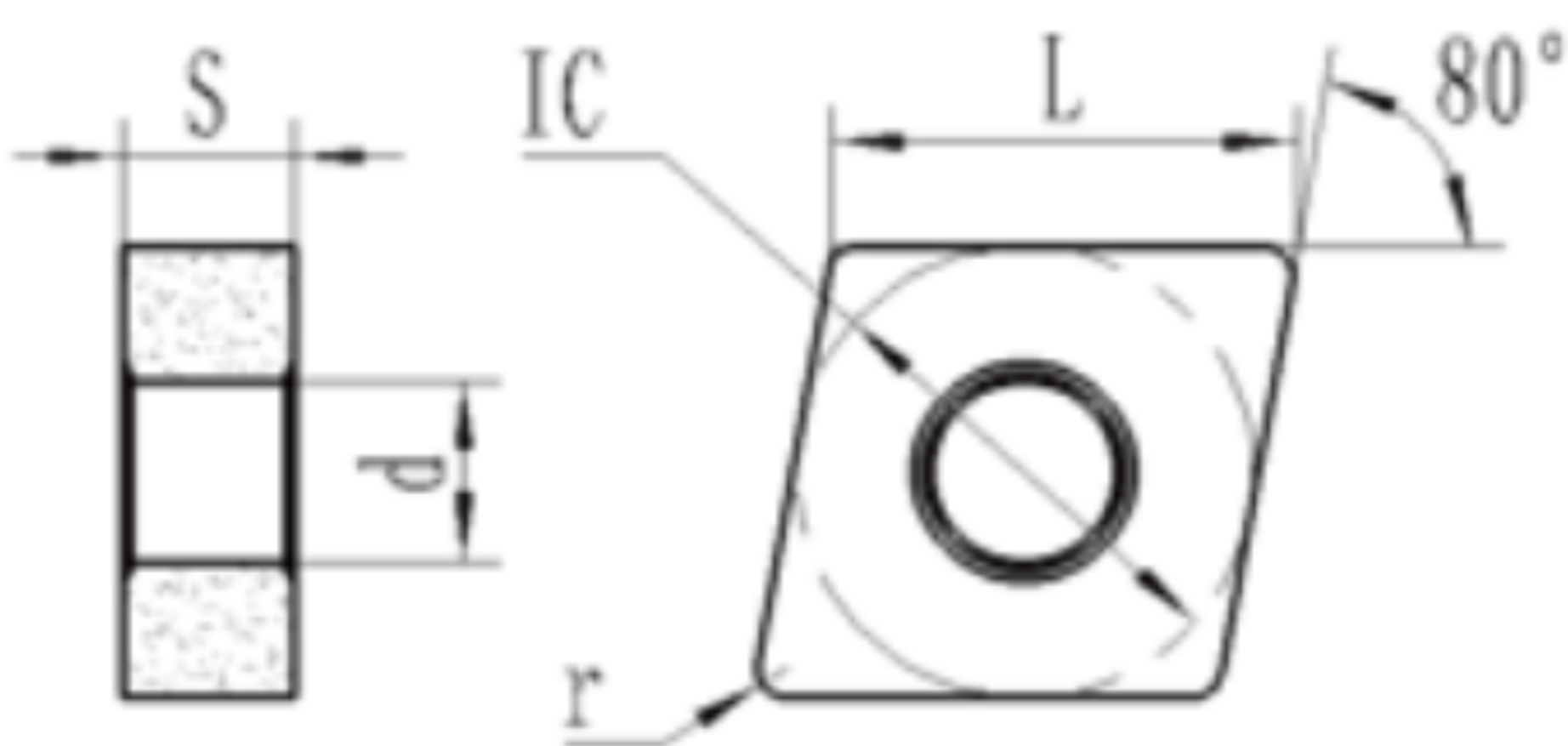
Workpiece material	GCr15(HRC18-20)
Insert Grade	GW3025
Insert Size	WNMG080408-PM
Cutting parameters	Vc=260m/min;f=0.25mm;Ap=1.2mm
Cooling method	Air cooling

List of Models

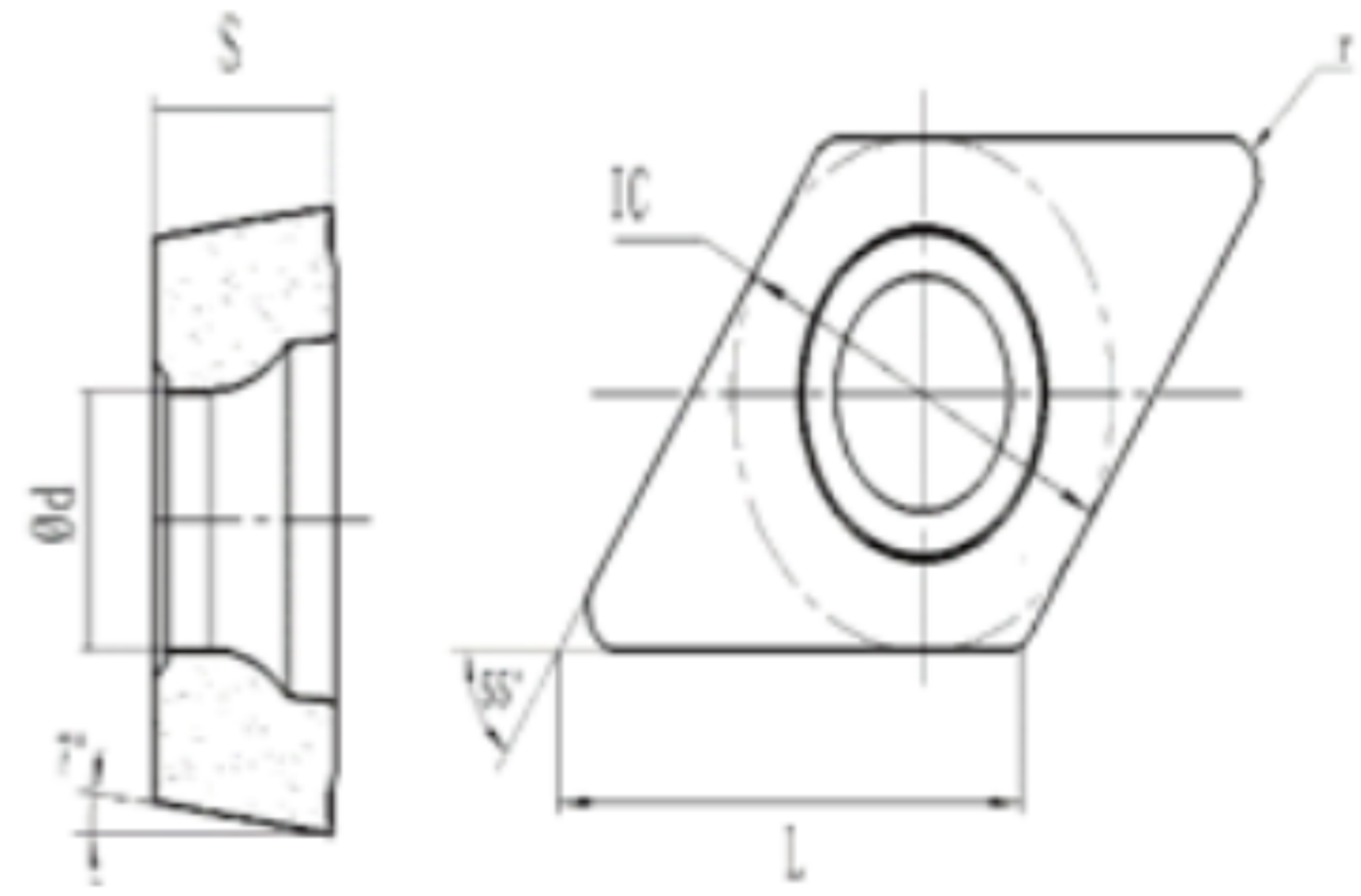
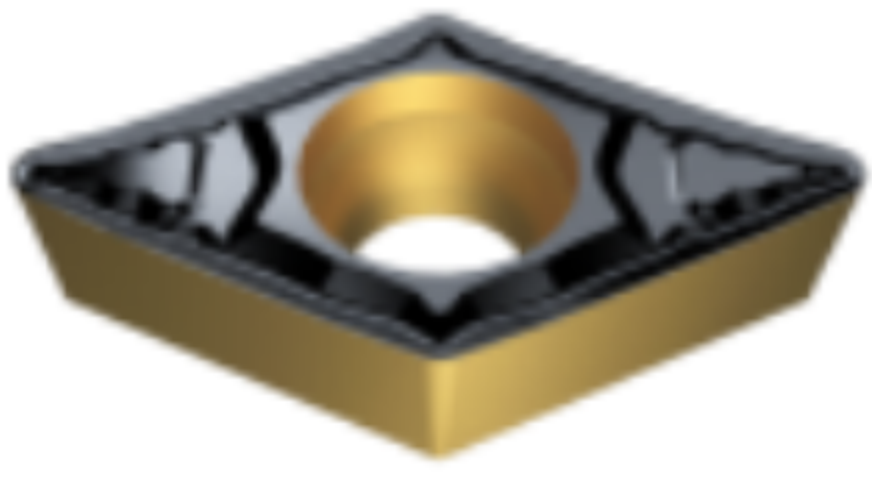
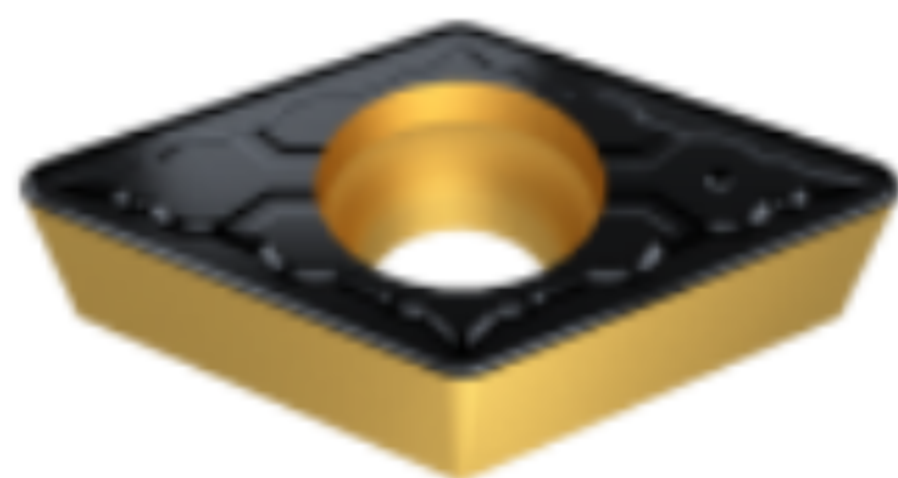
CC□□								
		Size(mm)					Grade	
Insert shape	Size	IC	S	L	d	r	GW3015	GW3025
	CCMT060204-PF	6.35	2.38	6.4	2.8	0.4	○	★
	CCMT060208-PF	6.35	2.38	6.4	2.8	0.8	○	★
	CCMT09T304-PF	9.525	3.97	9.7	4.4	0.4	○	★
	CCMT09T308-PF	9.525	3.97	9.7	4.4	0.8	○	★
	CCMT060204-PM	6.35	2.38	6.4	2.8	0.4	○	★
	CCMT060208-PM	6.35	2.38	6.4	2.8	0.8	○	★
	CCMT09T304-PM	9.525	3.97	9.7	4.4	0.4	○	★
	CCMT09T308-PM	9.525	3.97	9.7	4.4	0.8	○	★
	CCMT120404-PM	12.7	4.76	12.9	5.56	0.4	○	★
	CCMT120408-PM	12.7	4.76	12.9	5.56	0.8	○	★
	CCMT120412-PM	12.7	4.76	12.9	5.56	1.2	○	★

★Featured Grade ○ Make-to-Order

List of Models

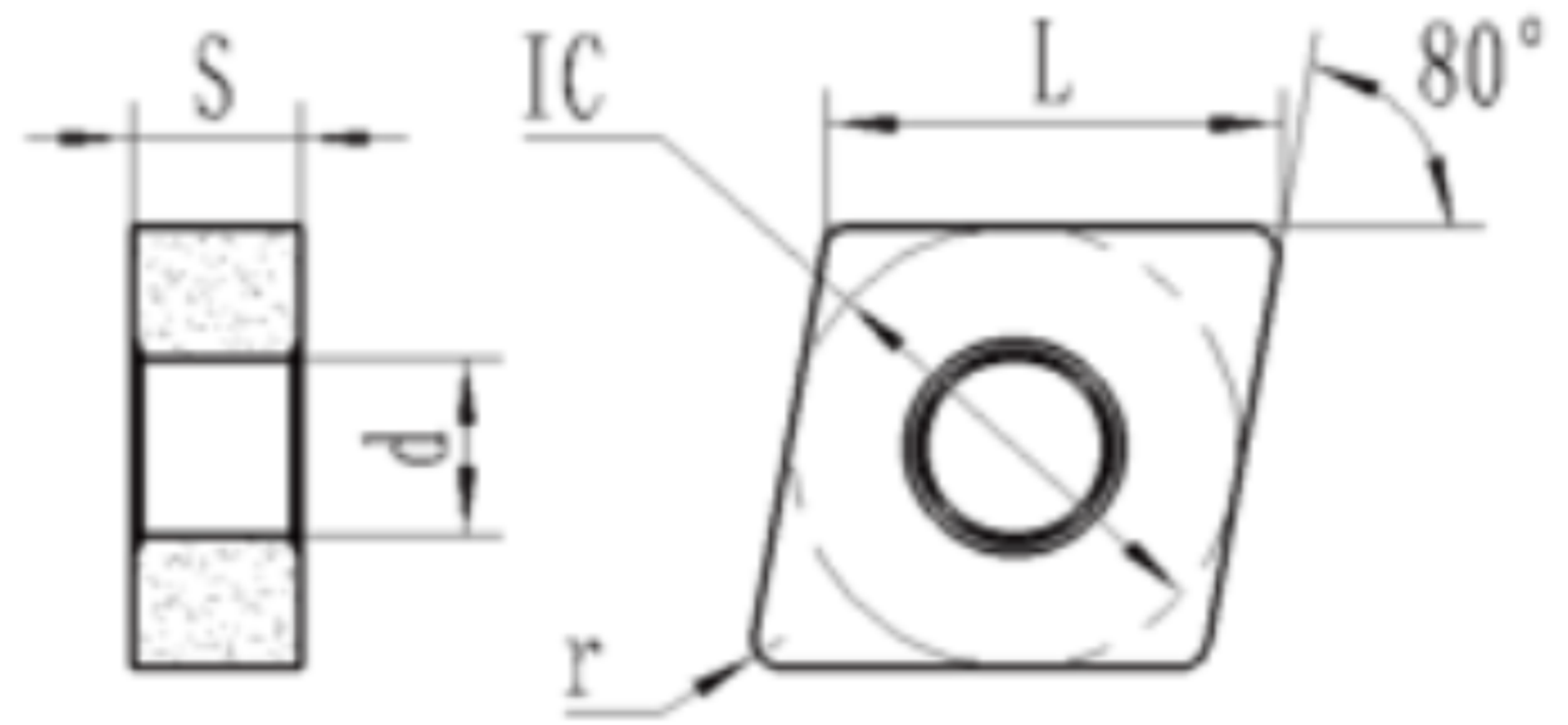
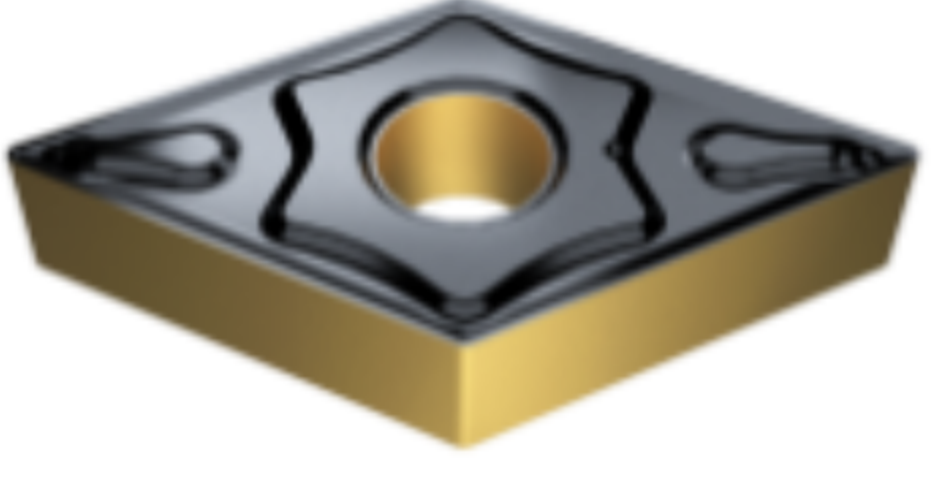
CN□□								
		Size(mm)					Grade	
Insert shape	Size	IC	S	L	d	r	GW3015	GW3025
	CNMG120404-PF	12.7	4.76	12	5.16	0.4	○	★
	CNMG120408-PF	12.7	4.76	12	5.16	0.8	○	★
	CNMG120412-PF	12.7	4.76	12	5.16	1.2	○	★
	CNMG120404-PM	12.7	4.76	12	5.16	0.4	○	★
	CNMG120408-PM	12.7	4.76	12	5.16	0.8	○	★
	CNMG120412-PM	12.7	4.76	12	5.16	1.2	○	★
	CNMG160608-PM	15.875	6.35	16	6.35	0.8	○	★
	CNMG160612-PM	15.875	6.35	16	7.93	1.2	○	★
	CNMG160616-PM	15.875	6.35	16	7.93	1.6	○	★
	CNMG120408-PR	12.7	4.76	12	5.16	0.8	○	★
	CNMG120412-PR	12.7	4.76	12	5.16	1.2	○	★
	CNMG160608-PR	15.875	6.35	16	6.35	0.8	○	★
	CNMG160612-PR	15.875	6.35	16	7.93	1.2	○	★
	CNMG160616-PR	15.875	6.35	16	7.93	1.6	○	★
	CNMG190612-PR	19.05	6.35	19	7.93	1.2	○	★
	CNMG190616-PR	19.05	6.35	19	7.93	1.6	○	★
	CNMG190624-PR	19.05	6.35	19	7.93	2.4	○	★

★ Featured Grade ○ Make-to-Order

DC□□								
		Size(mm)					Grade	
Insert shape	Size	IC	S	L	d	r	GW3015	GW3025
	DCMT070204-PF	6.35	2.38	6.7	2.8	0.4	○	★
	DCMT070208-PF	6.35	2.38	6.7	2.8	0.8	○	★
	DCMT11T304-PF	9.525	3.97	11.6	4.4	0.4	○	★
	DCMT11T308-PF	9.525	3.97	11.6	4.4	0.8	○	★
	DCMT070204-PM	6.35	2.38	6.7	2.8	0.4	○	★
	DCMT070208-PM	6.35	2.38	6.7	2.8	0.8	○	★
	DCMT11T304-PM	9.525	3.97	11.6	4.4	0.4	○	★
	DCMT11T308-PM	9.525	3.97	11.6	4.4	0.8	○	★

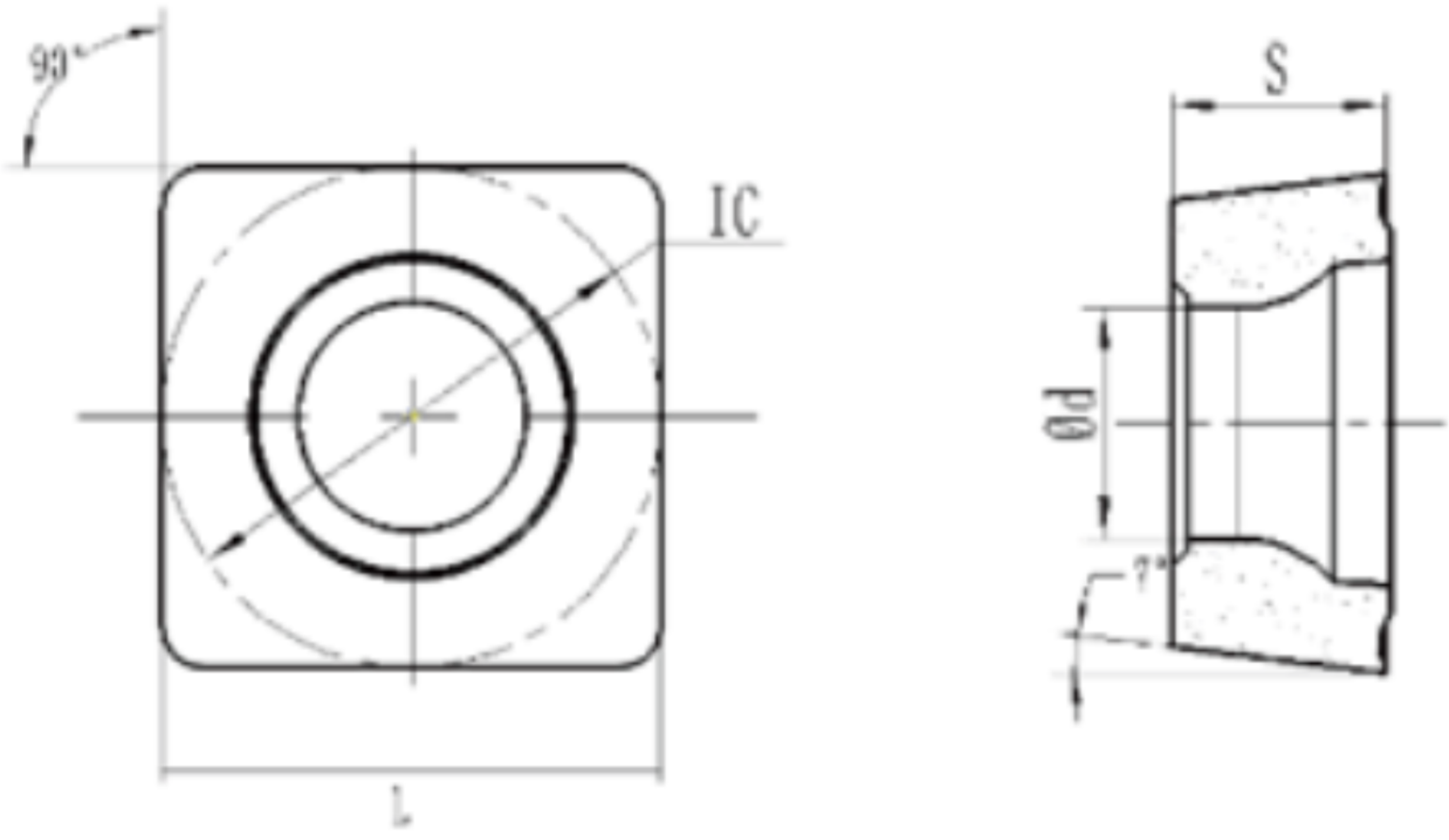
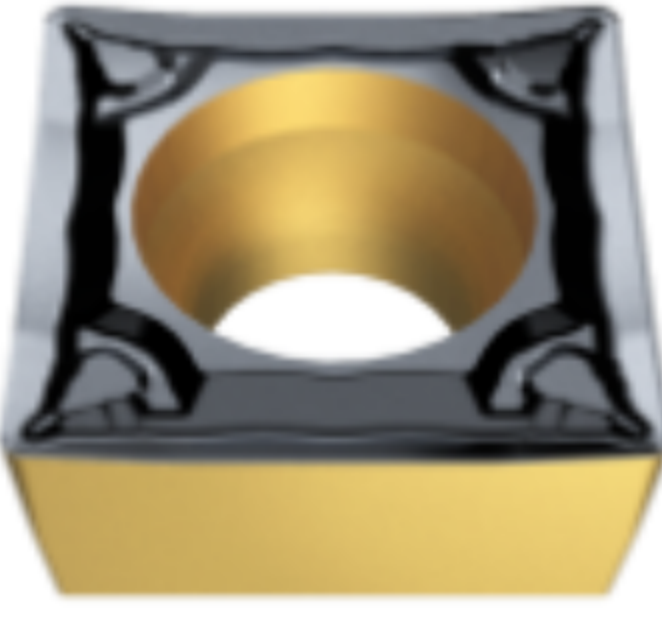
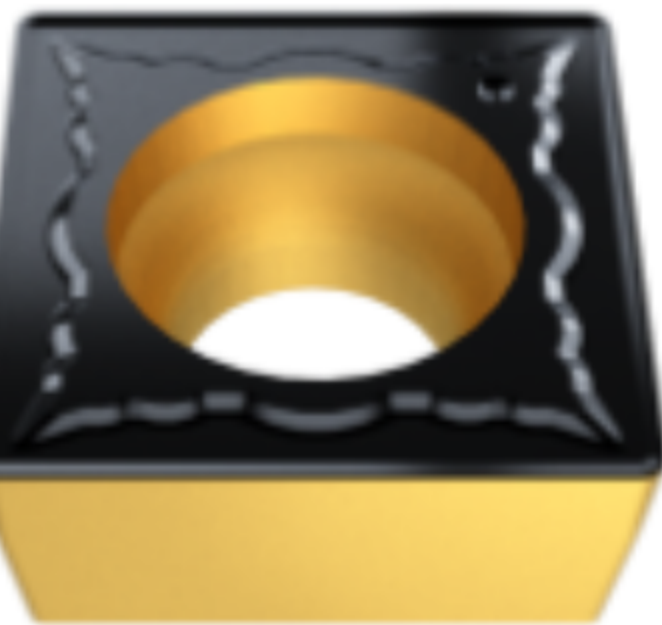
★Featured Grade ○ Make-to-Order

List of Models

DN□□								
		Size(mm)					Grade	
Insert shape	Size	IC	S	L	d	r	GW3015	GW3025
	DNMG110404-PF	12.7	4.76	15	3.81	0.4	○	★
	DNMG110408-PF	12.7	4.76	15	3.81	0.8	○	★
	DNMG150404-PF	12.7	4.76	15	5.16	0.4	○	★
	DNMG150408-PF	12.7	4.76	15	5.16	0.8	○	★
	DNMG150412-PF	12.7	4.76	15	5.16	1.2	○	★
	DNMG150604-PF	12.7	6.35	15	5.16	0.4	○	★
	DNMG150608-PF	12.7	6.35	15	5.16	0.8	○	★
	DNMG150612-PF	12.7	6.35	15	5.16	1.2	○	★
	DNMG150404-PM	12.7	4.76	15	5.16	0.4	○	★
	DNMG150408-PM	12.7	4.76	15	5.16	0.8	○	★
	DNMG150412-PM	12.7	4.76	15	5.16	1.2	○	★
	DNMG150416-PM	12.7	4.76	15	5.16	1.6	○	★
	DNMG150604-PM	12.7	6.35	15	5.16	0.4	○	★
	DNMG150608-PM	12.7	6.35	15	5.16	0.8	○	★
	DNMG150612-PM	12.7	6.35	15	5.16	1.2	○	★
	DNMG150616-PM	12.7	6.35	15	5.16	1.6	○	★

★ Featured Grade ○ Make-to-Order

SC□□

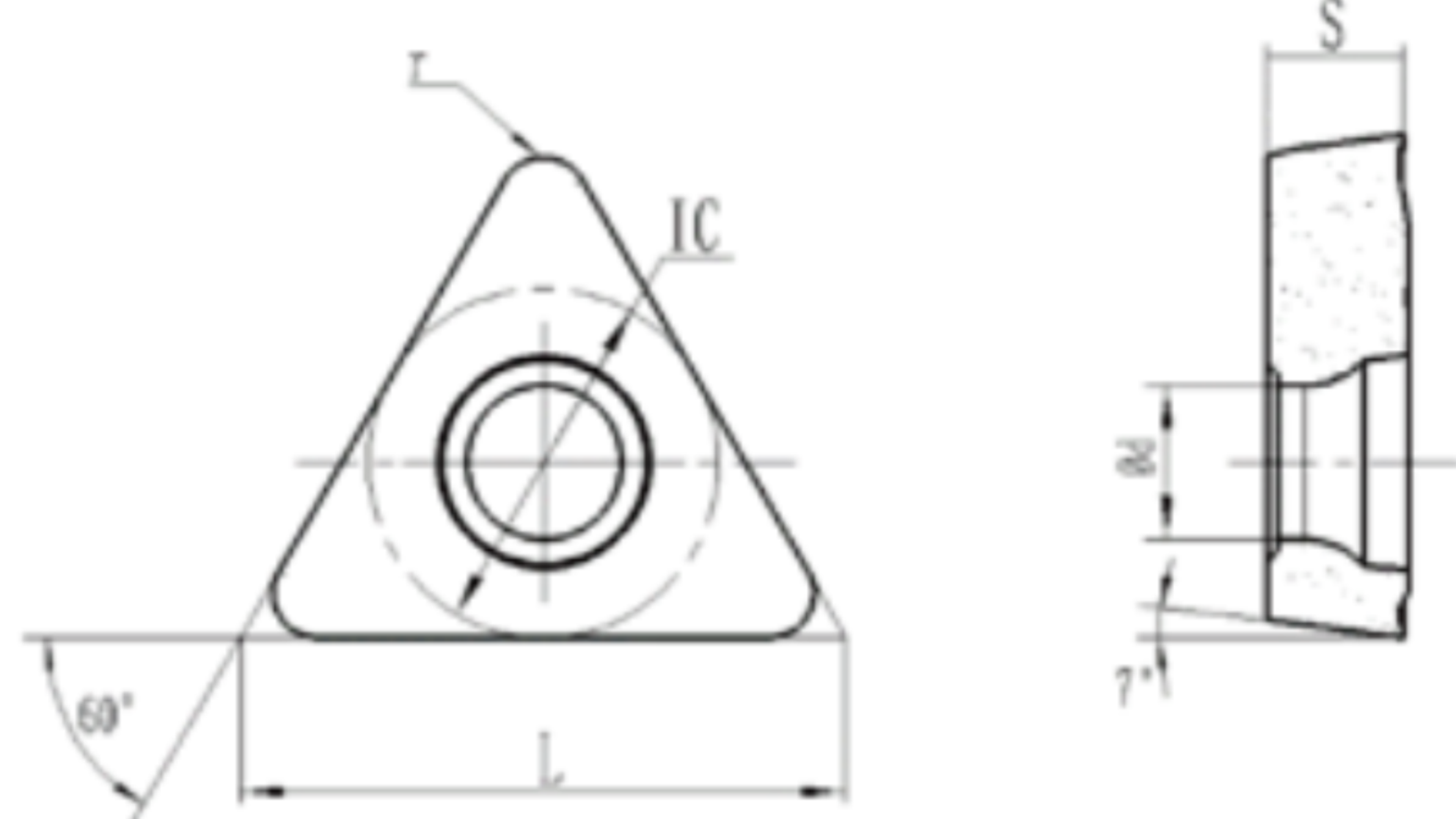
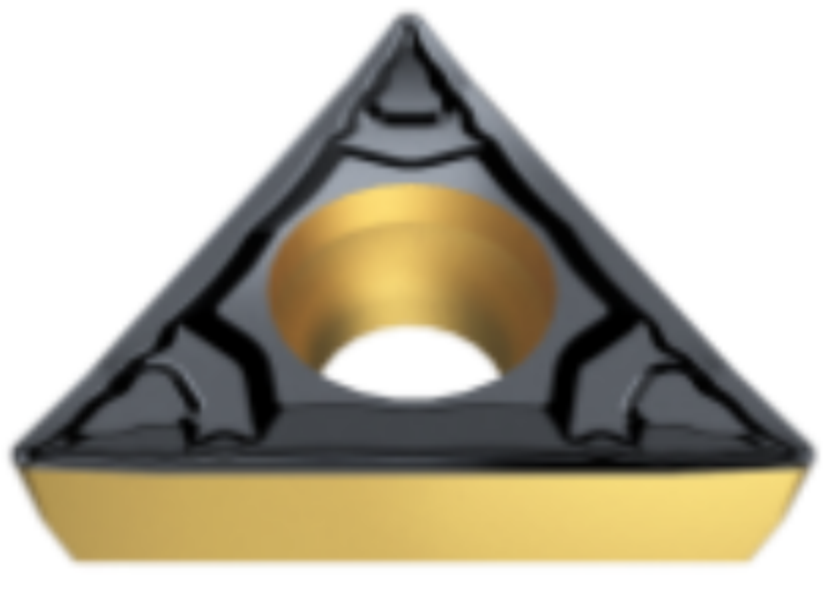
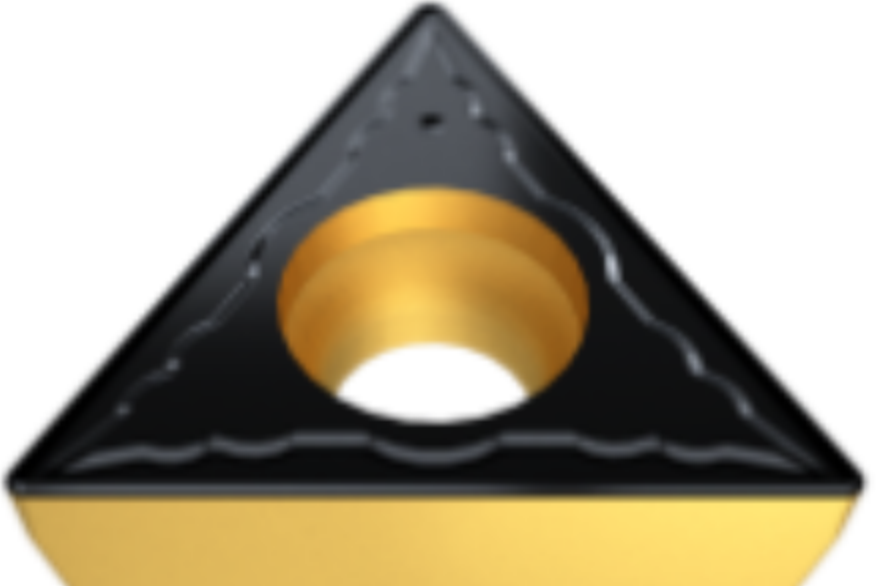
		Size(mm)					Grade	
		IC	S	L	d	r	GW3015	GW3025
Insert shape	Size	IC	S	L	d	r	GW3015	GW3025
	SCMT09T304-PF	9.525	3.97	9.525	4.4	0.4	○	★
	SCMT09T308-PF	9.525	3.97	9.525	4.4	0.8	○	★
	SCMT09T304-PM	9.525	3.97	9.525	4.4	0.4	○	★
	SCMT09T308-PM	9.525	3.97	9.525	4.4	0.8	○	★
	SCMT120404-PM	12.7	4.76	12.7	5.56	0.4	○	★
	SCMT120408-PM	12.7	4.76	12.7	5.56	0.8	○	★

★ Featured Grade ○ Make-to-Order

List of Models

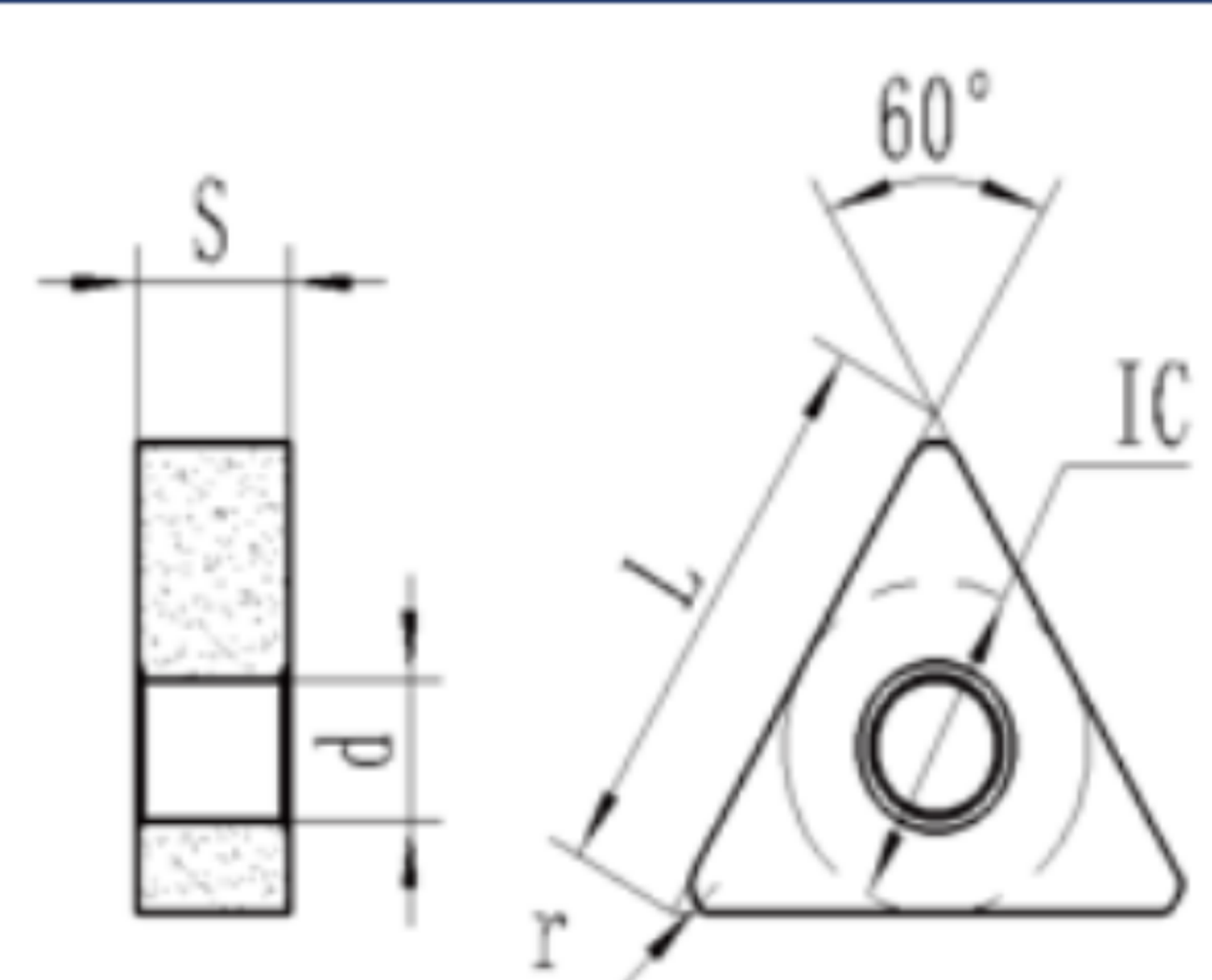



SN□□								
		Size(mm)					Grade	
Insert shape	Size	IC	S	L	d	r	GW3015	GW3025
	SNMG120404-PF	12.7	4.76	8	5.16	0.4	○	★
	SNMG120408-PF	12.7	4.76	8	5.16	0.8	○	★
	SNMG120412-PF	12.7	4.76	8	5.16	1.2	○	★
	SNMG120404-PM	12.7	4.76	12	5.16	0.4	○	★
	SNMG120408-PM	12.7	4.76	12	5.16	0.8	○	★
	SNMG120412-PM	12.7	4.76	12	5.16	1.2	○	★
	SNMG120408-PR	12.7	4.76	12	5.16	0.8	○	★
	SNMG120412-PR	12.7	4.76	12	5.16	1.2	○	★
	SNMG150608-PR	15.875	6.35	15	6.35	0.8	○	★
	SNMG150612-PR	15.875	6.35	15	6.35	1.2	○	★
	SNMG150616-PR	15.875	6.35	15	6.35	1.6	○	★
	SNMG190612-PR	19.05	6.35	19	7.93	1.2	○	★
	SNMG190616-PR	19.05	6.35	19	7.93	1.6	○	★
SNMG190624-PR	19.05	6.35	19	7.93	2.4	○	★	

★ Featured Grade ○ Make-to-Order

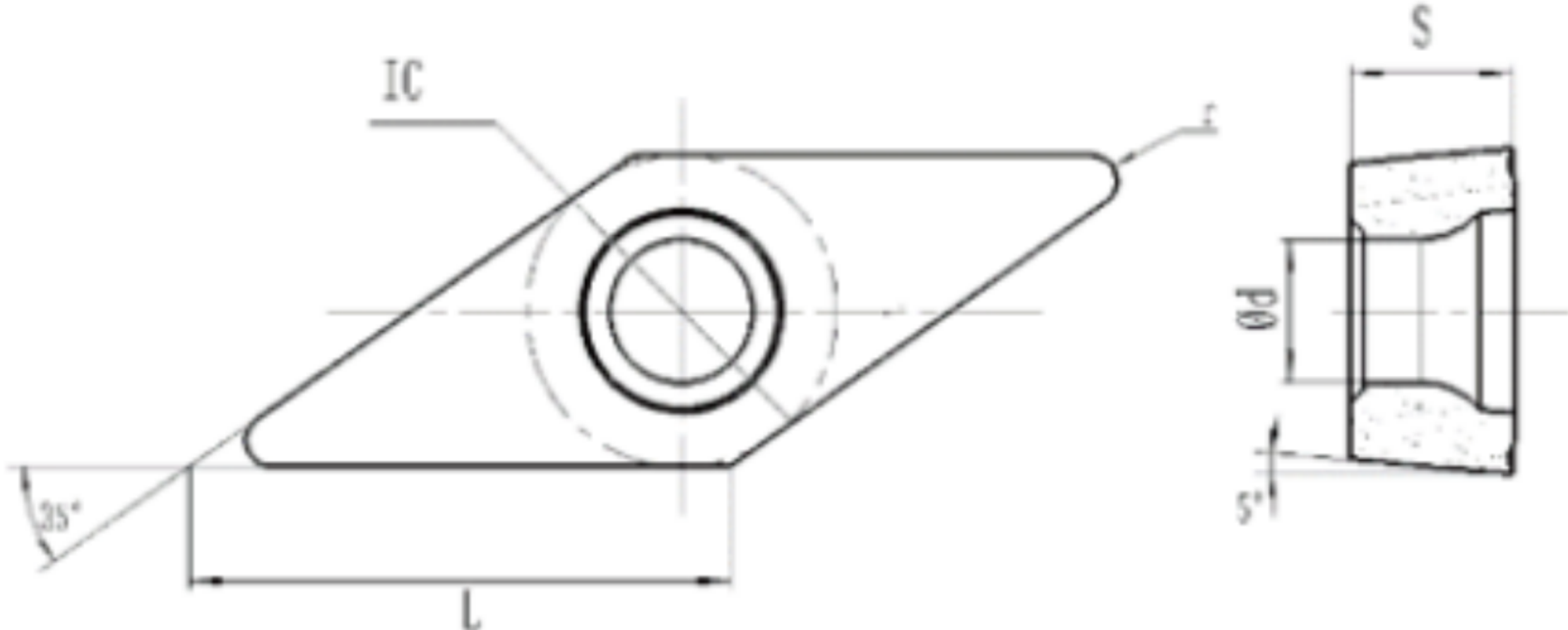
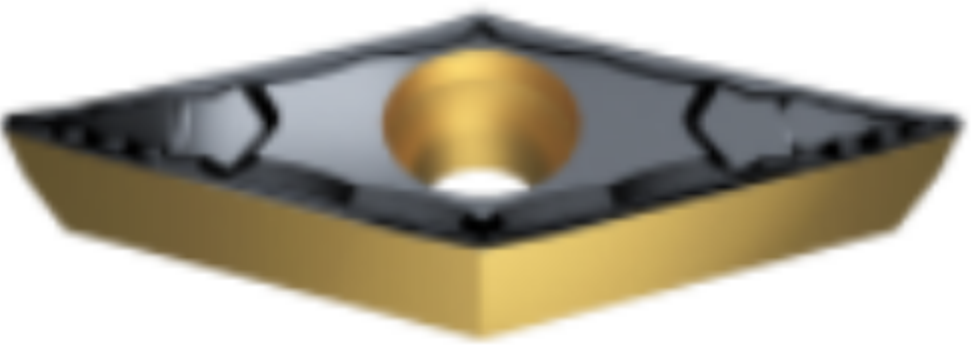
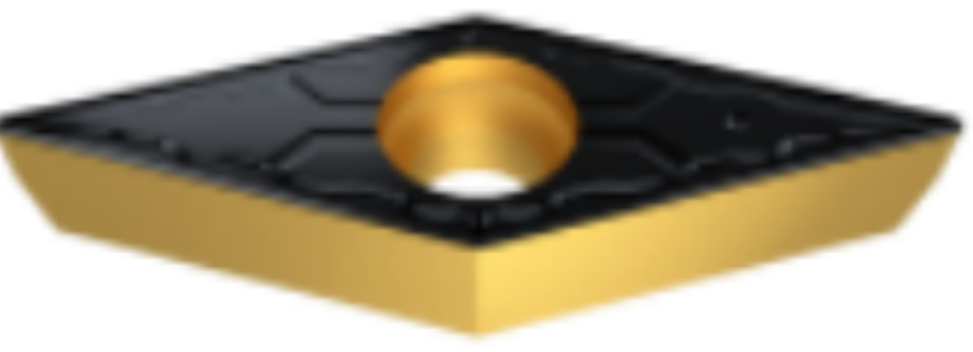
TC□□								
		Size(mm)					Grade	
Insert shape	Size	IC	S	L	d	r	GW3015	GW3025
	TCMT16T304-PF	9.525	3.97	16	4.4	0.4	○	★
	TCMT16T308-PF	9.525	3.97	16	4.4	0.8	○	★
	TCMT110204-PM	6.35	2.38	11	2.8	0.4	○	★
	TCMT110208-PM	6.35	2.38	11	2.8	0.8	○	★
	TCMT16T304-PM	9.525	3.97	16	4.4	0.4	○	★
	TCMT16T308-PM	9.525	3.97	16	4.4	0.8	○	★

★ Featured Grade ○ Make-to-Order

List of Models

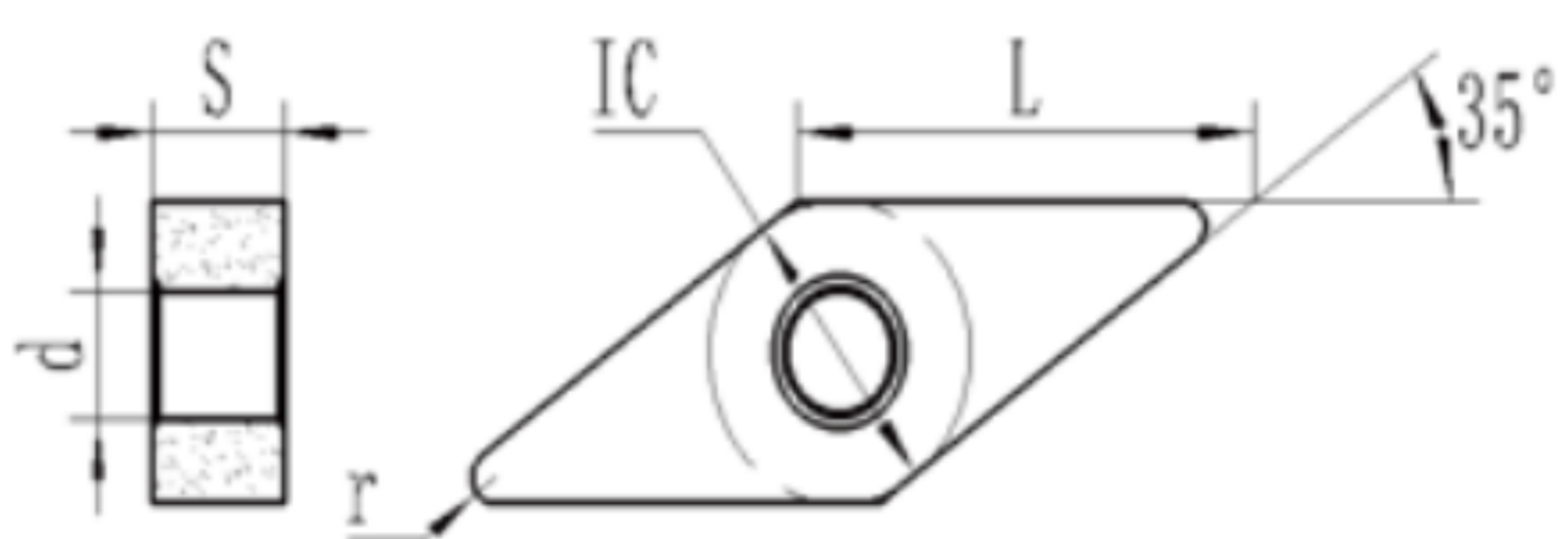
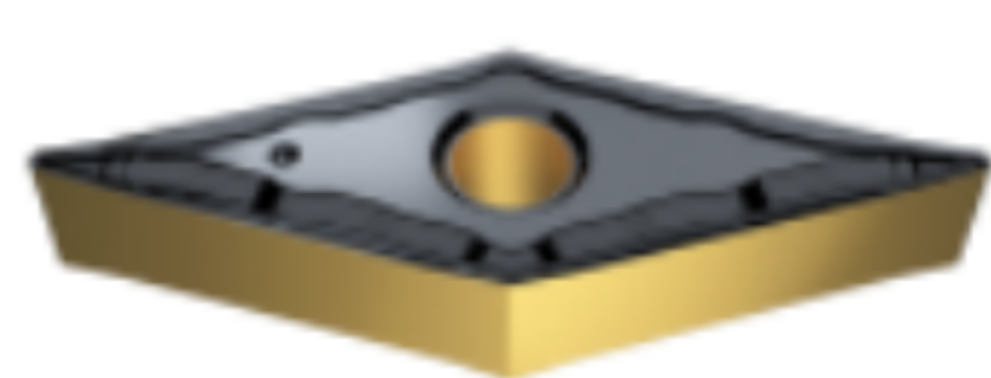
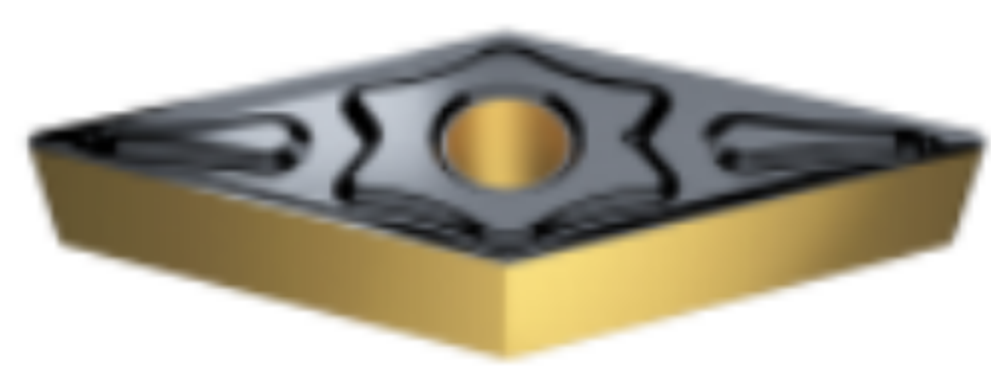
TN□□								
		Size(mm)					Grade	
Insert shape	Size	IC	S	L	d	r	GW3015	GW3025
	TNMG160404-PF	9.525	4.76	16	3.81	0.4	○	★
	TNMG160408-PF	9.525	4.76	16	3.81	0.8	○	★
	TNMG160412-PF	9.525	4.76	16	3.81	1.2	○	★
	TNMG220408-PF	12.7	4.76	22	5.16	0.8	○	★
	TNMG220412-PF	12.7	4.76	22	5.16	1.2	○	★
	TNMG160404-PM	9.525	4.76	16	3.81	0.4	○	★
	TNMG160408-PM	9.525	4.76	16	3.81	0.8	○	★
	TNMG160412-PM	9.525	4.76	16	3.81	1.2	○	★
	TNMG220408-PM	12.7	4.76	22	5.16	0.8	○	★
	TNMG220412-PM	12.7	4.76	22	5.16	1.2	○	★
	TNMG160408-PR	9.525	4.76	16	3.81	0.8	○	★
	TNMG160412-PR	9.525	4.76	16	3.81	1.2	○	★
	TNMG220408-PR	12.7	4.76	22	5.16	0.8	○	★
	TNMG220412-PR	12.7	4.76	22	5.16	1.2	○	★
	TNMG220416-PR	12.7	4.76	22	5.16	1.6	○	★
	TNMG270612-PR	15.875	6.35	27	6.35	1.2	○	★
	TNMG270616-PR	15.875	6.35	27	6.35	1.6	○	★

★ Featured Grade ○ Make-to-Order

VB□□								
		Size(mm)					Grade	
Insert shape	Size	IC	S	L	d	r	GW3015	GW3025
	VBMT160404-PF	9.525	4.76	16	4.4	0.4	○	★
	VBMT160404-PF	9.525	4.76	16	4.4	0.4	○	★
	VBMT160404-PM	9.525	4.76	16	4.4	0.4	○	★
	VBMT160408-PM	9.525	4.76	16	4.4	0.4	○	★
	VBMT160412-PM	9.525	4.76	16	4.4	0.4	○	★

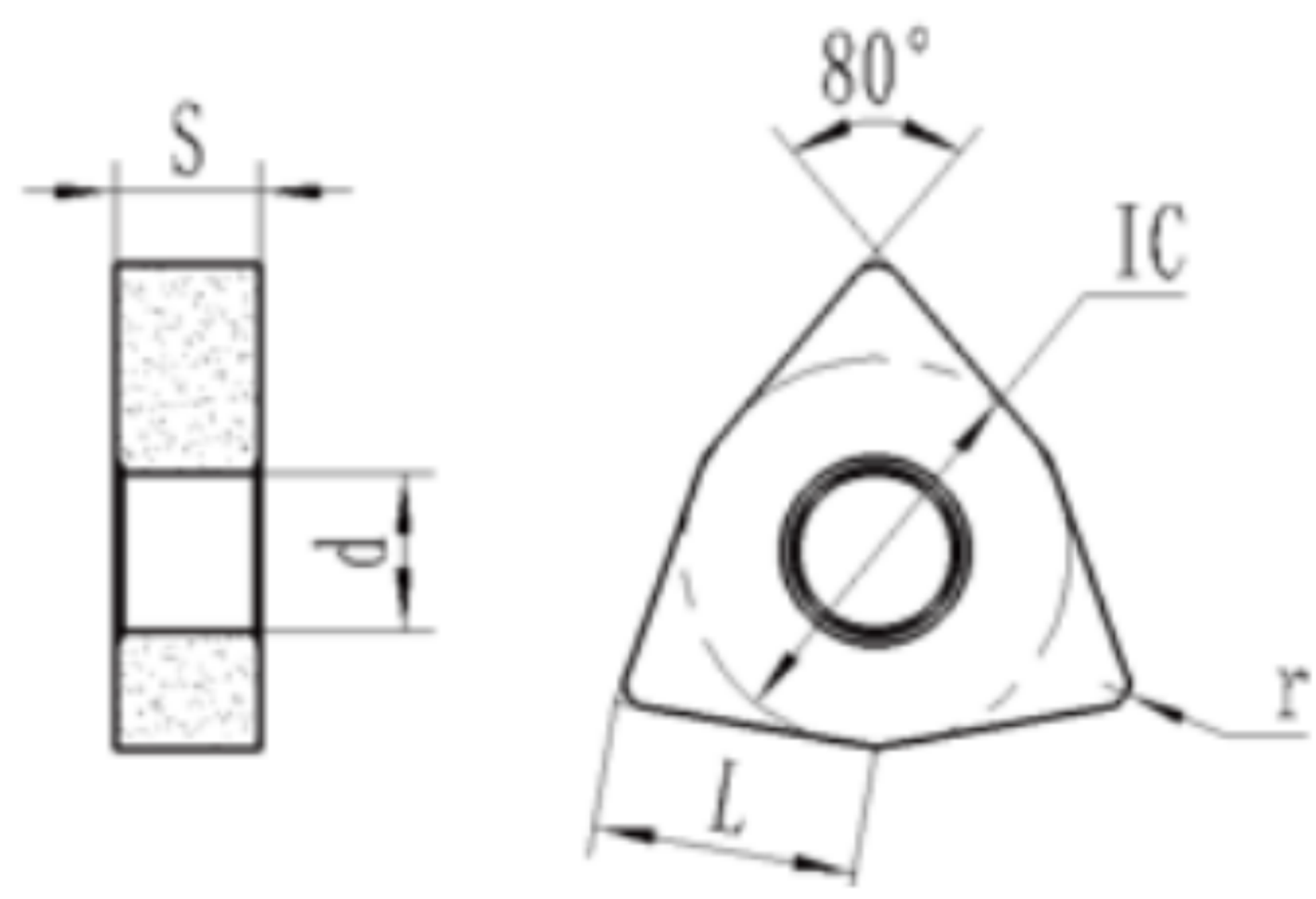
★ Featured Grade ○ Make-to-Order

List of Models

VN□□								
		Size(mm)					Grade	
Insert shape	Size	IC	S	L	d	r	GW3015	GW3025
	VNMG160404-PF	9.525	4.76	16	3.81	0.4	○	★
	VNMG160408-PF	9.525	4.76	16	3.81	0.8	○	★
	VNMG160412-PF	9.525	4.76	16	3.81	1.2	○	★
	VNMG160404-PM	9.525	4.76	16	3.81	0.4	○	★
	VNMG160408-PM	9.525	4.76	16	3.81	0.8	○	★
	VNMG160412-PM	9.525	4.76	16	3.81	1.2	○	★

★ Featured Grade ○ Make-to-Order

WN□□



Size(mm)

Grade

Insert shape	Size	IC	S	L	d	r	GW3015	GW3025
	WNMG060404-PF	9.525	4.76	16	3.81	0.4	○	★
	WNMG060408-PF	9.525	4.76	16	3.81	0.8	○	★
	WNMG080404-PF	9.525	4.76	16	3.81	1.2	○	★
	WNMG080408-PF	12.7	4.76	22	5.16	0.8	○	★
	WNMG0804012-PF	12.7	4.76	22	5.16	1.2	○	★
	WNMG060404-PM	9.525	4.76	16	3.81	0.4	○	★
	WNMG060408-PM	9.525	4.76	16	3.81	0.8	○	★
	WNMG060412-PM	9.525	4.76	16	3.81	1.2	○	★
	WNMG080404-PM	12.7	4.76	22	5.16	0.8	○	★
	WNMG080408-PM	12.7	4.76	22	5.16	1.2	○	★
	WNMG0804012-PM	9.525	4.76	16	3.81	0.8	○	★
	WNMG080408-PR	9.525	4.76	16	3.81	1.2	○	★
	WNMG0804012-PR	15.875	6.35	27	6.35	1.2	○	★

★Featured Grade ○ Make-to-Order

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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.

