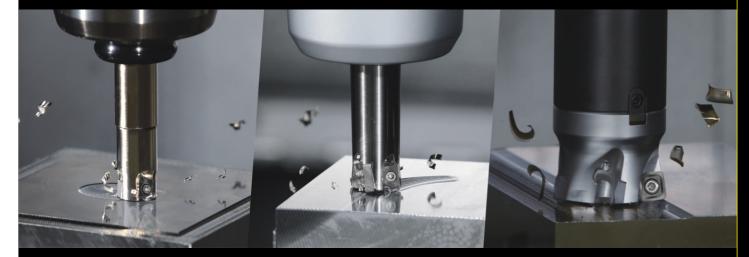
Catalog 2023-2024



# Efficiently realize value innovation and explore the future



CHONGQING HEADQUARTERS

SOUTH CHINA CENTER

EAST CHINA CENTER

#### CHANGZHOU ONMY TOOLS CO.,LTD

No.10 Shenjiang Road, Xixiashu Town, Xinbei District, Changzhou,

ONMY WILL CONTINUE TO WORK HARD IN THE INDUSTRY

**MAKE OUTSTANDING CONTRIBU** TIONS TO THE FIELD OF METAL **CUTTING** 



Changzhou ONMY Tools Co., Ltd., established in 2012, is located at No.10 Shenjiang Road, Xixiashu Town, Xinbei District, Changzhou City, Jiangsu Province, China.

It is a high-tech enterprise integrating the design, R & D, and sales of cemented carbide inserts.

The company has a domestic top technology R & D team, carried out in-depth cooperation with Chongging Green Intelligent Technology Research Institute of the Chinese Academy of Sciences, established the "precision forming technology R & D Center for cemented carbide tools with complex shapes", and applied for major scientific and technological projects.

The company has a number of independent invention patents, a series of imported high-end production equipment including mold manufacturing, precision molding, sintering, passivation, and grinder coating process, as well as advanced testing and experimental equipment.

We are committed to providing our customers with professional, high-quality, and efficient products and services through strong technical strength, a strict quality management system and a perfect service network.















#### **PVD Coating**

	Grade	Colour	Coating structure
	OK1025	Black	TiAIN
Р	OK1030	Black	TiAIN
	OK1040	Yellow	TICN+X
	OK1225	Yellow	TiCN+X
М	OK1325	Bronze	ALCr+X
	OK1328	Bronze	ALCr+X
	OK1010	Black	TiAIN+ALCrN+X
S	OK1020	Black	TiAIN+ALCrN+X
	OK1005S	Pale Yellow	ALCr+X+X
	OK1525S	Black	TiAIN+X

Electroscope Pictures	Characteristics and Uses
	High Co fine grain matrix with balanced hardness and toughness, combined with nano-gradient coating. Good wear resistance and toughness. Uses: steel, stainless steel cast iron, processing of general-purpose materials.
	High Co fine grain matrix with balanced hardness and toughness, combined with nano-gradient coating. Good wear resistance and toughness. Uses: steel, stainless steel cast iron, processing of general-purpose materials.
	High Co fine grain matrix with balanced hardness and toughness, combined with nano-multilayer coatings with optimized composition and structure, provides excellent resistance to wear and oxidation. Uses: Fine semi-finishing of steel, stainless steel, heat-resistant alloys.
	High Co fine grain matrix with balanced hardness and toughness, combined with elemental modified nanocomposite coating, excellent wear resistance and anti-chipping. Usage: Suitable for a wide range of steel processing, stainless steel processing can also realize long life. High Co fine grain matrix with balanced hardness and toughness,
	combined with elemental modified nanocomposite coating, excellent wear resistance and anti-chipping.Usage: Suitable for a wide range of steel processing, stainless steel processing can also realize long life.
	Toughness-enhanced high Co matrix, combined with elementally modified nanocomposite coatings for better chipping resistance. Uses: Stabilized machining of steel and stainless steel.
	High hardness low Co special matrix combined with nano-gradient coating. Excellent wear resistance. Uses: Finishing and semi-finishing of heat-resistant alloys, high hardness materials, stainless steel.
	High hardness low Co special matrix combined with nano-gradient coating. Excellent wear resistance. Uses: Finishing and semi-finishing of heat-resistant alloys, high hardness materials, stainless steel.
	Special matrix combining hardness, strength and toughness, combined with nano-multilayer coating with optimized composition and structure, excellent high temperature hardness, toughness and oxidation resistance.Use: Semi-finishing of heat-resistant alloys and stainless steel.
	High hardness low Co special matrix, combined with elemental modified nanocomposite coating. Excellent abrasion resistance, enhancement of surface finish and roughness of processed materials. Uses: Finishing and continuous machining of heat-resistant alloys and stainless steel.

**Technical Index** 



#### **Technical Index**

#### **CVD Coating**

	Gtade	Colour	Coating structure
	OK4025	Yellow	TiCN+AI <sub>2</sub> O <sub>3</sub> +TiN
	OK4125	Black	TiCN+AI <sub>2</sub> O <sub>3</sub>
	OK4220	Yellow+Black	TiCN+Al <sub>2</sub> O <sub>3</sub> + (TiN)
Р	OK4225	Yellow+Black	TiCN+Al <sub>2</sub> O <sub>3</sub> + (TiN)
	OK4235	Yellow+Black	TiCN+Al <sub>2</sub> O <sub>3</sub> + (TiN)
	OK4445	Yellow+Black	TiCN+AI <sub>2</sub> O <sub>3</sub> + (TiN)
K	OK5015	Black	TiCN+AI <sub>2</sub> O <sub>3</sub>
	OK5115	Black	TiCN+Al <sub>2</sub> O <sub>3</sub>

Electroscope Pictures	Characteristics, uses
	High Co fine grain matrix with balanced hardness and toughness, combined with nano-gradient coating. Good wear resistance and toughness. Usage: General material for steel and stainless steel processing.
	High Co fine grain matrix with balanced hardness and toughness, combined with elementally modified nano-composite coating, excellent wear resistance and anti-chipping. Use: Applicable to the range of steel processing, stainless steel processing can also realize long life.
	Toughness-enhanced high Co matrix, combined with elementally modified nanocomposite coatings for better chipping resistance. Uses: Stabilized machining of steel and stainless steel.
	High Co fine grain matrix with balanced hardness and toughness, combined with nano-multilayer coatings with optimized composition and structure, provides excellent resistance to wear and oxidation.  Uses: Fine semi-finishing of steel, stainless steel, heat-resistant alloys.
	High hardness low Co special matrix combined with nano- gradient coating. Excellent wear resistance. Uses: Finishing and semi-finishing of heat-resistant alloys and stainless steel.
	Special matrix with perfect combination of hardness, strength and toughness, combined with elemental modified nanocomposite coating. High temperature hardness, good toughness. Uses: semi-finishing of heat-resistant alloys, stainless steel, continuous intermittent processing.
	Special matrix combining hardness, strength and toughness, combined with nano-multilayer coating with optimized composition and structure, excellent high temperature hardness, toughness and oxidationresistance. Uses: semi-finishing of heat-resistant alloys, high standard cast iron.
	Super toughness high Co coarse grain special matrix, combined with elemental modified nanocomposite coating. Excellent chipping resistance. Uses: Rough machining and intermittent machining of heat-resistant alloys, various types of cast iron and ductile iron.

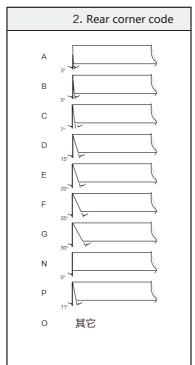
#### **Recommended Grades for Material Application**

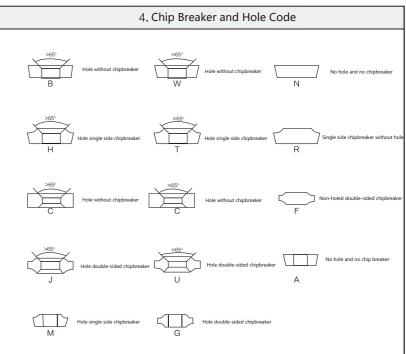
	ISO		CVD Coating	1		PVD Coating	
	01						
P	10						
P	20	OK4220 (4225	125	025		025	
	30	OK4225	OK4235 OK4125	OK4025 OK4445		OK1025	OK1030
	40		0K4	0 <b>K</b> 4			
	01						
M	10						
	20				OK1225 OK1325	<u> </u>	
	30				OK1	OK1328	
	40					0	
	01						
K	10	OK5015		OK5115			0
	20	S S S S S S S S S S S S S S S S S S S		OK5		OK1025	OK1020
	30					OK1	
	40						
	01				OK1005S		
S	10				OK1	SS	
	20					OK1525S	
	30					0	
	40						

### **Product Naming Rules**

*) S0°
5° H
. M
) R
Other Z

			;	3. Toler	ance	coc	de						
	L	<u> </u>		m m					S S				
code	Nose height $M$ Tolerance (mm)	Inscribed circle ØI. CTolerance (mm)	Thickness Tolerance (mm)	Nose Height	Tolerance 🏻	n(m	nm)						
Α	±0.005	±0.025	± 0.025	Inscribed circle	Regular tria	angle	Squ	are	80°	Diamond	55° Diam	ond	35° Diamone
В	±0.005	±0.013	± 0.025	6.35	± 0.08	В	±0.	.08	±	80.0	± 0.11		±0.16
С	±0.013	± 0.025	± 0.025	9.525	± 0.08	В	±0.	.08	±	80.0	± 0.11		± 0.16
Н	±0.025	±0.013	± 0.025	12.70 ±0.13 ±0.13 ±0.13 ±0.15					-				
Е	±0.025	± 0.025	± 0.025	15.875	± 0.15	±0.15 ±0.15			±	0.15	± 0.18		-
G	±0.025	±0.025	±0.13	19.05	± 0.15	±0.15 ±0.15		.15	±	0.15	± 0.18		-
J	±0.005	±0.05-±0.13	± 0.025	25.40	-	- ±0.18		.18	-		-		_
К	±0.013	±0.05-±0.13	± 0.025	Inscribed circl	e ØI.C	Tole	erance	(mm	1)				
L	±0.025	±0.05-±0.13	± 0.025	Inscribed circle	Regular triangle	Sq	juare	80°	mond	55° Diam	ond 35° Dia	mond	Round
М	±0.08-±0.18	±0.05-±0.13	±0.13	6.35	±0.05	±	0.05	± 0.		± 0.0			-
N	±0.08-±0.18	±0.05-±0.13	± 0.025	9.525	±0.05	±	0.05	±0.	.05	±0.0	5 ±0	.05	±0.05
U	±0.13-±0.38	±0.08-±0.25	±0.13	12.70	±0.08	±	0.08	± 0.	.08	±0.0	8 -	-	±0.08
	Indicates	inserts tha	at do	15.875	±0.10	±	0.10	± 0.	.10	±0.1	0 -	-	±0.10
		ire sharper	ning on	19.05	±0.10	±	0.10	± 0.	.10	±0.1	0 -	-	±0.10
	the side			25.40	-	±	0.13	-	-	-	-	-	± 0.13





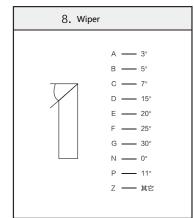
## A P M T 11 35 P D E R - XR

ChipBreaker code

	5. Length of cutting edge								
内接圆 (mm)	С	П	R	□s	Ат	√v	Ĵ_w		
3.97	03	04		03	06		02		
5.00			05						
5.56	05	06		05	09	09	03		
6.00			06						
6.35	06	07		06	11	11	04		
8.00			08						
9.525	09	11	09	09	16	16	06		
10.00			10						
12.00			12						
12.70	12	15	12	12	22	22	05		
15.875	16		15	15	27		10		
16.00		19	16						
19.05	19		19	19	33		13		
20.00			20						
25.00	25	25	25						
25.40			25	25	44				
31.75	32		31	31	54				
32.00			32						

6. Insert thickness
Thickness is defined as the height from the buttom of the insert to the heightest of part of cutting edge
01 — 1.59mm
T1 ==== 1.98mm
02 ==== 2.38mm
T2 — 2.78mm
03 ==== 3.18mm
T3 ==== 3.97mm
04 —— 4.76mm
T4 —— 4.96mm
05 ==== 5.56mm
T5 — 5.95mm
06 — 6.35mm
T6 ==== 6.75mm
07 ==== 7.94mm
09 —— 9.52mm
T9 — 9.72mm

7. Wiper	
	A — 45° D — 60° E — 75° F — 85° P — 90° Z — 其它



9. Chamfer				
E =		Rounded		
F=		Sharp		
T=		Chamfered		
S =		Composite		

10. Cutting direction
R- Right hand
L— Left hand
N- Neutral

#### **Square Shoulder Milling Inserts**

	Code										Gra	ade									
Inserts		CVD								PVD											
		Ok4220	OK4025	OK4125	OK4225	OK4235	OK4445	OK5015	OK5115	OK1005S	OK1010	OK1020	OK1025	OK1030	OK1040	OK1215	OK1225	OK1325	OK1328	OK1330S	OK1525S
900	APMT160420PDER-H												•	•			•		•		
	APMT160430PDER-H												•	•			•		•		