

# POSITIVE INSERTS SERIES

Think positive with Nikko!

ISO

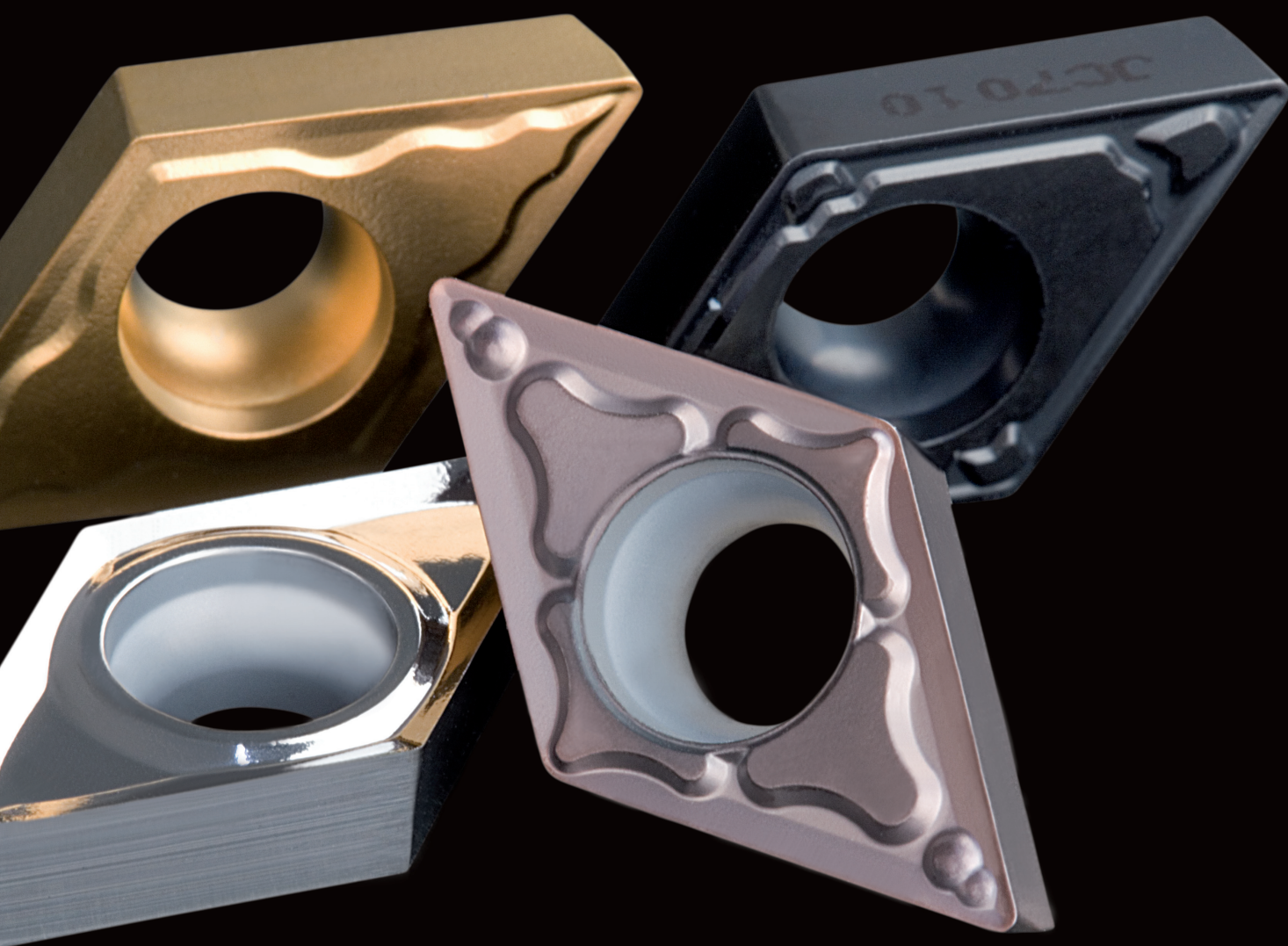
P

M

K

N

S

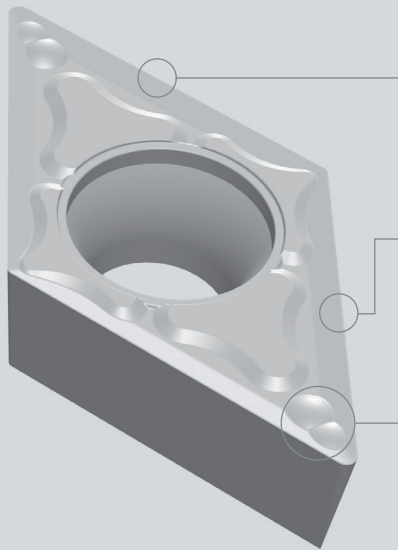


**nikko**TOOLS

# POSITIVE INSERTS SERIES

**P M S**

## New PFU CHIPBREAKER



**\* SHARP CUTTING EDGE**  
Low cutting force and excellent surface finishing

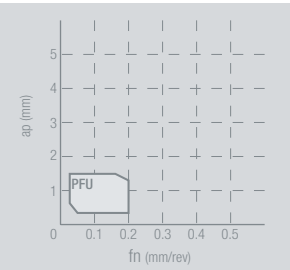
**🇮🇹 TAGLIENTE VIVO**  
Azione di taglio dolce ed ottima finitura superficiale

**\* DOUBLE RAKE ANGLE**  
Good balance between strength and sharpness of the cutting edge

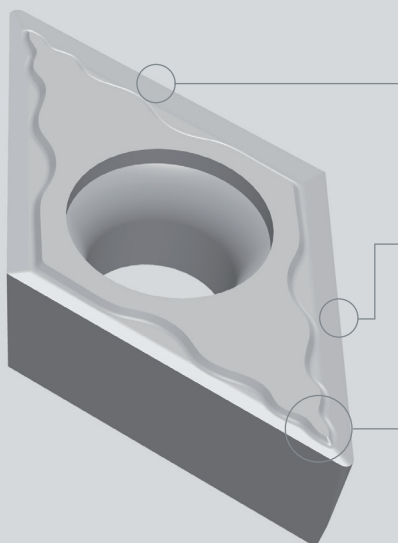
**🇮🇹 DOPPIO ANGOLO DI SPOGLIA**  
Buona combinazione tra taglienza e robustezza del filo tagliente

**\* SPECIAL DOUBLE DOTS GEOMETRY**  
Excellent chip control with low depth of cut

**🇮🇹 GEOMETRIA A DOPPIO RILIEVO**  
Ottimo controllo truciolo a basse profondità di passata



## PMU CHIPBREAKER



**\* UNIVERSAL CHIPBREAKER**  
First choice for general purpose

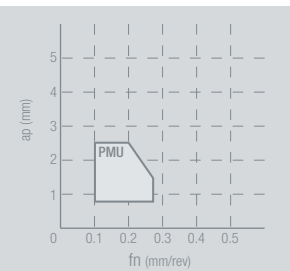
**🇮🇹 TAGLIENTE UNIVERSALE**  
Prima scelta per impiego generico

**\* DOUBLE RAKE ANGLE**  
Good balance between strength and sharpness of the cutting edge

**🇮🇹 DOPPIO ANGOLO DI SPOGLIA**  
Buona combinazione tra taglienza e robustezza del filo tagliente

**\* WAVE GEOMETRY**  
Excellent chip control even in case of variable depth of cut

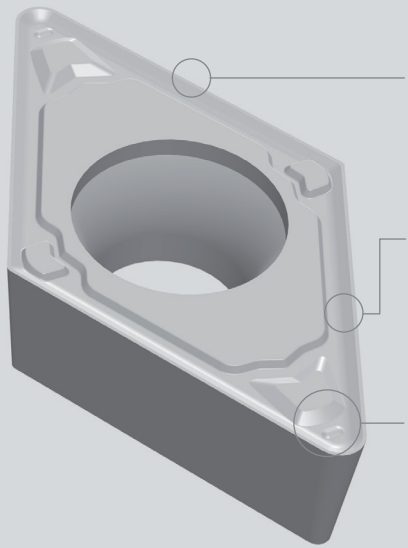
**🇮🇹 GEOMETRIA ONDULATA**  
Ottimo controllo truciolo anche con asportazioni variabili



**P M K**

**P** **K**

## New PRU CHIPBREAKER



**✦ REINFORCED CUTTING EDGE**  
First choice for difficult operations and interrupted cut

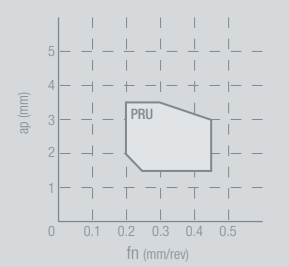
**🇮🇹 TAGLIENTE RINFORZATO**  
Consigliato per lavorazioni gravose e taglio interrotto

**✦ WIDE AND SHALLOW GROOVES**  
Low cutting force even at high deep of cut

**🇮🇹 GOLE AMPIE E POCO PROFONDE**  
Basse forze di taglio anche ad elevate asportazioni

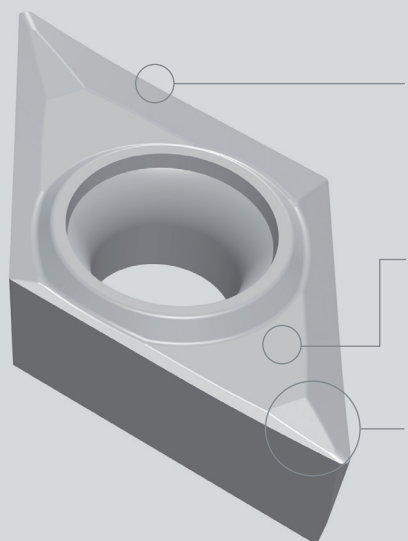
**✦ SPECIAL 3D GEOMETRY ON RADIUS ZONE**  
Variable groove depth to reduce vibration

**🇮🇹 GEOMETRIA 3D NELLA ZONA DEL RAGGIO**  
Gola con profondità variabile per ridurre le vibrazioni



**N**

## PMN CHIPBREAKER



**✦ SHARP EDGE**  
Excellent surface finishing without burrs

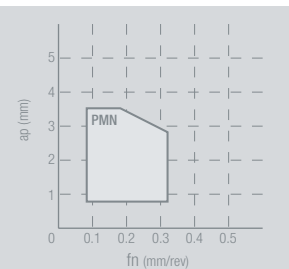
**🇮🇹 TAGLIENTE AFFILATO E RETTIFICATO**  
Ottima finitura superficiale e riduzione delle bave

**✦ POLISHED SURFACE**  
To reduce built-up edge

**🇮🇹 SUPERFICIE LUCIDATA**  
Riduce la formazione del tagliante di riporto

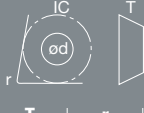
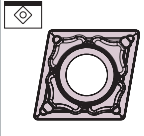
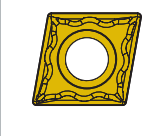

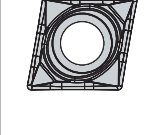
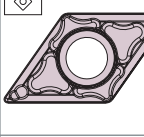
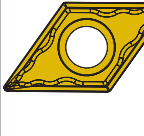

**✦ WIDE GROOVE**  
Excellent chip evacuation at high cutting speed

**🇮🇹 GOLA AMPIA**  
Ottimo deflusso del truciolo ad elevate velocità di taglio



# POSITIVE INSERTS SERIES

## INSERTS

DESCRIPTION					HT			HC					HW		
	IC	T	r	Ød	JU4015	JP5015	JP5025	JC7010	JC7020	JC8015	JC8025	JC9025	JU6010	JU6020	
<b>PFU</b> 	CCMT 060202-PFU	6.35	2.38	0.2	2.8	●	●	●			●	●	●		
	060204-PFU	6.35	2.38	0.4	2.8	●	●	●			●	●	●		
	CCMT 09T302-PFU	9.525	3.97	0.2	4.4	●	●	●			●	●	●		
	09T304-PFU	9.525	3.97	0.4	4.4	●	●	●			●	●	●		
	09T308-PFU	9.525	3.97	0.8	4.4	●	●	●			●	●	●		
<b>PMU</b> 	CCMT 060202-PMU	6.35	2.38	0.2	2.8	●		■	○		○	●	●		
	060204-PMU	6.35	2.38	0.4	2.8	●		●	●	○	●	●	●		
	060208-PMU	6.35	2.38	0.8	2.8	●		■	●		●	●	●		
	CCMT 09T302-PMU	9.525	3.97	0.2	4.4	●		■	○		●	●	●		
	09T304-PMU	9.525	3.97	0.4	4.4	●		●	●		●	●	●		
	09T308-PMU	9.525	3.97	0.8	4.4	●		●	●		●	●	●		
	CCMT 120404-PMU	12.7	4.76	0.4	5.5			■	●		●	●	●		
	120408-PMU	12.7	4.76	0.8	5.5			●	●		●	●	●		
	120412-PMU	12.7	4.76	1.2	5.5			●	●		●	●	●		
<b>PRU</b> 	CCMT 09T304-PRU	9.525	3.97	0.4	4.4				●						
	09T308-PRU	9.525	3.97	0.8	4.4				●						
	CCMT 120408-PRU	12.7	4.76	0.8	5.5				●						
	120412-PRU	12.7	4.76	1.2	5.5				●						
<b>PMN</b> 	CCGX 060202-PMN	6.35	2.38	0.2	2.8									●	
	060204-PMN	6.35	2.38	0.4	2.8									●	●
	060208-PMN	6.35	2.38	0.8	2.8									○	●
	CCGX 09T302-PMN	9.525	3.97	0.2	4.4									●	
	09T304-PMN	9.525	3.97	0.4	4.4									●	
	09T308-PMN	9.525	3.97	0.8	4.4									○	●
	CCGX 120402-PMN	12.7	4.76	0.2	5.5									●	
	120404-PMN	12.7	4.76	0.4	5.5									●	●
120408-PMN	12.7	4.76	0.8	5.5									●	●	
<b>PFU</b> 	DCMT 070202-PFU	6.35	2.38	0.2	2.8	●	●	●			●	●	●		
	070204-PFU	6.35	2.38	0.4	2.8	●	●	●			●	●	●		
	DCMT 11T302-PFU	9.525	3.97	0.2	4.4	●	●	●			●	●	●		
	11T304-PFU	9.525	3.97	0.4	4.4	●	●	●			●	●	●		
	11T308-PFU	9.525	3.97	0.8	4.4	●	●	●			●	●	●		
<b>PMU</b> 	DCMT 070202-PMU	6.35	2.38	0.2	2.8	●		■	○		●	●	○		
	070204-PMU	6.35	2.38	0.4	2.8	●		●	●		●	●	●		
	070208-PMU	6.35	2.38	0.8	2.8	●		■	●		○	●	●		
	DCMT 11T302-PMU	9.525	3.97	0.2	4.4	●		■	○		●	●	●		
	11T304-PMU	9.525	3.97	0.4	4.4	●		●	●	○	●	●	●		
	11T308-PMU	9.525	3.97	0.8	4.4	●		●	●	○	●	●	●		
	DCMT 150404-PMU	12.7	4.76	0.4	5.6				○			●			
	150408-PMU	12.7	4.76	0.8	5.6				○		●	●	●		
	150412-PMU	12.7	4.76	1.2	5.6				○			●	●		
<b>PRU</b> 	DCMT 11T304-PRU	9.525	3.97	0.4	4.4				●			●			
	11T308-PRU	9.525	3.97	0.8	4.4				●			●			

● stock standard; ○ non stock standard; ■ stock exhaustion

 finishing
  medium
  roughing

HC: coated carbide

HW: uncoated carbide

HT: Cermet

JP: PVD coating

JC: CVD coating

JU: uncoated

INSERTS

DESCRIPTION					HT			HC					HW	
	IC	T	r	Ød	JU4015	JP5015	JP5025	JC7010	JC7020	JC8015	JC8025	JC9025	JU6010	JU6020
 DCGX 070202-PMN 070204-PMN 070208-PMN DCGX 11T302-PMN 11T304-PMN 11T308-PMN	6.35	2.38	0.2	2.8									●	
	6.35	2.38	0.4	2.8									○	●
	6.35	2.38	0.8	2.8									○	●
	9.525	3.97	0.2	4.4									●	
	9.525	3.97	0.4	4.4									●	●
	9.525	3.97	0.8	4.4									○	●
 SCMT 09T304-PMU 09T308-PMU SCMT 120404-PMU 120408-PMU	9.525	3.97	0.4	4.4	●			●		●	●	●		
	9.525	3.97	0.8	4.4	●			●		●	●	●		
	12.7	4.76	0.4	5.5				●		●	●	●		
	12.7	4.76	0.8	5.5				●		●	●	●		
 SCMT 09T308-PRU SCMT 120408-PRU	9.525	3.97	0.8	4.4				●			●			
	12.7	4.76	0.8	5.5				●			●			
 SCGX 09T304-PMN 09T308-PMN SCGX 120404-PMN 120408-PMN	9.525	3.97	0.4	4.4									○	●
	9.525	3.97	0.8	4.4									○	●
	12.7	4.76	0.4	5.5									○	●
	12.7	4.76	0.8	5.5									○	●
 TCMT 090204-PMU TCMT 110202-PMU 110204-PMU 110208-PMU TCMT 16T304-PMU 16T308-PMU 16T312-PMU TCMT 220408-PMU	5.56	2.38	0.4	2.5	●		■	●		●	●	●		
	6.35	2.38	0.2	2.8	●		■	○		○	●	●		
	6.35	2.38	0.4	2.8	●		■	●		●	●	●		
	6.35	2.38	0.8	2.8	●		■	●		●	●	●		
	9.525	3.97	0.4	4.4	●		■	●		●	●	●		
	9.525	3.97	0.8	4.4	●		■	●	●	●	●	●		
	9.525	3.97	1.2	4.4				●	○	○	●	●		
	12.7	4.76	0.8	5.6				○			●	●		
 TCMT 16T304-PRU 16T308-PRU	9.525	3.97	0.4	4.4				●			●			
	9.525	3.97	0.8	4.4				●			●			
 TCGX 090204-PMN TCGX 110202-PMN 110204-PMN 110208-PMN TCGX 16T302-PMN 16T304-PMN 16T308-PMN	5.56	2.38	0.4	2.5									○	●
	6.35	2.38	0.2	2.8									●	
	6.35	2.38	0.4	2.8									○	●
	6.35	2.38	0.8	2.8									○	●
	9.525	3.97	0.2	4.4									●	
	9.525	3.97	0.4	4.4									○	●
	9.525	3.97	0.8	4.4									○	●
 VBMT 110304-PFU VBMT 160404-PFU 160408-PFU	6.35	3.18	0.4	2.8	●	●	●							
	9.525	4.76	0.4	4.4	●	●	●			●	●	●		
	9.525	4.76	0.8	4.4	●	●	●			●	●	●		
 VBMT 160404-PMU 160408-PMU	9.525	4.76	0.4	4.4	●		●	●		●	●	●		
	9.525	4.76	0.8	4.4	●		●	●		●	●	●		

● stock standard; ○ non stock standard; ■ stock exhaustion

finishing   
 medium   
 roughing

HC: coated carbide

HW: uncoated carbide

HT: Cermet

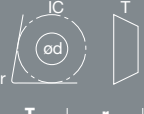




JP: PVD coating

JC: CVD coating

JU: uncoated

# POSITIVE INSERTS SERIES

## INSERTS

DESCRIPTION						HT			HC				HW		
		IC	T	r	Ød	JU4015	JP5015	JP5025	JC7010	JC7020	JC8015	JC8025	JC9025	JU6010	JU6020
PRU	 VBMT 160408-PRU	9.525	4.76	0.8	4.4				●			●			
	 VCMT 110304-PMU	6.35	3.18	0.4	2.8	●		■	●		●	●	●		
PMU	VCMT 160404-PMU	9.525	4.76	0.4	4.4	●		■	●		●	●	●		
	160408-PMU	9.525	4.76	0.8	4.4	●		■	●		●	●	●		
	VCMT 160404-PRU	9.525	4.76	0.4	4.4				○			○			
PRU	160408-PRU	9.525	4.76	0.8	4.4				●			●			
	PMN	 VCGX 110302-PMN	6.35	3.18	0.2	2.8									●
110304-PMN		6.35	3.18	0.4	2.8									○	●
110308-PMN		6.35	3.18	0.8	2.8									○	●
VCGX 160402-PMN		9.525	4.76	0.2	4.4									○	
160404-PMN		9.525	4.76	0.4	4.4									●	●
160408-PMN		9.525	4.76	0.8	4.4									○	●
160412-PMN		9.525	4.76	1.2	4.4										●
VCGX 220530-PMN		12.7	5.56	3.0	5.6									●	●
PMU	 WCMT 12T304-PMU	9.525	3.97	0.4	4.4	●			●		●	●	●		
	12T308-PMU	9.525	3.97	0.8	4.4	●			●		●	●	●		

● stock standard; ○ non stock standard; ■ stock exhaustion



HC: coated carbide

HW: uncoated carbide

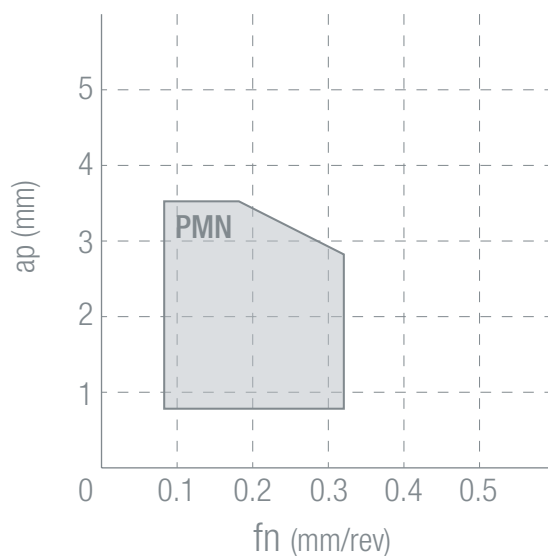
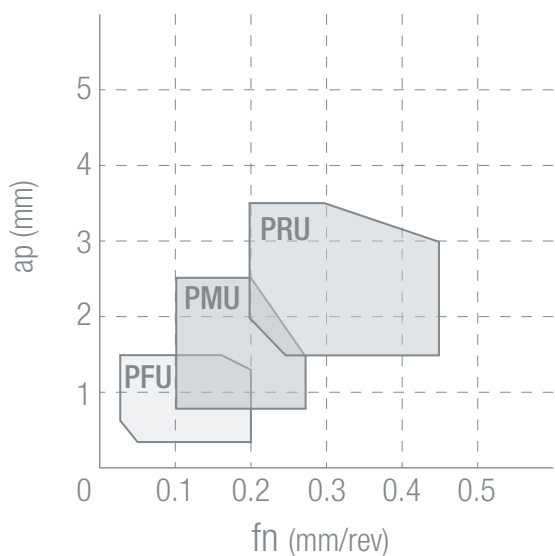
HT: Cermet

JP: PVD coating

JC: CVD coating

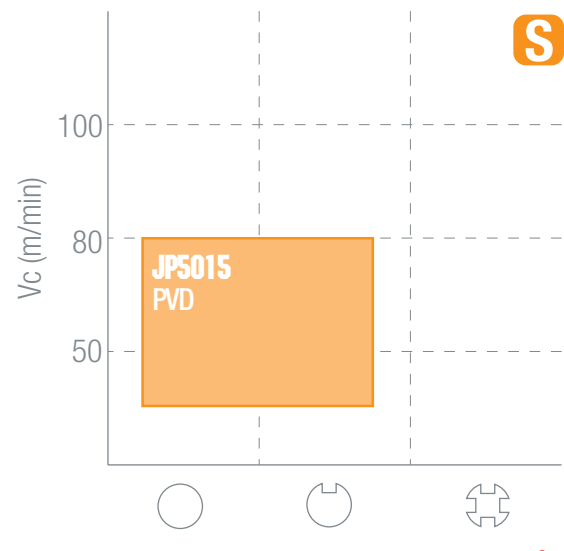
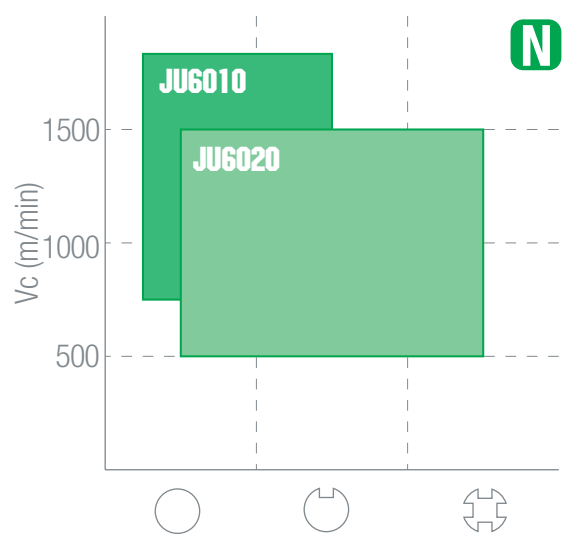
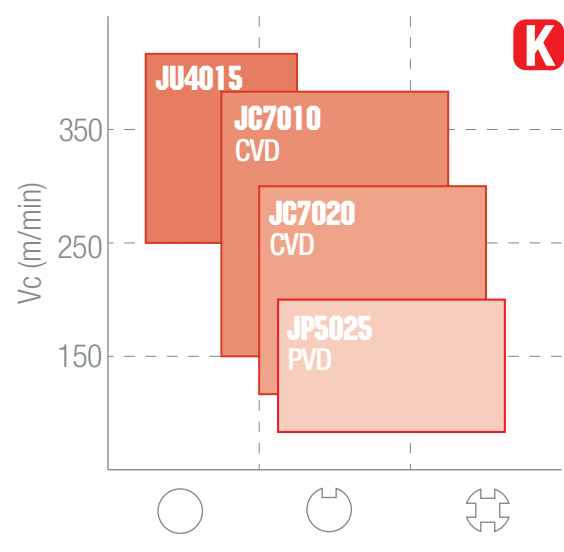
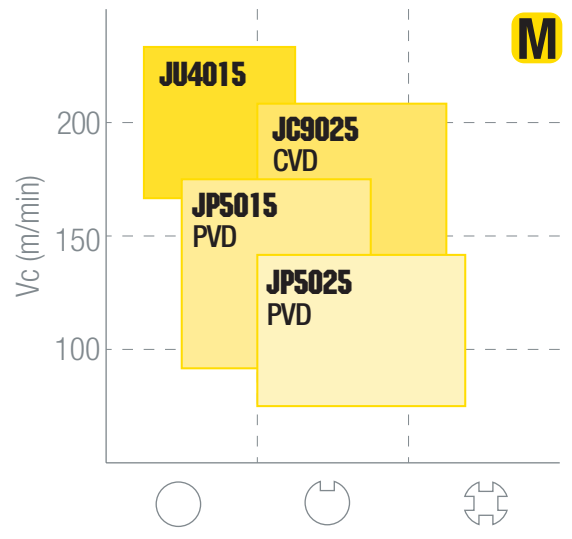
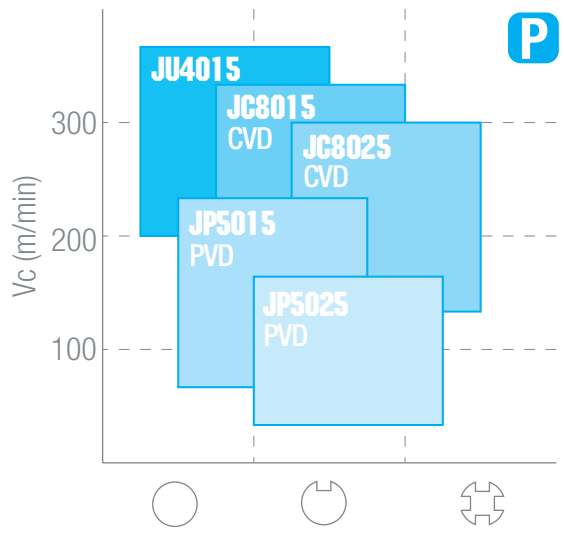
JU: uncoated

## CHIPBREAKERS APPLICATION CHART



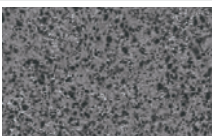
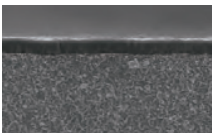
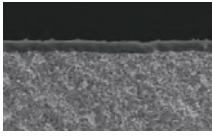
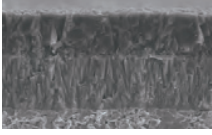
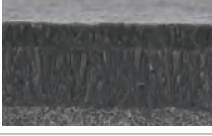
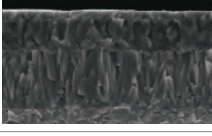
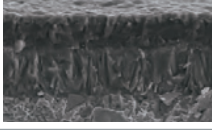
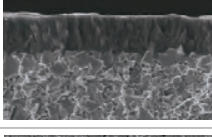
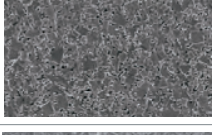
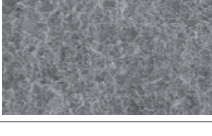


GRADES APPLICATION CHART



# POSITIVE INSERTS SERIES

## GRADES

GRADE	ISO RANGE	MICROSTRUCTURE	DESCRIPTION
<b>JU4015</b> UNCOATED CERMET	<b>P M K</b>		<ul style="list-style-type: none"> <li>✦ Uncoated cermet grade with good wear resistance. Finishing and semi-finishing on ISO P, M and K. Special post sintering treatment to improve cutting edge reliability. Excellent surface roughness.</li> <li>🇮🇹 Grado cermet non rivestito con ottima resistenza all'usura per finitura e semi-finitura su materiali ISO P, M e K. Lo speciale trattamento dei taglienti consente di ottenere ottime rugosità superficiali.</li> </ul>
<b>JP5015</b> CARBIDE PVD	<b>P M S</b>		<ul style="list-style-type: none"> <li>✦ Sub micrograin carbide with PVD coating. New TiAlN coating family to improve wear and heat resistance for finishing and semi finishing on ISO P, M and S.</li> <li>🇮🇹 Metallo duro sub-micrograna con rivestimento PVD a base TiAlN di nuova generazione con ottima resistenza all'usura ed al calore. Consigliato per lavorazioni di finitura e semi-finitura su materiali ISO P, M e S.</li> </ul>
<b>JP5025</b> CARBIDE PVD	<b>P M K</b>		<ul style="list-style-type: none"> <li>✦ Extremely tough sub micrograne carbide with TiAlN base PVD. General purpose on ISO P, M and K at moderate cutting speed.</li> <li>🇮🇹 Metallo duro sub-micrograna estremamente tenace con rivestimento PVD a base TiAlN. Consigliato per lavorazioni generiche e velocità di taglio moderate su materiali ISO P, M e K.</li> </ul>
<b>JG7010</b> CARBIDE CVD	<b>K</b>		<ul style="list-style-type: none"> <li>✦ Micro grain carbide with thick MT-CVD (TiCN+Al<sub>2</sub>O<sub>3</sub>) coating. Special surface treatment to improve reliability. Grey and nodular cast iron machining on continuous and interrupted cut.</li> <li>🇮🇹 Metallo duro micrograna con rivestimento MT-CVD (TiCN+Al<sub>2</sub>O<sub>3</sub>) di elevato spessore e speciale trattamento superficiale. Indicato per lavorazioni ISO K sia in condizioni di taglio continuo che interrotto.</li> </ul>
<b>JG7020</b> CARBIDE CVD	<b>K</b>		<ul style="list-style-type: none"> <li>✦ Micro grain carbide with high toughness and thick MT-CVD (TiCN+Al<sub>2</sub>O<sub>3</sub>) coating. First choice for cast iron difficult machining.</li> <li>🇮🇹 Metallo duro micrograna ad elevata tenacità con rivestimento MT-CVD (TiCN+Al<sub>2</sub>O<sub>3</sub>) di elevato spessore. Consigliato per lavorazioni particolarmente gravose di ghisa grigia e sferoidale (ISO K).</li> </ul>
<b>JG8015</b> CARBIDE CVD	<b>P</b>		<ul style="list-style-type: none"> <li>✦ Carbide grade with high wear resistance MT-CVD (TiCN+Al<sub>2</sub>O<sub>3</sub>+TiN). High cutting speed and stable machining for free cutting steel and alloy steel.</li> <li>🇮🇹 Metallo duro estremamente resistente all'usura con rivestimento MT-CVD (TiCN+Al<sub>2</sub>O<sub>3</sub>+TiN). Applicabile su acciaio al carbonio ed acciaio legato (ISO P) in condizioni stabili e velocità di taglio elevate.</li> </ul>
<b>JG8025</b> CARBIDE CVD	<b>P</b>		<ul style="list-style-type: none"> <li>✦ Carbide substrate with good toughness. MT-CVD (TiCN+Al<sub>2</sub>O<sub>3</sub>+TiN) coating. Suitable for general purpose on ISO P even on interrupted cut.</li> <li>🇮🇹 Substrato di metallo duro con ottima tenacità abbinato ad un rivestimento MT-CVD (TiCN+Al<sub>2</sub>O<sub>3</sub>+TiN). Consigliato per uso generico su materiali ISO P anche in condizioni di taglio interrotto.</li> </ul>
<b>JG9025</b> CARBIDE CVD	<b>M</b>		<ul style="list-style-type: none"> <li>✦ Tough carbide substrate with thin MT-CVD (TiCN+TiN) coating. Medium roughing application on stainless steel (ISO M) even on light interrupted cut.</li> <li>🇮🇹 Substrato di metallo duro tenace con sottile rivestimento MT-CVD (TiCN+TiN) e speciale trattamento di spazzolatura. Consigliato per semi-sgrossatura di acciaio inossidabile.</li> </ul>
<b>JU6010</b> UNCOATED CARBIDE	<b>N</b>		<ul style="list-style-type: none"> <li>✦ Hard micrograin carbide for an outstanding wear resistance. First choice for non-ferrous material (ISO N). High cutting speed and stable machining.</li> <li>🇮🇹 Metallo duro micrograna ad elevata durezza per garantire un'eccezionale resistenza all'usura. Consigliato per lavorazione di materiali non ferrosi (ISO N) ad elevata velocità e condizioni stabili.</li> </ul>
<b>JU6020</b> UNCOATED CARBIDE	<b>N</b>		<ul style="list-style-type: none"> <li>✦ Fine grain carbide for non-ferrous material (ISO N). From finishing to roughing even in light interrupted cut.</li> <li>🇮🇹 Metallo duro a grana fine per lavorazione generica di materiali non ferrosi (ISO N) dalla finitura alla sgrossatura anche in condizioni di taglio leggermente interrotto.</li> </ul>