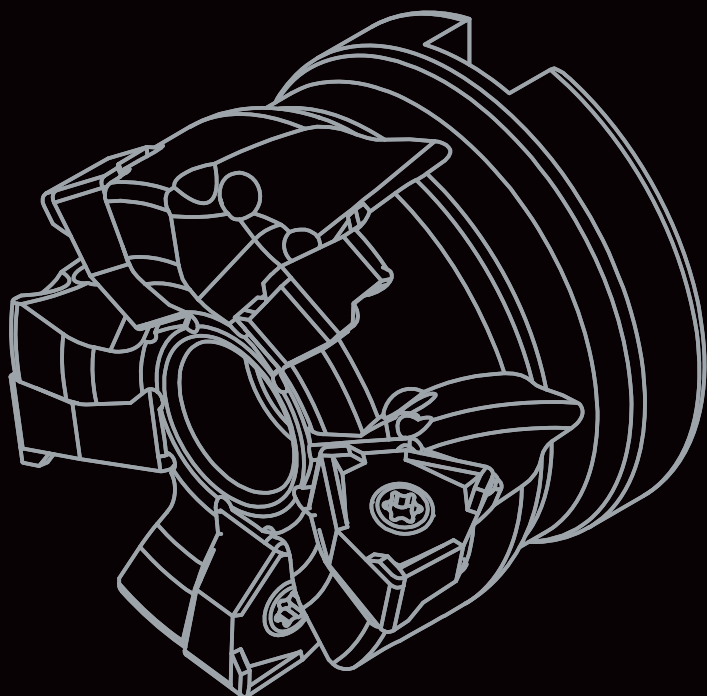


UPDATE
2017



MIKOTTOOLS

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POSITIVE INSERTS SERIES

Think positive with Nikko!

ISO

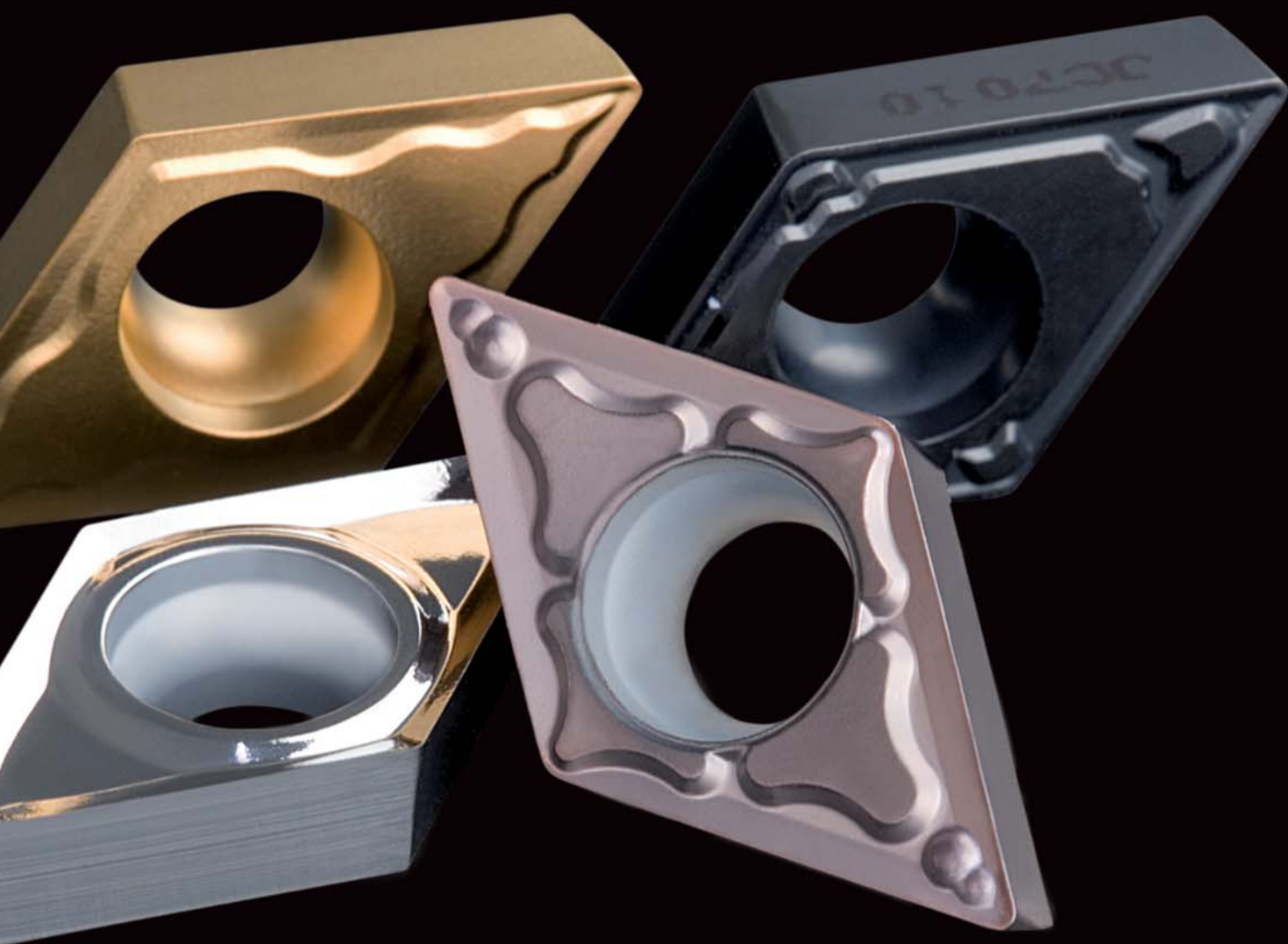
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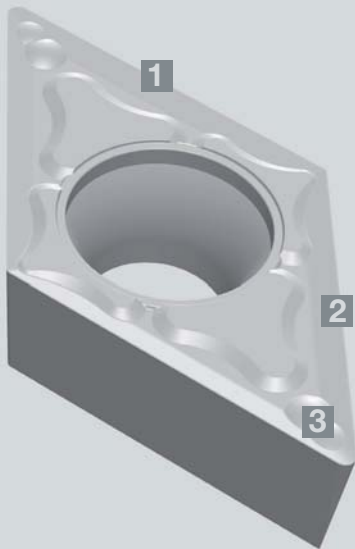
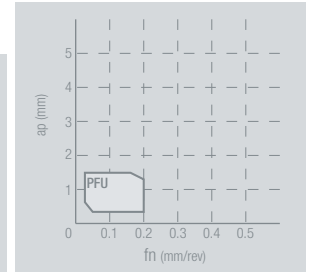
nikkoTOOLS

POSITIVE INSERTS SERIES

P M S

PFU CHIPBREAKER

NEW



1

✦ SHARP CUTTING EDGE

Low cutting force and excellent surface finishing

🇮🇹 TAGLIENTE VIVO

Azione di taglio dolce e ottima finitura superficiale

🇩🇪 SCHNEIDECKENRADIUS

Sanfte Schneidwirkung und hervorragende Oberflächengüte

🇫🇷 ARETE DE COUPE VIVE

Action de coupe douce et excellent état de surface

🇪🇸 LADO DE CORTE AGUDO

Baja fuerza de corte y excelente acabado superficial

🇷🇺 ОСТРАЯ РЕЖУЩАЯ КРОМКА

Низкое усилие резания и превосходная чистота поверхности.

2

✦ DOUBLE RAKE ANGLE

Good balance between strength and sharpness of the cutting edge

🇮🇹 DOPPIO ANGOLO DI SPOGLIA

Buona combinazione tra taglientezza e robustezza del filo tagliente

🇩🇪 DOPPELTE FREIFLÄCHE

Gute Kombination von Schärfe und Langlebigkeit der Schneidkante

🇫🇷 DOUBLE ANGLE DE DÉPOUILLE

Bonne combinaison entre le tranchant et la force de l'arête de coupe

🇪🇸 DOBLE ÁNGULO DE CORTE

Buen equilibrio entre dureza y agudez del lado de corte

🇷🇺 ДВОЙНОЙ ПЕРЕДНИЙ УГОЛ

Отличное соотношение между прочностью и остротой режущей кромки.

3

✦ SPECIAL DOUBLE DOTS GEOMETRY

Excellent chip control with low depth of cut

🇮🇹 GEOMETRIA A DOPPIO RILIEVO

Ottimo controllo truciolo a basse profondità di passata

🇩🇪 DOPPELTE GEOMETRIE

Hervorragende Spankontrolle bei geringer Schnitttiefe

🇫🇷 GÉOMÉTRIE À DOUBLE RELIEF

Contrôle optimal du copeau dans les passes peu profondes

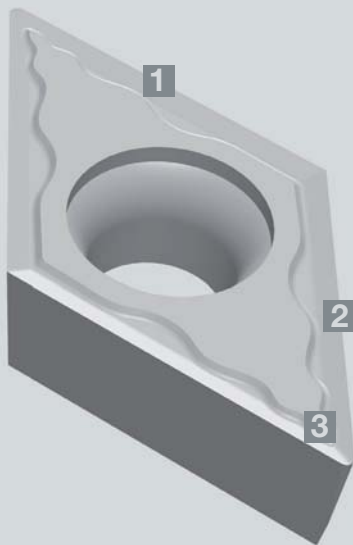
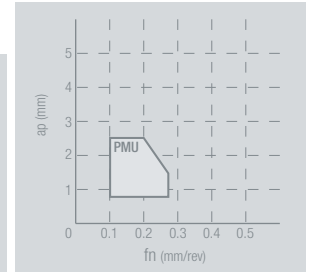
🇪🇸 GEOMETRIA CON DOBLE RELIEVE

Excelente control de viruta a poca profundidad de corte

🇷🇺 СПЕЦИАЛЬНАЯ ДВУХТОЧЕЧНАЯ ГЕОМЕТРИЯ

Превосходный контроль стружкообразования при малых глубинах резания.

PMU CHIPBREAKER



1

- ✦ UNIVERSAL CHIPBREAKER
First choice for general purpose
- 🇮🇹 TAGLIENTE UNIVERSALE
Prima scelta per impiego generico
- 🇩🇪 UNIVERSAL SPANBRECHER
Erste Wahl für allgemeine Anwendung
- 🇫🇷 BRISE-COPEAUX UNIVERSEL
Premier choix pour des emplois génériques
- 🇪🇸 ROMPEVIRUTAS UNIVERSAL
Primera elección para uso general
- 🇷🇺 УНИВЕРСАЛЬНЫЙ СТРУЖКОЛОМ
Первый выбор для общего применения.

2

- ✦ DOUBLE RAKE ANGLE
Good balance between strength and sharpness of the cutting edge
- 🇮🇹 DOPPIO ANGOLO DI SPOGLIA
Buona combinazione tra taglientezza e robustezza del filo tagliente
- 🇩🇪 DOPPELTE FREIFLÄCHE
Gute Kombination von Schärfe und Langlebigkeit der Schneidkante
- 🇫🇷 DOUBLE ANGLE DE DÉPOUILLE
Bonne combinaison entre le tranchant et la force de l'arête de coupe
- 🇪🇸 DOBLE ÁNGULO DE CORTE
Buen equilibrio entre dureza y agudez del lado de corte
- 🇷🇺 ДВОЙНОЙ ПЕРЕДНИЙ УГОЛ
Отличное соотношение между прочностью и остротой режущей кромки.

3

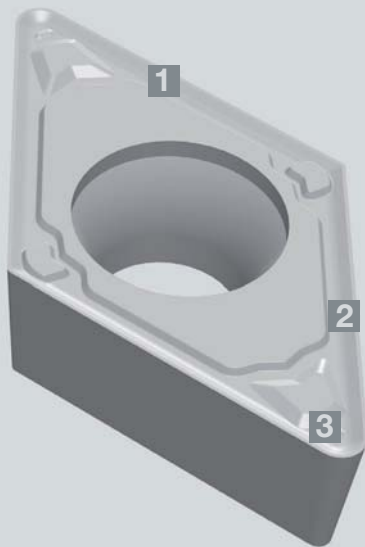
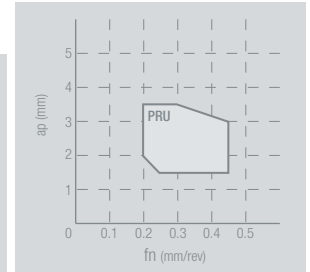
- ✦ WAVE GEOMETRY
Excellent chip control even in case of variable depth of cut
- 🇮🇹 GEOMETRIA ONDULATA
Ottimo controllo truciolo anche con asportazioni variabili
- 🇩🇪 GEWELLTE GEOMETRIE
Gute Spankontrolle auch mit variabler Spanabfuhr
- 🇫🇷 GÉOMÉTRIE ONDULATOIRE
Contrôle optimal du copeau aussi dans les enlèvements variables
- 🇪🇸 GEOMETRÍA ONDULADA
Excelente control de viruta incluso con variable profundidad de corte
- 🇷🇺 ВОЛНИСТАЯ ГЕОМЕТРИЯ
Превосходный контроль стружкообразования даже при переменной глубине резания.

POSITIVE INSERTS SERIES

P K

PRU CHIPBREAKER

NEW



1

✦ REINFORCED CUTTING EDGE

First choice for difficult operations and interrupted cut

🇮🇹 TAGLIANTE RINFORZATO

Consigliato per lavorazioni gravose e taglio interrotto

🇩🇪 VERSTÄRKT SCHNEIDE

Empfohlen für die Schwerzerspannung und unterbrochenen Schnitt

🇫🇷 ARETE RENFORCÉE

Conseillé pour des opérations difficiles et coupe interrompue

🇪🇸 LADO DE CORTE REFORZADO

Recomendado para operaciones difíciles y cortes interrumpidos

🇷🇺 УСИЛЕННАЯ РЕЖУЩАЯ КРОМКА

Первый выбор для черновых операций и прерывистого резания.

2

✦ 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

🇩🇪 GROSSE UND NIEDRIGE NUTEN

Niedrige Schnittkräfte auch bei hoher Spanabfuhr

🇫🇷 GORGES AMPLES ET PEU PROFONDES

Forces de coupe basses aussi dans des enlèvements élevés

🇪🇸 RANURAS ANCHAS Y POCO PROFUNDAS

Baja fuerza de corte incluso a gran profundidad de corte

🇷🇺 ШИРОКИЕ И НЕГЛУБОКИЕ КАНАВКИ

Низкое усилие резания даже при большой глубине резания.

3

✦ 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

🇩🇪 3D-GEOMETRIE IM BEREICH DES RADIUS

Nut mit variabler Tiefe um Vibrationen zu reduzieren

🇫🇷 GEOMETRIE 3D DANS L'AIRE DU RAYON

Gorge avec une profondeur variable pour réduire les vibrations

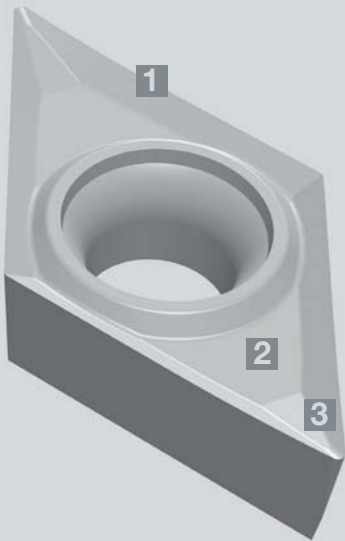
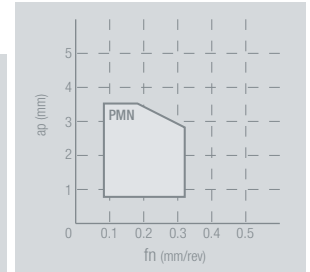
🇪🇸 GEOMETRIA 3D EN LA ZONA DE RADIO

Ranura con profundidad variable para reducir vibraciones

🇷🇺 СПЕЦИАЛЬНАЯ 3D ГЕОМЕТРИЯ ЗОНЫ РАДИУСА

Переменная глубина канавки для уменьшения вибраций.

PMN CHIPBREAKER



1

✦ SHARP EDGE

Excellent surface finishing without burrs

🇮🇹 TAGLIENTE AFFILATO E RETTIFICATO

Ottima finitura superficiale e riduzione delle bave

🇩🇪 SCHARFE SCHNEIDE

Sehr gute Oberflächenqualität und Verringerung der Grate

🇫🇷 ARETE AIGUISÉE ET RECTIFIÉE

Etat de surface optimal et réduction des bavures

🇪🇸 BORDE AFILADO Y RECTIFICADO

Excelente acabado superficial y reducción de las rebabas

🇷🇺 ОСТРАЯ КРОМКА

Превосходная чистовая поверхность без заусенцев.

2

✦ POLISHED SURFACE

To reduce built-up edge

🇮🇹 SUPERFICIE LUCIDATA

Riduce la formazione del tagliente di riporto

🇩🇪 POLIERTE OBERFLÄCHE

Es reduziert die Bildung von Aufbauschneiden

🇫🇷 SUPERFICE POLIE

Réduit la formation d'arêtes de coupe rapportées

🇪🇸 SUPERFÍCIE PULIDA

Reduce la formación de acúmulo en el borde

🇷🇺 ПОЛИРОВАННАЯ ПОВЕРХНОСТЬ

Для предотвращения склонности к наросту на режущей кромке.

3

✦ WIDE GROOVE

Excellent chip evacuation at high cutting speed

🇮🇹 GOLA AMPIA

Ottimo deflusso del truciolo ad elevate velocità di taglio

🇩🇪 GROSSE NUT

Große Spanabfuhr mit hoher Schnittgeschwindigkeit

🇫🇷 GORGE AMPLE

Evacuation optimale du copeau à des vitesses de coupe élevées

🇪🇸 RANURAS ANCHAS

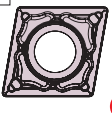
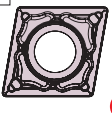




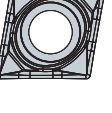
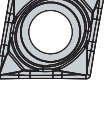
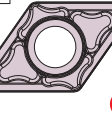
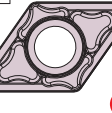
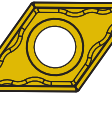
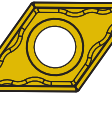


Excelente evacuación de viruta a alta velocidad

🇷🇺 ШИРОКАЯ КАНАВКА

Превосходный отвод стружки при высокой скорости резания.

POSITIVE INSERTS SERIES

INSERTS

DESCRIPTION	IC	T	r	Ød	HT			HC					HW				
					JU4015	JP5015	JP5025	JC7010	JC7020	JC8015	JC8025	JC9025	JU6010	JU6020			
 PFU		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	●	●	●			●	●	●			
 PMU		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			■	●	●	●	●	●			
 PRU		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				●			●				
											●			●			
 PMN		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										●	●
 PFU		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	●	●	●			●	●	●			
 PMU		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							●	●			
 PRU		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

HT: Cermet

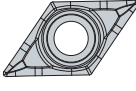



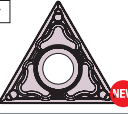


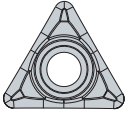
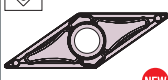
HW: uncoated carbide

JC: CVD coating

JP: PVD coating

JU: uncoated

INSERTS

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

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

 finishing
  medium
  roughing

HC: coated carbide

HT: Cermet

HW: uncoated carbide





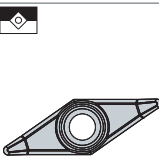

JC: CVD coating

JP: PVD coating

JU: uncoated

POSITIVE INSERTS SERIES

INSERTS

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

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

 finishing
  medium
  roughing

HC: coated carbide

HT: Cermet

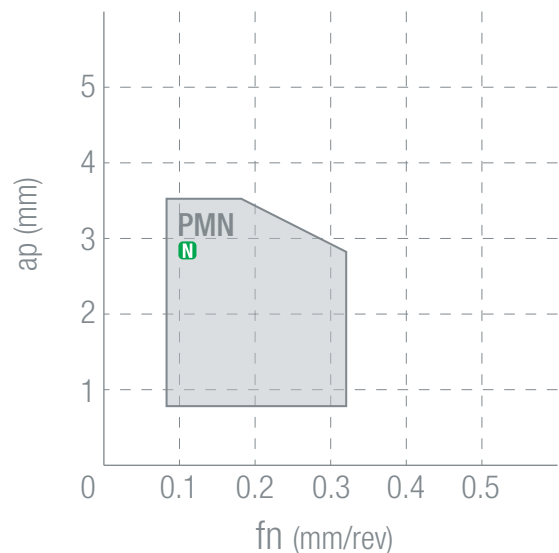
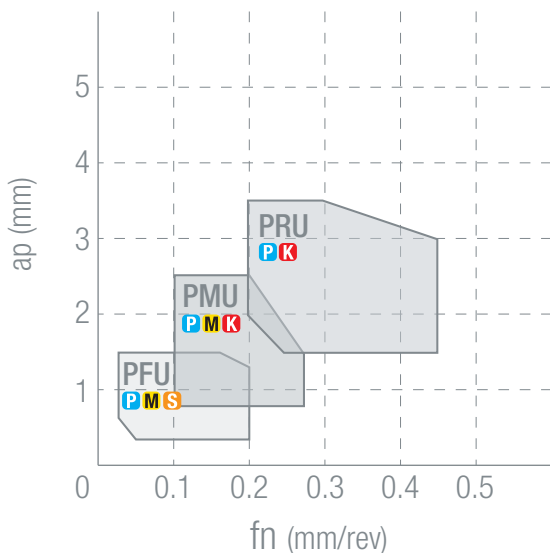
HW: uncoated carbide

JC: CVD coating

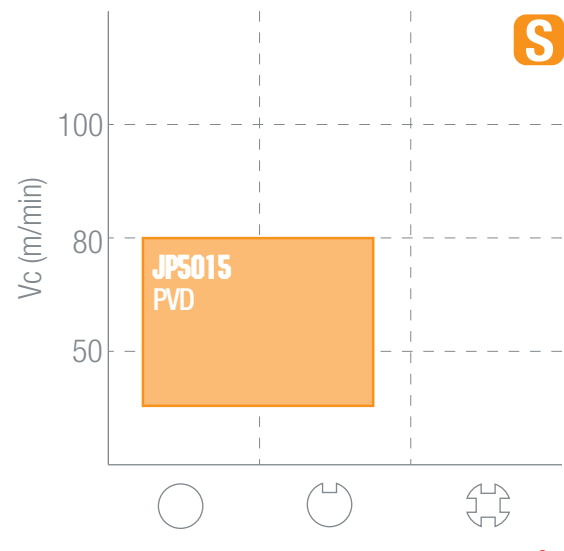
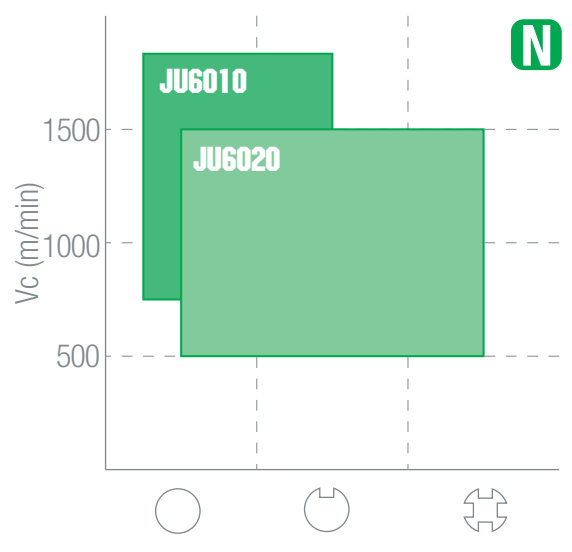
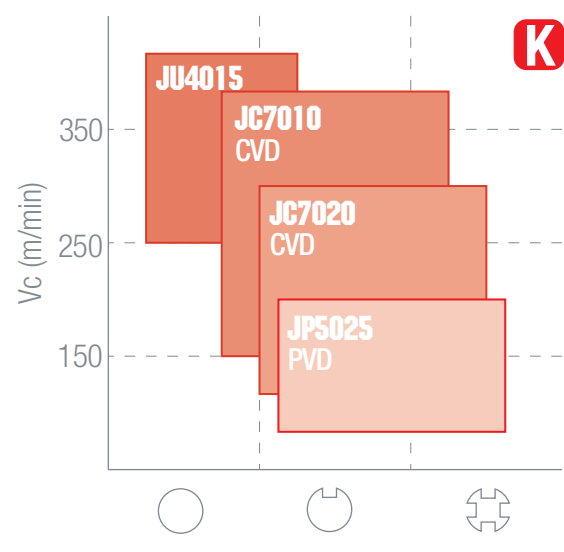
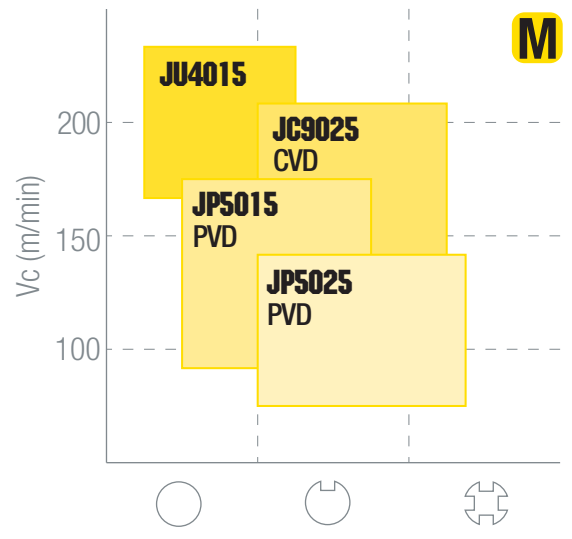
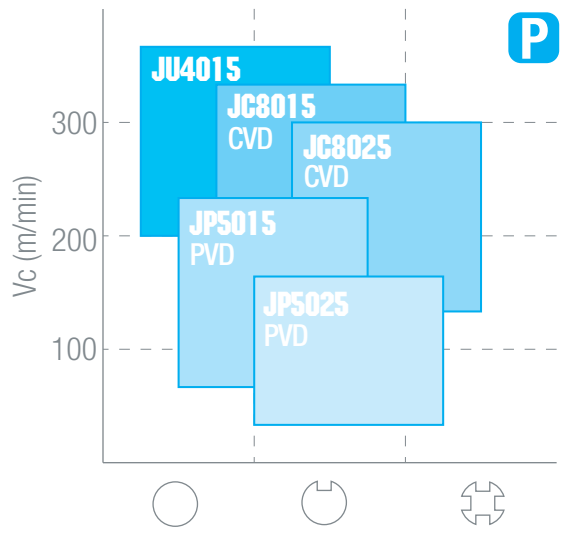
JP: PVD coating

JU: uncoated

CHIPBREAKERS APPLICATION CHART

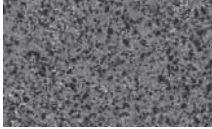
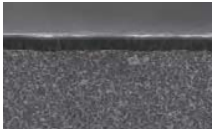
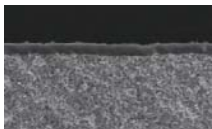



GRADES APPLICATION CHART



POSITIVE INSERTS SERIES

GRADES

GRADE	ISO RANGE	MICROSTRUCTURE	DESCRIPTION
JU4015 UNCOATED CERMET	P M K		<ul style="list-style-type: none"> ✦ 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. 🇮🇹 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. 🇩🇪 Unbeschichtete Cermetsorte mit ausgezeichneter Verschleißfestigkeit für Schlichten und Schruppen von ISO P, M und K Materialien. Die spezielle Behandlung der Schneidkanten ermöglicht eine hohe Oberflächenrauheit. 🇫🇷 Grade cermet sans revêtement avec une résistance optimale à l'usure pour la finition et semi-finition sur des matières ISO, P, M et K. Le traitement spécial des arêtes de coupe permet d'obtenir des rugosités de surfaces optimales. 🇪🇸 Grado cermet no recubierto con excelente resistencia al desgaste, perfecto para Acabado y Semi-Acabado en materiales ISO P, M e K. El tratamiento especial de los bordes de corte permite obtener excelente rugosidades superficiales. 🇷🇺 Не покрытый керамометаллический сплав с хорошей износостойкостью. Чистовые и получистовые операции по ISO P, M и K. Специальная обработка после спекания для повышения надежности режущих кромок. Отличная шероховатость поверхности.
JP5015 CARBIDE PVD	P M S		<ul style="list-style-type: none"> ✦ 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. 🇮🇹 Metallo duro sub-micrograna con rivestimento PVD a base TiAlN di nuova generazione con ottima resistenza all'usura e al calore. Consigliato per lavorazioni di finitura e semi-finitura su materiali ISO P, M e S. 🇩🇪 Feinstkornhartmetall mit einer PVD Beschichtung auf TiAlN Basis mit exzellenter Resistenz von Wärme. Empfohlen für Schlichten und Schruppen von ISO P, M und S Materialien. 🇫🇷 Acier dur sub-micro grain avec revêtement PVD à base TiAlN de nouvelle génération avec une résistance optimale à l'usure et à la chaleur. Conseillé pour des opérations de finition et semi-finition sur des matières ISO P, M et S. 🇪🇸 Metal duro sub-micrograno con revestimiento PVD a base TiAlN de nueva generación, con excelente resistencia al desgaste y al calor. Recomendado para Acabado y Semi-Acabado en materiales ISO P, M y S. 🇷🇺 Сверх мелкозернистый твердый сплав с PVD покрытием. Новое семейство TiAlN покрытий, направленное на улучшение износостойкости и термостойкости при чистовых и получистовых операциях резания материалов по ISO P, M и S.
JP5025 CARBIDE PVD	P M K		<ul style="list-style-type: none"> ✦ Extremely tough sub micrograne carbide with TiAlN base PVD. General purpose on ISO P, M and K at moderate cutting speed. 🇮🇹 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. 🇩🇪 Feinstkornhartmetall mit extrem harter PVD-Beschichtung auf TiAlN Basis. Empfohlen für allgemeine und moderate Schnittgeschwindigkeit, für Bearbeitung von ISO P, M und K Materialien. 🇫🇷 Acier dur sub-micro grain extrêmement tenace avec revêtement PVD à base TiAlN. Conseillé pour des opérations génériques et des vitesses de coupe modérées sur des matières ISO P, M et K. 🇪🇸 Metal duro sub-micrograno extremadamente tenaz, con revestimiento PVD a base TiAlN. Recomendado para uso general y velocidades de corte moderadas sobre materiales ISO P, M y K. 🇷🇺 Суперпрочный мелкозернистый твердый сплав с TiAlN покрытием, полученным методом PVD. Основной выбор при обработке материалов ISO P, M и K на средней скорости резания.
JG7010 CARBIDE CVD	K		<ul style="list-style-type: none"> ✦ Micro grain carbide with thick MT-CVD (TiCN+Al₂O₃) coating. Special surface treatment to improve reliability. Grey and nodular cast iron machining on continuous and interrupted cut. 🇮🇹 Metallo duro micrograna con rivestimento MT-CVD (TiCN+Al₂O₃) di elevato spessore e speciale trattamento superficiale. Indicato per lavorazioni ISO K sia in condizioni di taglio continuo che interrotto. 🇩🇪 Feinstkorn-Hartmetall mit MT-CVD-Beschichtung (TiCN + Al₂O₃) und spezieller Oberflächenbehandlung. Empfohlen für ISO K. Geeignet für Glatten und unterbrochenen Schnitt. 🇫🇷 Acier dur micro grain avec revêtement MT-CVD (TiCN+Al₂O₃). Traitement de surface spécial apte à des opérations ISO K dans des conditions de coupe continue et interrompue. 🇪🇸 Metal duro micrograno con revestimiento MT-CVD (TiCN+Al₂O₃) de elevado espesor y especial tratamiento superficial. Indicado para mecanizar ISO K sea en condiciones de corte continuo que interrumpido. 🇷🇺 Мелкозернистый твердый сплав с многослойным MT-CVD (TiCN+Al₂O₃) покрытием. Специальная обработка поверхности для повышения надежности. Обычная и прерывистая обработка серого чугуна и чугуна с шаровидным графитом.

GRADES

GRADE	ISO RANGE	MICROSTRUCTURE	DESCRIPTION
JC7020 CARBIDE CVD	K		<ul style="list-style-type: none"> ✦ Micro grain carbide with high toughness and thick MT-CVD (TiCN+Al₂O₃) coating. First choice for cast iron difficult machining. 🇮🇹 Metallo duro micrograna ad elevata tenacità con rivestimento MT-CVD (TiCN+Al₂O₃) di elevato spessore. Consigliato per lavorazioni particolarmente gravose di ghisa grigia e sferoidale (ISO K). 🇩🇪 Feinstkorn-Hartmetall für mit dicker MT-CVD-Beschichtung (TiCN + Al₂O₃). Empfohlen für schwere Bearbeitung von Grauguss und Sphäroguss (ISO K). 🇫🇷 Acier dur micro grain avec une ténacité élevée et revêtement MT-CVD (TiCN+Al₂O₃) à épaisseur élevée. Conseillé pour des opérations très lourdes de fonte grise et sphéroïdal 🇪🇸 Metal duro micrograno con elevada tenacidad, con revestimiento MT-CVD (TiCN+Al₂O₃) de elevado espesor. Recomendado para elaboraciones difíciles de fundición (ISO K). 🇷🇺 Мелкозернистый твердый сплав с многослойным MT-CVD (TiCN+Al₂O₃) покрытием. Первый выбор при нестабильной обработке серого чугуна.
JC8015 CARBIDE CVD	P		<ul style="list-style-type: none"> ✦ Carbide grade with high wear resistance MT-CVD (TiCN+Al₂O₃+TiN). High cutting speed and stable machining for free cutting steel and alloy steel. 🇮🇹 Metallo duro estremamente resistente all'usura con rivestimento MT-CVD (TiCN+Al₂O₃+TiN). Applicabile su acciaio al carbonio e acciaio legato (ISO P) in condizioni stabili e velocità di taglio elevate. 🇩🇪 Extrem verschleißfestes Hartmetall mit MT-CVD-Beschichtung (TiCN + Al₂O₃ + TiN). Anwendbar auf Kohlenstoffstahl und legiertem Stahl (ISO P) in einem stabilen Zustand und hohen Schnittgeschwindigkeiten. 🇫🇷 Acier dur extrêmement résistant à l'usure avec un revêtement MT-CVD (TiCN+Al₂O₃+TiN). Utilisation sur le carbone et sur l'acier allié (ISO P) dans des conditions stables et avec des vitesses de coupe élevées. 🇪🇸 Metal duro extremadamente resistente al desgaste con revestimiento MT-CVD (TiCN+Al₂O₃+TiN). Aplicable en acero al carbono y acero aleado (ISO P) en condiciones estables y velocidad de corte elevadas. 🇷🇺 Твердый сплав с высокой износостойкостью MT-CVD (TiCN+Al₂O₃+TiN). Высокая скорость резания и стабильное резание при обработке обычных и низколегированных сталей.
JC8025 CARBIDE CVD	P		<ul style="list-style-type: none"> ✦ Carbide substrate with good toughness. MT-CVD (TiCN+Al₂O₃+TiN) coating. Suitable for general purpose on ISO P even on interrupted cut. 🇮🇹 Substrato di metallo duro con ottima tenacità abbinato ad un rivestimento MT-CVD (TiCN+Al₂O₃+TiN). Consigliato per uso generico su materiali ISO P anche in condizioni di taglio interrotto. 🇩🇪 Metallsubstrat mit ausgezeichneter Zähigkeit in Kombination mit einer MT-CVD-Beschichtung (TiCN + Al₂O₃ + TiN). Empfohlen für die allgemeine Verwendung von ISO P Materialien auch bei unterbrochenem Schnitt. 🇫🇷 Substrat d'acier dur avec une ténacité optimale combinée avec un revêtement MT-CVD (TiCN+Al₂O₃+TiN). Conseillé pour un emploi générique sur des matières ISO P et, pour des conditions de coupe interrompue. 🇪🇸 Substrato de metal duro con excelente tenacidad y revestimiento MT-CVD (TiCN+Al₂O₃+TiN). Recomendado para uso general en materiales ISO P incluso en condiciones de corte interrumpido. 🇷🇺 Основа из твердого сплава с высокой ударпрочностью. MT-CVD (TiCN+Al₂O₃+TiN) покрытие. Подходит для основного применения при обработке сталей ISO P даже при прерывистом резании.
JC9025 CARBIDE CVD	M		<ul style="list-style-type: none"> ✦ Tough carbide substrate with thin MT-CVD (TiCN+TiN) coating. Medium roughing application on stainless steel (ISO M) even on light interrupted cut. 🇮🇹 Substrato di metallo duro tenace con sottile rivestimento MT-CVD (TiCN+TiN) e speciale trattamento di spazzolatura. Consigliato per semi-sgrossatura di acciaio inossidabile. 🇩🇪 Zäher Metallsubstrat mit einer dünnen MT-CVD-Beschichtung (TiCN + TiN) und spezielle Bürstenbehandlung. Empfohlen für Edelstahl und mittlere Bearbeitung. 🇫🇷 Substrat d'acier dur tenace avec un fin revêtement MT-CVD (TiCN+TiN) et traitement spécial de brosseage. Conseillé pour l'ébauche de l'acier inoxydable. 🇪🇸 Substrato de metal duro tenaz con un fino revestimiento MT-CVD (TiCN+TiN) y especial tratamiento de cepillado. Recomendado para semi-desbaste de acero inox. 🇷🇺 Прочная твердосплавная основа с многослойным MT-CVD (TiCN+TiN) покрытием. Полуцистовая обработка нержавеющей сталей (ISO M) даже при незначительном прерывистом резании.

POSITIVE INSERTS SERIES

GRADES

GRADE	ISO RANGE	MICROSTRUCTURE	DESCRIPTION
JU6010 UNCOATED CARBIDE	N		<p>✦ Hard micrograin carbide for an outstanding wear resistance. First choice for non-ferrous material (ISO N). High cutting speed and stable machining.</p> <p>🇮🇹 Metallo duro micrograna ad elevata durezza per garantire un'eccezionale resistenza all'usura. Consigliato per la lavorazione di materiali non ferrosi (ISO N) ad elevata velocità e condizioni stabili.</p> <p>🇩🇪 Feinstkornhartmetall für hohe Härte für außergewöhnliche Verschleißfestigkeit. Empfohlen zur Bearbeitung von NE-Materialien (ISO N) mit hoher Geschwindigkeit und stabilen Bedingungen.</p> <p>🇫🇷 Acier dur micro grain d'une dureté élevée, pour garantir une résistance exceptionnelle à l'usure. Conseillé pour des opérations sur des matières non ferreuses (ISO N) à des vitesses élevées et dans des conditions stables.</p> <p>🇪🇸 Metal duro micrograno con alta durezza para garantizar una excelente resistencia al desgaste. Aconsejado para mecanizado de materiales no ferrosos (ISO N) a alta velocidad y con condiciones estables.</p> <p>🇷🇺 Мелкозернистый твердый сплав с улучшенной стойкостью на износ. Первый выбор для цветных металлов (ISO N). Высокая скорость резания и стабильное резание.</p>
JU6020 UNCOATED CARBIDE	N		<p>✦ Fine grain carbide for non-ferrous material (ISO N). From finishing to roughing even in light interrupted cut.</p> <p>🇮🇹 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.</p> <p>🇩🇪 Feinstkornhartmetall für allgemeine Bearbeitung von NE-Materialien (ISO N) von Schlichten bis Schruppen auch bei leicht unterbrochenen Schnitt.</p> <p>🇫🇷 Acier dur à grain fin pour des opérations génériques de matériaux non ferreux (ISO N) de la finition à l'ébauche et, dans des conditions de coupe légèrement interrompue.</p> <p>🇪🇸 Metal duro a grano fino para uso general de materiales No ferrosos (ISO N), desde el acabado hasta el desbaste incluso en condiciones de corte ligeramente interrumpidas.</p> <p>🇷🇺 Твердый сплав для цветных металлов (ISO N). Применяется при чистовой и черновой обработке даже при незначительном прерывистом резании.</p>

JC8005 SERIES

Simply the best for high speed turning of steel.

ISO



P

- carbide P05
- CVD coating





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JC8005 SERIES

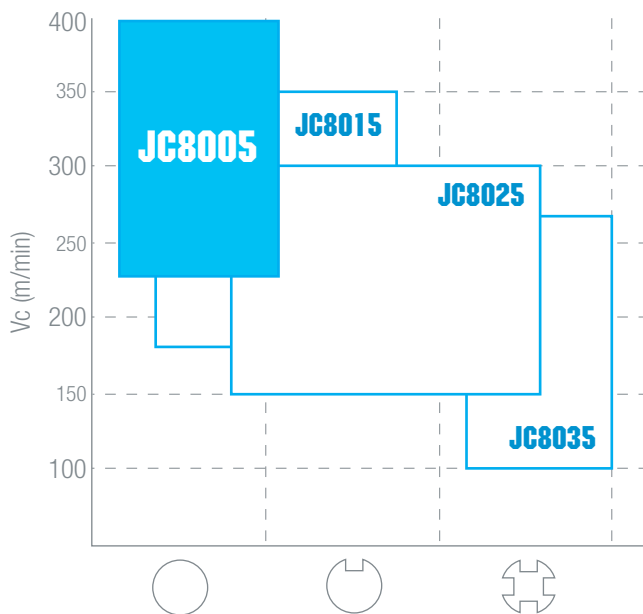
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		120412-NUP ●
		120416-NUP ^{NEW} ●
NUP		DNMG 150604-NUP ●
		150608-NUP ●
		150612-NUP ●

● stock standard

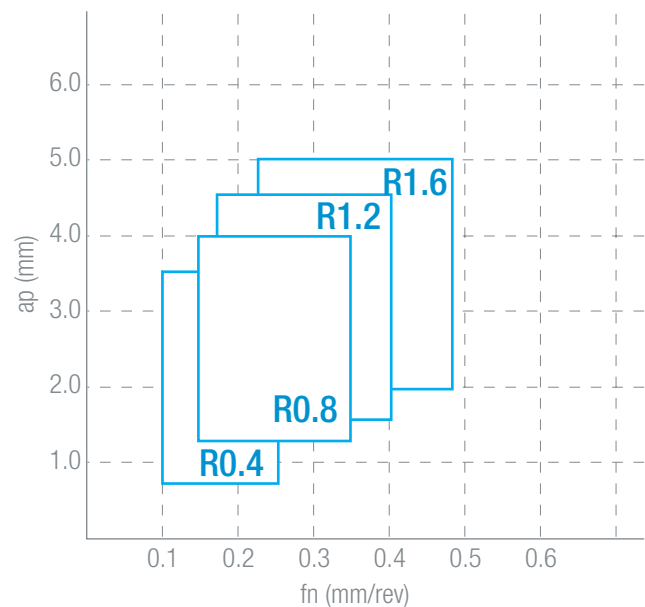
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		080416-NUP ^{NEW} ●

● stock standard

GRADE APPLICATION CHART



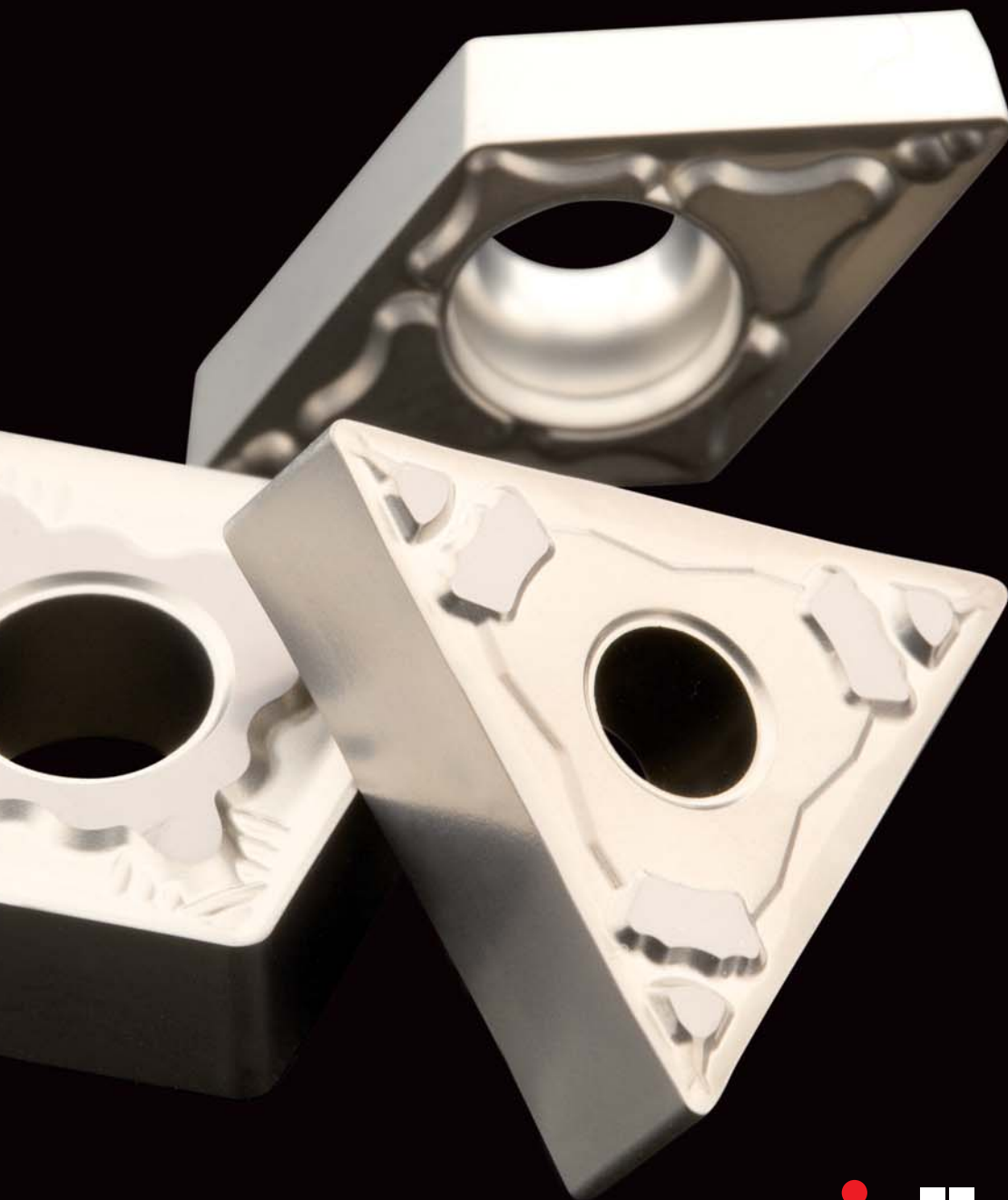
CHIPBREAKER APPLICATION CHART



CERMET JU4015

The best choice for high speed finishing.

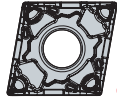

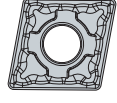
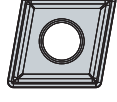

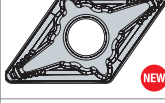


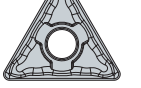
ISO




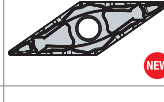

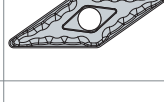


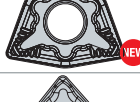
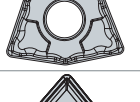

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CERMET JU4015

NEGATIVE

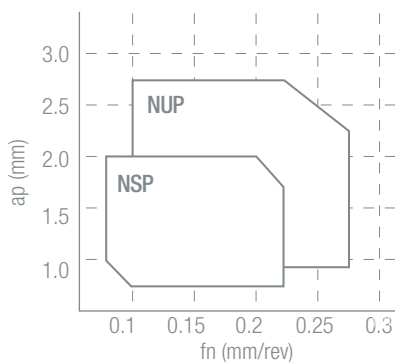
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		CNMG 120404-NSP	●
		120408-NSP	●
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		090308-NUP	●
		CNMG 120404-NUP	●
		120408-NUP	●
NMP		CNMG 120408-NMP	■
NMM		CNMG 120404-NMM	■
		120408-NMM	■
NSP		DNMG 110404-NSP	●
		110408-NSP	●
		DNMG 150604-NSP	●
		150608-NSP	●
NUP		DNMG 110404-NUP	●
		110408-NUP	●
		DNMG 150604-NUP	●
		150608-NUP	●
NSP		TNMG 160404-NSP	●
		160408-NSP	●
NUP		TNMG 160404-NUP	●
		160408-NUP	●
NMP		TNMG 160404-NMP	■
		160408-NMP	■

● stock standard; ■ stock exhaustion


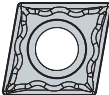
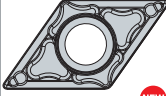
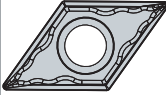

DESCRIPTION			JU4015
NMM		TNMG 160404-NMM	■
		160408-NMM	■
NSP		VNMG 160404-NSP	●
		160408-NSP	●
NUP		VNMG 160404-NUP	●
		160408-NUP	●
NMP		VNMG 160404-NMP	■
		160408-NMP	■
NMM		VNMG 160404-NMM	■
		160408-NMM	■
NSP		WNMG 060404-NSP	●
		060408-NSP	●
		WNMG 080404-NSP	●
		080408-NSP	●
NUP		WNMG 060404-NUP	●
		060408-NUP	●
		WNMG 080404-NUP	●
		080408-NUP	●
NMP		WNMG 080404-NMP	■
		080408-NMP	■
NMM		WNMG 080404-NMM	■
		080408-NMM	■

● stock standard; ■ stock exhaustion




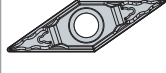
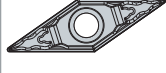

CHIPBREAKER APPLICATION CHART



POSITIVE

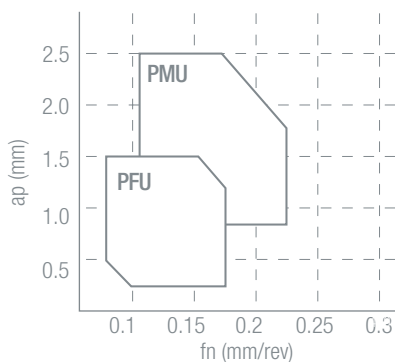
DESCRIPTION		JJ4015
PFU		CCMT 060202-PFU ●
		060204-PFU ●
		CCMT 09T302-PFU ●
		09T304-PFU ●
		09T308-PFU ●
PMU		CCMT 060202-PMU ●
		060204-PMU ●
		060208-PMU ●
		CCMT 09T302-PMU ●
		09T304-PMU ●
PFU		DCMT 070202-PFU ●
		070204-PFU ●
		DCMT 11T302-PFU ●
		11T304-PFU ●
		11T308-PFU ●
PMU		DCMT 070202-PMU ●
		070204-PMU ●
		070208-PMU ●
		DCMT 11T302-PMU ●
		11T304-PMU ●
PMU		SCMT 09T304-PMU ●
		09T308-PMU ●

● stock standard

DESCRIPTION		JJ4015
PFU		TCMT 110202-PFU ●
		110204-PFU ●
PMU		TCMT 090204-PMU ●
		TCMT 110202-PMU ●
		110204-PMU ●
		110208-PMU ●
		TCMT 16T304-PMU ●
PFU		VBMT 110304-PFU ●
		VBMT 160404-PFU ●
		160408-PFU ●
PMU		VBMT 160404-PMU ●
		160408-PMU ●
PMU		VCMT 110304-PMU ●
		VCMT 160404-PMU ●
		160408-PMU ●
PMU		WCMT 12T304-PMU ●
		12T308-PMU ●

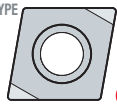
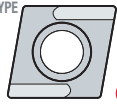
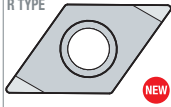
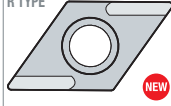
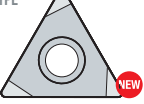
● stock standard

CHIPBREAKER APPLICATION CHART


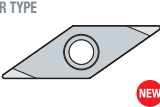
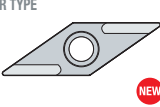
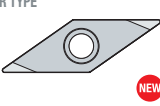
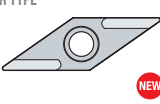


CERMET JU4015

POSITIVE PRECISION

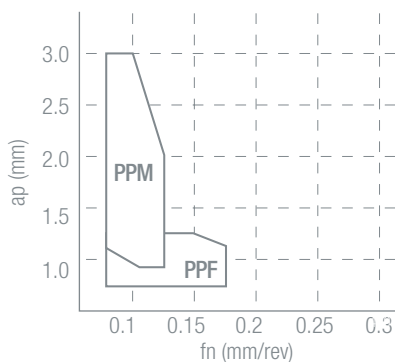
DESCRIPTION			JU4015
PPF	R TYPE 	CCET 060202 ^R /L-PPF	★
		060204 ^R /L-PPF	★
		CCET 09T302 ^R /L-PPF	★
		09T304 ^R /L-PPF	★
PPM	R TYPE 	CCET 060202 ^R /L-PPM	★
		060204 ^R /L-PPM	★
		CCET 09T302 ^R /L-PPM	★
		09T304 ^R /L-PPM	★
PPF	R TYPE 	DCET 070202 ^R /L-PPF	★
		070204 ^R /L-PPF	★
		DCET 11T302 ^R /L-PPF	★
PPM	R TYPE 	DCET 070202 ^R /L-PPM	★
		070204 ^R /L-PPM	★
		DCET 11T302 ^R /L-PPM	★
PPF	R TYPE 	TPEH 090202 ^R /L-PPF	★
		090204 ^R /L-PPF	★
		TPEH 110302 ^R /L-PPF	★
		110304 ^R /L-PPF	★

★ upcoming introduction

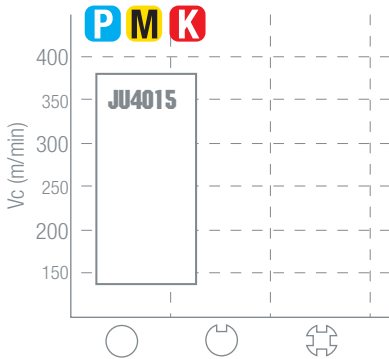
DESCRIPTION			JU4015
PPM	R TYPE 	TPEH 090202 ^R /L-PPM	★
		090204 ^R /L-PPM	★
		TPEH 110302 ^R /L-PPM	★
		110304 ^R /L-PPM	★
PPF	R TYPE 	VBET 110302 ^R /L-PPF	★
		110304 ^R /L-PPF	★
PPM	R TYPE 	VBET 110302 ^R /L-PPM	★
		110304 ^R /L-PPM	★
PPF	R TYPE 	VCET 110302 ^R /L-PPF	★
		110304 ^R /L-PPF	★
PPM	R TYPE 	VCET 110302 ^R /L-PPM	★
		110304 ^R /L-PPM	★

★ upcoming introduction

CHIPBREAKER APPLICATION CHART



GRADE APPLICATION CHART



CUTTING SPEED (Vc m/min)

Gr.	MATERIAL			JU4015
P1	Free cutting steel and structural steel	Rm < 500 N/mm ²	(9SMn28 / 1.0715 / AVP)	280 ÷ 380
P2	Carbon steel and low alloy steel	Rm 500-700 N/mm ²	(C40 / 1.0511)	240 ÷ 330
P3	Medium alloy steel and heat treated steel	Rm 600-800 N/mm ²	(42CrMo4 / 1.7225)	220 ÷ 300
P4	High alloy steel	Rm 800-1000 N/mm ²	(100Cr6 / 1.3505)	200 ÷ 280
P5	Tool steel	Rm 900-1200 N/mm ²	(X210Cr12 / 1.2080 / K100)	160 ÷ 220
M1	Ferritic stainless steel	Rm 400-700 N/mm ²	(X40Cr13 / 1.4034 / AISI420)	180 ÷ 250
M2	Austenitic stainless steel (good machinability)	Rm 500-750 N/mm ²	(X5CrNi18.10 / 1.4301 / AISI304)	160 ÷ 220
M3	Austenitic stainless steel (medium machinability)	Rm 550-850 N/mm ²	(X2CrNiMo18.12 / 1.4435 / AISI316L)	150 ÷ 200
M4	Martensitic stainless steel	Rm 650-950 N/mm ²	(X2CrNiMoN25.7.4 / 1.4410 / Super Duplex)	140 ÷ 180
K1	Grey cast iron	HB 150-250	(GG-25 / 0.6025)	250 ÷ 400
K2	Nodular cast iron	HB 150-350	(GGG-50 / 0.7050)	180 ÷ 300

NT-SLB SLEEVE

Sleeve for boring bars.



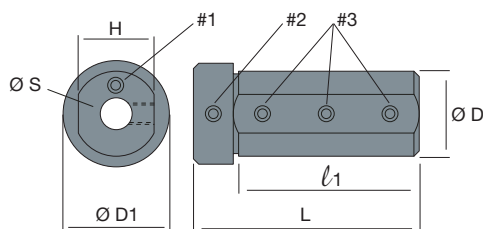
nixkoTOOLS

NT-SLB SLEEVE

NT-SLB

SLEEVE
for boring bars

NEW

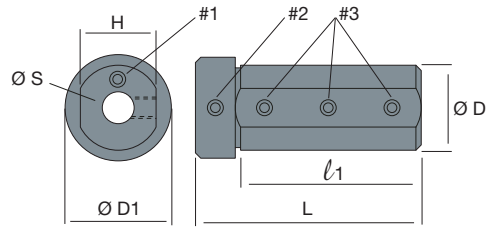





DESCRIPTION	STOCK	DIMENSIONS							#1		#2		#3	
		ØS	ØD	L	l1	D1	H							
NT-SLB S03 D16-L62	●	3	16	62	55	19	14.5	-	-	NT-ST093	NT-WR020	1x NT-ST091	NT-WR020	
NT-SLB S04 D16-L62	●	4	16	62	55	19	14.5	-	-	NT-ST099	NT-WR025	1x NT-ST098	NT-WR025	
	●	4	32	80	70	38	29.5	-	-	NT-ST107	NT-WR030	1x NT-ST106	NT-WR030	
NT-SLB S05 D32-L85	●	5	32	85	70	38	29.5	-	-	NT-ST107	NT-WR030	1x NT-ST105	NT-WR030	
NT-SLB S06 D16-L62	●	6	16	62	55	19	14.5	-	-	NT-ST099	NT-WR025	1x NT-ST094	NT-WR025	
	●	6	20	51	45	25	18.5	-	-	NT-ST104	NT-WR030	1x NT-ST103	NT-WR030	
	●	6	20	67	60	27	17.5	-	-	NT-ST105	NT-WR030	1x NT-ST103	NT-WR030	
	●	6	25	64	58	35	23.5	NT-ST092	NT-WR020	-	-	1x NT-ST104	NT-WR030	
	●	6	32	85	70	38	29.5	-	-	NT-ST107	NT-WR030	1x NT-ST105	NT-WR030	
	●	6	40	100	85	46	38	-	-	NT-ST108	NT-WR030	1x NT-ST107	NT-WR030	
	●	6	40	100	85	46	38	-	-	NT-ST108	NT-WR030	1x NT-ST107	NT-WR030	
	●	6	40	100	85	46	38	-	-	NT-ST108	NT-WR030	1x NT-ST107	NT-WR030	
NT-SLB S07 D20-L67	●	7	20	67	60	27	18.5	-	-	NT-ST099	NT-WR025	1x NT-ST098	NT-WR025	
	●	7	25	64	58	35	23.5	NT-ST092	NT-WR020	-	-	2x NT-ST104	NT-WR030	
	●	7	32	85	70	38	29.5	-	-	NT-ST107	NT-WR030	1x NT-ST106	NT-WR030	
	●	7	40	100	85	46	38	-	-	NT-ST108	NT-WR030	1x NT-ST107	NT-WR030	
	●	8	16	62	55	19	14.5	-	-	NT-ST098	NT-WR025	2x NT-ST094	NT-WR025	
	●	8	20	51	45	25	18.5	-	-	NT-ST104	NT-WR030	1x NT-ST102	NT-WR030	
	●	8	20	67	60	27	17.5	-	-	NT-ST104	NT-WR030	2x NT-ST101	NT-WR030	
	●	8	25	64	58	35	23.5	NT-ST092	NT-WR020	-	-	2x NT-ST104	NT-WR030	
NT-SLB S08 D32-L85	●	8	32	85	70	38	29.5	-	-	NT-ST106	NT-WR030	1x NT-ST105	NT-WR030	
	●	8	40	100	85	46	38	-	-	NT-ST114	NT-WR040	2x NT-ST113	NT-WR040	
	●	8	50	100	85	58	48	-	-	NT-ST115	NT-WR040	2x NT-ST114	NT-WR040	
	●	10	16	62	55	19	14.5	-	-	NT-ST094	NT-WR025	2x NT-ST094	NT-WR025	
	●	10	20	51	45	25	18.5	-	-	NT-ST103	NT-WR030	2x NT-ST102	NT-WR030	
	●	10	20	67	60	27	17.5	-	-	NT-ST104	NT-WR030	2x NT-ST101	NT-WR030	
	●	10	25	64	58	35	23.5	NT-ST092	NT-WR020	-	-	3x NT-ST103	NT-WR030	
	●	10	32	100	85	38	29.5	-	-	NT-ST113	NT-WR040	2x NT-ST111	NT-WR040	
NT-SLB S10 D40-L100	●	10	40	100	85	46	38	-	-	NT-ST114	NT-WR040	2x NT-ST113	NT-WR040	
	●	10	50	100	85	58	48	-	-	NT-ST115	NT-WR040	2x NT-ST114	NT-WR040	
	●	12	20	51	45	25	18.5	-	-	NT-ST103	NT-WR030	2x NT-ST101	NT-WR030	
	●	12	20	67	60	27	17.5	-	-	NT-ST103	NT-WR030	2x NT-ST101	NT-WR030	
	●	12	25	64	58	35	23.5	NT-ST092	NT-WR020	-	-	3x NT-ST103	NT-WR030	
	●	12	32	100	85	38	29.5	-	-	NT-ST113	NT-WR040	2x NT-ST111	NT-WR040	
	●	12	50	100	85	58	48	-	-	NT-ST115	NT-WR040	2x NT-ST114	NT-WR040	
	●	12	50	100	85	58	48	-	-	NT-ST115	NT-WR040	2x NT-ST114	NT-WR040	
NT-SLB S12 D32-L100	●	14	32	100	85	38	29.5	-	-	NT-ST113	NT-WR040	2x NT-ST109	NT-WR040	
	●	14	40	100	85	46	38	-	-	NT-ST114	NT-WR040	2x NT-ST113	NT-WR040	

NT-SLB

NEW

SLEEVE
for boring bars



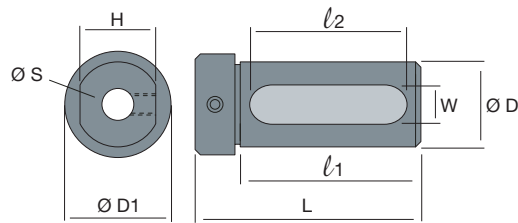
DESCRIPTION	STOCK	DIMENSIONS							#1		#2		#3	
		ØS	ØD	L	l1	D1	H							
NT-SLB S15	D32-L100	●	15	32	100	85	38	29.5	-	-	NT-ST113	NT-WR040	2x NT-ST109	NT-WR040
	D40-L100	●	15	40	100	85	46	38	-	-	NT-ST113	NT-WR040	2x NT-ST112	NT-WR040
NT-SLB S16	D32-L100	●	16	32	100	85	38	29.5	-	-	NT-ST112	NT-WR040	2x NT-ST109	NT-WR040
	D40-L100	●	16	40	100	85	46	38	-	-	NT-ST113	NT-WR040	2x NT-ST112	NT-WR040
	D50-L100	●	16	50	100	85	58	48	-	-	NT-ST115	NT-WR040	2x NT-ST114	NT-WR040
NT-SLB S18	D32-L100	●	18	32	100	85	38	29.5	-	-	NT-ST112	NT-WR040	2x NT-ST109	NT-WR040
	D40-L100	●	18	40	100	85	46	38	-	-	NT-ST113	NT-WR040	2x NT-ST112	NT-WR040
NT-SLB S20	D50-L100	●	20	50	100	85	58	48	-	-	NT-ST114	NT-WR040	3x NT-ST113	NT-WR040
NT-SLB S25	D50-L100	●	25	50	100	85	58	48	-	-	NT-ST114	NT-WR040	3x NT-ST113	NT-WR040

NT-SLB SLEEVE

NT-SLB

NEW

SLEEVE
for boring bars



DESCRIPTION	STOCK	DIMENSIONS												
		$\varnothing S$	$\varnothing D$	L	$l1$	$D1$	$l2$	W						
NT-SLB S12 D16-L62	●	12	16	62	55	19	50	11	NT-ST101	NT-WR030				
NT-SLB S14 D20-L67	●	14	20	67	60	27	55	13	NT-ST103	NT-WR030				
	●	14	25	64	58	35	51	12	-	-				
NT-SLB S15 D20-L67	●	15	20	67	60	27	55	13	NT-ST103	NT-WR030				
	●	15	25	64	58	35	51	12	-	-				
NT-SLB S16 D20-L51	●	16	20	51	45	25	40	11	NT-ST102	NT-WR030				
	●	16	20	67	60	27	55	13	NT-ST102	NT-WR030				
	●	16	25	64	58	35	51	12	-	-				
NT-SLB S18 D25-L64	●	18	25	64	58	35	51	12	-	-				
NT-SLB S20 D25-L64	●	20	25	64	58	35	51	12	-	-				
	●	20	32	100	85	38	77	14	NT-ST111	NT-WR040				
	●	20	40	100	85	46	77	14	NT-ST113	NT-WR040				
NT-SLB S22 D25-L64	●	22	25	64	58	35	51	12	-	-				
	●	22	32	100	85	38	77	14	NT-ST111	NT-WR040				
	●	22	40	100	85	46	77	14	NT-ST113	NT-WR040				
NT-SLB S25 D32-L100	●	25	32	100	85	38	77	14	NT-ST109	NT-WR040				
	●	25	40	100	85	46	77	14	NT-ST112	NT-WR040				
NT-SLB S32 D40-L100	●	32	40	100	85	46	77	14	NT-ST109	NT-WR040				
	●	32	50	100	85	58	77	14	NT-ST113	NT-WR040				
NT-SLB S40 D50-L100	●	40	50	100	85	58	77	14	NT-ST111	NT-WR040				

TPM THREADING SERIES

Universal geometry for perfect chip control.

ISO



- METRIC
- WHITWORTH
- UN
- NPT
- BSPT



TPM THREADING SERIES

Universal geometry for perfect chip control.



- Thanks to an innovating moulding process (Threading Precision Moulding), the new TPM geometry meets the accuracy standards of more expensive ground inserts.
- The chipbreaker has been optimized in order to ensure a perfect chip control on a wide range of materials.
- Thread standard and pitch are clearly marked on each insert.



- Grazie ad un'accurata procedura di stampaggio, la nuova geometria sinterizzata TPM (Threading Precision Moulding) è in grado di garantire taglienza e precisione paragonabili alle più costose tipologie rettificate.
- La perfetta conformazione del rompitrucciolo assicura un controllo ottimale su una grande varietà di materiali.
- Tipologia di filettatura e passo sono chiaramente indicati su ogni inserto.



- Dank eines innovativen Formverfahren (Threading Precision Moulding), erfüllt die TPM Geometrie Genauigkeitsstandards teurer Wendeschneidplatten.
- Der Spanbrecher wurde optimiert, um eine perfekte Kontrolle über die Späne auf einer breiten Palette von Materialien zu gewährleisten.
- Gewindestandards und Steigungen sind auf jedem Einsatz markiert.



- Grace à un innovant procédé de moulage, la nouvelle géométrie TPM (Threading Precision Moulding) garantit une précision de coupe équivalente à celle des plaquettes affûtées, à un prix nettement plus bas.
- La forme idéale du brise-copeaux maîtrise parfaitement les copeaux dans une grande variété de matières.
- Le filet et le pas sont marqués sur chaque plaquette.








- Gracias a un proceso de moldeo preciso, la nueva geometría TPM sinterizada (Threading Precision Moulding) asegura afilado y precisión comparables a las más cara tipologia rectificada.
- La conformación ideal del rompevirutas asegura un óptimo control y una amplia variedad de materiales.
- El tipo de rosca y de paso están claramente marcados en cada placa.



- Благодаря передовой технологии изготовления (Threading Precision Moulding), новая TPM геометрия в состоянии обеспечить точность сравнимую с пластинами изготовленных путём шлифования.
- Усовершенствованный стружколом обеспечивает высокий уровень контроля стружки для широкой гаммы материалов.
- Тип и шаг резьбы указаны на каждой пластине.






INSERTS

		16ER EXTERNAL						METRIC (M)						
		FULL PROFILE 60°												
DESCRIPTION							No. OF PASSES	HC						
			IC	T	r			Ød	JP5125					
TPM	16ER 100ISO-TPM	1.00 mm	9.525	3.47	0.14	4.0	5÷8	●						
	125ISO-TPM	1.25 mm	9.525	3.47	0.18	4.0	6÷9	●						
	150ISO-TPM	1.50 mm	9.525	3.47	0.22	4.0	6÷9	●						
	175ISO-TPM	1.75 mm	9.525	3.47	0.25	4.0	8÷11	●						
	200ISO-TPM	2.00 mm	9.525	3.47	0.29	4.0	8÷11	●						
	250ISO-TPM	2.50 mm	9.525	3.47	0.36	4.0	10÷13	●						
	300ISO-TPM	3.00 mm	9.525	3.47	0.43	4.0	12÷15	●						

● stock standard

HC: coated carbide

JP: PVD coating

		11/16IR INTERNAL						METRIC (M)							
		FULL PROFILE 60°													
DESCRIPTION							No. OF PASSES	HC							
			IC	T	r			Ød	JP5125						
TPM	11IR 100ISO-TPM <small>NEW</small>	1.00 mm	6.35	3.18	0.07	3.2	5÷8	●							
	125ISO-TPM <small>NEW</small>	1.25 mm	6.35	3.18	0.09	3.2	6÷9	●							
	150ISO-TPM <small>NEW</small>	1.50 mm	6.35	3.18	0.11	3.2	6÷9	●							
	175ISO-TPM <small>NEW</small>	1.75 mm	6.35	3.18	0.13	3.2	8÷11	●							
	200ISO-TPM <small>NEW</small>	2.00 mm	6.35	3.18	0.15	3.2	8÷11	●							
	16IR	100ISO-TPM	1.00 mm	9.525	3.47	0.07	4.0	5÷8	●						
		125ISO-TPM	1.25 mm	9.525	3.47	0.09	4.0	6÷9	●						
		150ISO-TPM	1.50 mm	9.525	3.47	0.11	4.0	6÷9	●						
		175ISO-TPM	1.75 mm	9.525	3.47	0.13	4.0	8÷11	●						
		200ISO-TPM	2.00 mm	9.525	3.47	0.15	4.0	8÷11	●						
		250ISO-TPM	2.50 mm	9.525	3.47	0.18	4.0	10÷13	●						
		300ISO-TPM	3.00 mm	9.525	3.47	0.22	4.0	12÷15	●						

● stock standard

HC: coated carbide

JP: PVD coating



BOX 5 PCS.

TPM THREADING SERIES

INSERTS

DESCRIPTION								No. OF PASSES						
		IC	T	r	Ød	HC	JP5125							
TPM		16ER 19W-TPM	19 TPI	9.525	3.47	0.17	4.0	6÷9	●					
		14W-TPM	14 TPI	9.525	3.47	0.24	4.0	8÷11	●					
		11W-TPM	11 TPI	9.525	3.47	0.30	4.0	9÷12	●					

● stock standard

HC: coated carbide

JP: PVD coating

DESCRIPTION								No. OF PASSES						
		IC	T	r	Ød	HC	JP5125							
TPM		16IR 19W-TPM	19 TPI	9.525	3.47	0.17	4.0	6÷9	●					
		14W-TPM	14 TPI	9.525	3.47	0.24	4.0	8÷11	●					
		11W-TPM	11 TPI	9.525	3.47	0.30	4.0	9÷12	●					

● stock standard

HC: coated carbide


JP: PVD coating





BOX 5 PCS.

INSERTS


16ER EXTERNAL FULL PROFILE 60°



UNIFIED (UN) **NEW** 

DESCRIPTION							No. OF PASSES	HC						
	TPI	IC	T	r	Ød	JP5125								
	16ER 24UN-TPM	24 TPI	9.525	3.47	0.15	4.0	5÷8	●						
	20UN-TPM	20 TPI	9.525	3.47	0.18	4.0	6÷9	●						
	18UN-TPM	18 TPI	9.525	3.47	0.20	4.0	6÷9	●						
	16UN-TPM	16 TPI	9.525	3.47	0.23	4.0	7÷10	●						
	14UN-TPM	14 TPI	9.525	3.47	0.26	4.0	8÷11	●						
	12UN-TPM	12 TPI	9.525	3.47	0.31	4.0	8÷11	●						
	8UN-TPM	8 TPI	9.525	3.47	0.46	4.0	12÷15	●						

● stock standard HC: coated carbide JP: PVD coating

16IR INTERNAL FULL PROFILE 60°

UNIFIED (UN) **NEW** 

DESCRIPTION							No. OF PASSES	HC						
	TPI	IC	T	r	Ød	JP5125								
	16IR 24UN-TPM	24 TPI	9.525	3.47	0.08	4.0	5÷8	●						
	20UN-TPM	20 TPI	9.525	3.47	0.09	4.0	6÷9	●						
	18UN-TPM	18 TPI	9.525	3.47	0.10	4.0	6÷9	●						
	16UN-TPM	16 TPI	9.525	3.47	0.12	4.0	7÷10	●						
	14UN-TPM	14 TPI	9.525	3.47	0.13	4.0	8÷11	●						
	12UN-TPM	12 TPI	9.525	3.47	0.16	4.0	8÷11	●						
	8UN-TPM	8 TPI	9.525	3.47	0.23	4.0	12÷15	●						

● stock standard HC: coated carbide JP: PVD coating



BOX 5 PCS.

TPM THREADING SERIES

INSERTS

		16ER EXTERNAL FULL PROFILE 60°						NPT NEW							
DESCRIPTION								No. OF PASSES	HC						
		IC	T	r	Ød			JP5125							
TPM		16ER 18NPT-TPM	18 TPI	9.525	3.47	0.20	4.0	8÷11	●						
		14NPT-TPM	14 TPI	9.525	3.47	0.22	4.0	10÷13	●						
		11.5NPT-TPM	11.5 TPI	9.525	3.47	0.25	4.0	12÷15	●						

● stock standard

HC: coated carbide

JP: PVD coating

		16IR INTERNAL FULL PROFILE 60°						NPT NEW							
DESCRIPTION								No. OF PASSES	HC						
		IC	T	r	Ød			JP5125							
TPM		16IR 18NPT-TPM	18 TPI	9.525	3.47	0.20	4.0	8÷11	●						
		14NPT-TPM	14 TPI	9.525	3.47	0.22	4.0	10÷13	●						
		11.5NPT-TPM	11.5 TPI	9.525	3.47	0.25	4.0	12÷15	●						

● stock standard

HC: coated carbide

JP: PVD coating



BOX 5 PCS.

INSERTS

16ER EXTERNAL

FULL PROFILE 55°

TAPERED PIPE (BSPT)

NEW

TPM		DESCRIPTION		 IC T r Ød				No. OF PASSES	HC JP5125					
				IC	T	r	Ød		●					
		16ER 28BSPT-TPM	28 TPI	9.525	3.47	0.11	4.0	5÷8	●					
		16ER 19BSPT-TPM	19 TPI	9.525	3.47	0.17	4.0	6÷9	●					
		16ER 14BSPT-TPM	14 TPI	9.525	3.47	0.24	4.0	9÷12	●					
		16ER 11BSPT-TPM	11 TPI	9.525	3.47	0.30	4.0	12÷15	●					

● stock standard

HC: coated carbide

JP: PVD coating

16IR INTERNAL

FULL PROFILE 55°

TAPERED PIPE (BSPT)

NEW

TPM		DESCRIPTION		 IC T r Ød				No. OF PASSES	HC JP5125					
				IC	T	r	Ød		●					
		16IR 28BSPT-TPM	28 TPI	9.525	3.47	0.11	4.0	5÷8	●					
		16IR 19BSPT-TPM	19 TPI	9.525	3.47	0.17	4.0	6÷9	●					
		16IR 14BSPT-TPM	14 TPI	9.525	3.47	0.24	4.0	9÷12	●					
		16IR 11BSPT-TPM	11 TPI	9.525	3.47	0.30	4.0	12÷15	●					

● stock standard

HC: coated carbide



JP: PVD coating



BOX 5 PCS.

TPM THREADING SERIES



INSERTS

DESCRIPTION		METRIC (M) NEW		UNIFIED (UN)				No. OF PASSES	HC					
		(M)	(UN)	IC	T	r	Ød		JP5125					
TPM		16ER A60-TPM	0.50÷1.50 mm	48÷16 TPI	9.525	3.47	0.08	4.0	4÷10	●				
		AG60-TPM	0.50÷3.00 mm	48÷8 TPI	9.525	3.47	0.08	4.0	4÷15	●				
		G60-TPM	1.75÷3.00 mm	14÷8 TPI	9.525	3.47	0.25	4.0	8÷15	●				

● stock standard

HC: coated carbide

JP: PVD coating

DESCRIPTION		METRIC (M) NEW		UNIFIED (UN)				No. OF PASSES	HC					
		(M)	(UN)	IC	T	r	Ød		JP5125					
TPM		16IR A60-TPM	0.50÷1.50 mm	48÷16 TPI	9.525	3.47	0.08	4.0	4÷10	●				
		AG60-TPM	0.50÷3.00 mm	48÷8 TPI	9.525	3.47	0.08	4.0	4÷15	●				
		G60-TPM	1.75÷3.00 mm	14÷8 TPI	9.525	3.47	0.13	4.0	8÷15	●				

● stock standard





HC: coated carbide

JP: PVD coating



BOX 5 PCS.





INSERTS

		16ER EXTERNAL		WHITWORTH (W) NEW		PARALLEL PIPE (G)		55°						
		PARTIAL PROFILE 55°												
DESCRIPTION								No. OF PASSES						
		(W)	(G)	IC	T	r	Ød	HC	JP5125					
TPM		16ER A55-TPM	40÷16 TPI	28 TPI - 19 TPI	9.525	3.47	0.08	4.0	8÷11	●				
		AG55-TPM	40÷8 TPI	28÷11 TPI	9.525	3.47	0.08	4.0	10÷13	●				
		G55-TPM	14÷8 TPI	14 TPI - 11 TPI	9.525	3.47	0.21	4.0	12÷15	●				

● stock standard

HC: coated carbide

JP: PVD coating

		16IR INTERNAL		WHITWORTH (W) NEW		PARALLEL PIPE (G)		55°						
		PARTIAL PROFILE 55°												
DESCRIPTION								No. OF PASSES						
		(W)	(G)	IC	T	r	Ød	HC	JP5125					
TPM		16IR A55-TPM	40÷16 TPI	28 TPI - 19 TPI	9.525	3.47	0.08	4.0	8÷11	●				
		AG55-TPM	40÷8 TPI	28÷11 TPI	9.525	3.47	0.08	4.0	10÷13	●				
		G55-TPM	14÷8 TPI	14 TPI - 11 TPI	9.525	3.47	0.21	4.0	12÷15	●				

● stock standard

HC: coated carbide

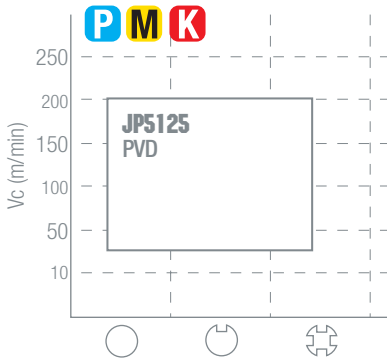
JP: PVD coating



BOX 5 PCS.

TPM THREADING SERIES

GRADE APPLICATION CHART



CUTTING SPEED (Vc m/min)

Gr.	MATERIAL			JP5125
P1	Free cutting steel and structural steel	Rm < 500 N/mm ²	(9SMn28 / 1.0715 / AVP)	160 ÷ 200
P2	Carbon steel and low alloy steel	Rm 500-700 N/mm ²	(C40 / 1.0511)	140 ÷ 180
P3	Medium alloy steel and heat treated steel	Rm 600-800 N/mm ²	(42CrMo4 / 1.7225)	100 ÷ 160
P4	High alloy steel	Rm 800-1000 N/mm ²	(100Cr6 / 1.3505)	80 ÷ 140
P5	Tool steel	Rm 900-1200 N/mm ²	(X210Cr12 / 1.2080 / K100)	80 ÷ 120
P6	High tensile strength steel	Rm 1200-1600 N/mm ²	(X2NiCrMo18.9.5 / 1.6358 / W720)	50 ÷ 80
M1	Ferritic stainless steel	Rm 400-700 N/mm ²	(X40Cr13 / 1.4034 / AISI420)	100 ÷ 140
M2	Austenitic stainless steel (good machinability)	Rm 500-750 N/mm ²	(X5CrNi18.10 / 1.4301 / AISI304)	80 ÷ 120
M3	Austenitic stainless steel (medium machinability)	Rm 550-850 N/mm ²	(X2CrNiMo18.12 / 1.4435 / AISI316L)	80 ÷ 100
M4	Martensitic stainless steel	Rm 650-950 N/mm ²	(X2CrNiMoN25.7.4 / 1.4410 / Super Duplex)	60 ÷ 80
M5	PH stainless steel	Rm 800-1250 N/mm ²	(X5CrNiNb16.4 / 1.4542 / 17-4PH)	40 ÷ 60
K1	Grey cast iron	HB 150-250	(GG-25 / 0.6025)	100 ÷ 140
K2	Nodular cast iron	HB 150-350	(GGG-50 / 0.7050)	80 ÷ 100
K3	Austenitic cast iron	HB 120-260	(GGL-NiCr20.2 / 0.6660)	60 ÷ 80
K4	ADI cast iron	HB 250-500	(GJS-1000-5 / ADI 1000)	40 ÷ 60

DRS DRILLING SYSTEM

High-performance solution for universal use.

ISO

P

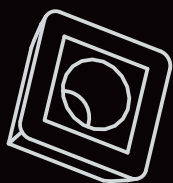
M

K

N

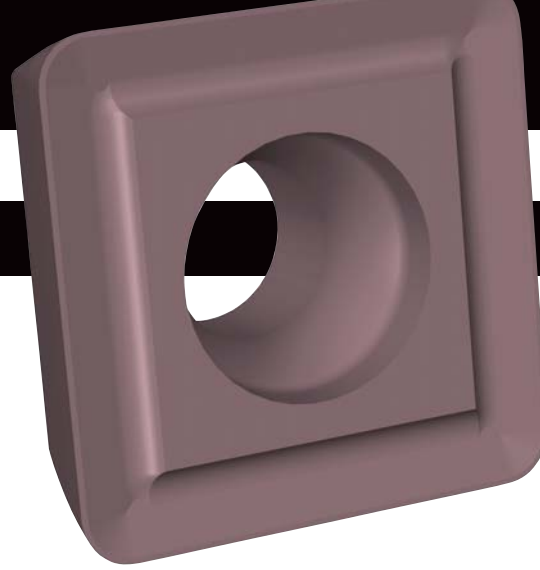
S

- 2xD
- 3xD
- 4xD



4 edges

nixkoTOOLS



DRS DRILLING SYSTEM

High-performance solution for universal use.



- High-performance drilling system featuring 4-edged SPMX/SPGX inserts, for enhanced versatility and massive cost reduction.
- Cutting geometry optimized to efficiently machine ISO P, M and K material classes, allowing high process stability and reduced cutting forces.
- JP5625 micrograin carbide for universal application, JP9635 for ISO M and ISO S specific applications, JU6520 combined to lapped and ground AL geometry for non ferrous materials ISO N.



- Sistema di foratura ad alte prestazioni estremamente versatile ed economico grazie all'inserto a 4 taglianti SPMX/SPGX.
- Geometria ottimizzata per impiego generico su materiali ISO P, M e K in grado di garantire eccezionale stabilità e ridotti sforzi di taglio.
- JP5625 metallo duro micrograna per impiego universale, JP9635 per applicazioni specifiche su ISO M e ISO S, JU6520 combinato con la geometria rettificata e lappata AL per materiali non ferrosi ISO N.



- Hochleistungs-Bohrsystem mit 4 schneidigen SPMX/SPGX Wendschneidplatten für verbesserte Vielseitigkeit und massiven Kostenreduktion.
- Optimierte Geometrie für den allgemeinen Gebrauch von Materialien ISO P, M und K, so dass eine hohe Prozessstabilität und reduzierte Schnittkraft ermöglicht wird.
- JP5625 Feinstkornhartmetall für den universellen Einsatz, JP9635 für spezifische Anwendungen von ISO M und ISO S, JU6520 mit angepasster geschliffener Geometrie AL für Nicht Eisen Materialien ISO N.



- Système de perçage haute-performance, extrêmement flexible et économique, grâce aux plaquettes à 4 arêtes SPMX/SPGX.
- Géométrie de coupe optimisée pour utilisation sur matières ISO P, M et K, qui assure une excellente stabilité et un réduit effort de coupe.
- JP5625 carbure micro-grain pour utilisation universelle, JP9635 pour matières ISO M et ISO S, JU6520 avec géométrie rectifiée et polie AL pour matières ISO N.



- Sistema de taladrado extremadamente versátil, de alto rendimiento y económico gracias a la placa con 4 filos de corte SPMX/SPGX.
- Geometría optimizada para el uso general en materiales ISO P, M y K que garantiza una estabilidad excepcional y la reducción de los esfuerzos de corte.
- JP5625 metal duro micrograno para uso universal, JP9635 para aplicaciones específicas en ISO M e ISO S, JU6520 combinado con la geometría rectificada y lappada AL para materiales no ferrosos ISO.



- Высокопроизводительная система сверления с 4мя режущими кромками с пластинами SPMX/SPGX, обеспечивает существенное сокращение затрат.
- Режущая геометрия оптимизирована для обработки материалов групп ISO P, M и K и обеспечивает высокую стабильность обработки и малые режущие усилия.
- JP5625 мелкозернистый твёрдый сплав для общего применения, JP9635 предназначен для ISO M и ISO S, JU6520 комбинация формы полученной шлифованием и полировкой предназначен для Al других цветных металлов ISO N.

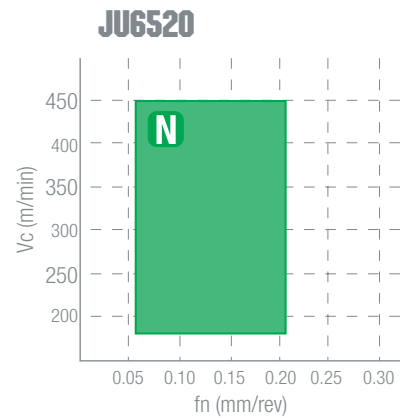
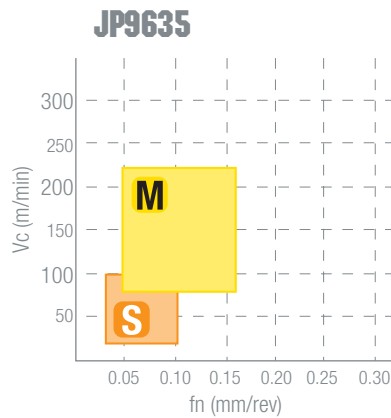
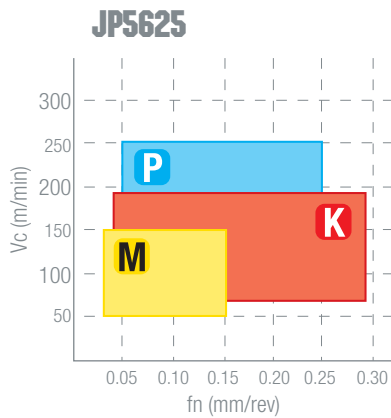
INSERTS

DESCRIPTION					HC		HW											
	IC	T	r	Ød	JP5625	JP9635	JU6520											
 GP	SPMX 050204-GP	5.00	2.38	0.4	2.50	●	● NEW											
	060204-GP	6.00	2.38	0.4	2.80	●	● NEW											
	07T308-GP	7.94	3.97	0.8	2.80	●	● NEW											
	090408-GP	9.80	4.30	0.8	4.10	●	● NEW											
	110408-GP	11.50	4.76	0.8	4.40	●	● NEW											
	140512-GP	14.30	5.20	1.2	5.50	●	● NEW											
 AL	SPGX 050204-AL	5.00	2.38	0.4	2.50			●										
	060204-AL	6.00	2.38	0.4	2.80			●										
	07T308-AL	7.94	3.97	0.8	2.80			●										
	090408-AL	9.80	4.30	0.8	4.10			●										
	110408-AL	11.50	4.76	0.8	4.40			●										
	140512-AL	14.30	5.20	1.2	5.50			●										

● stock standard

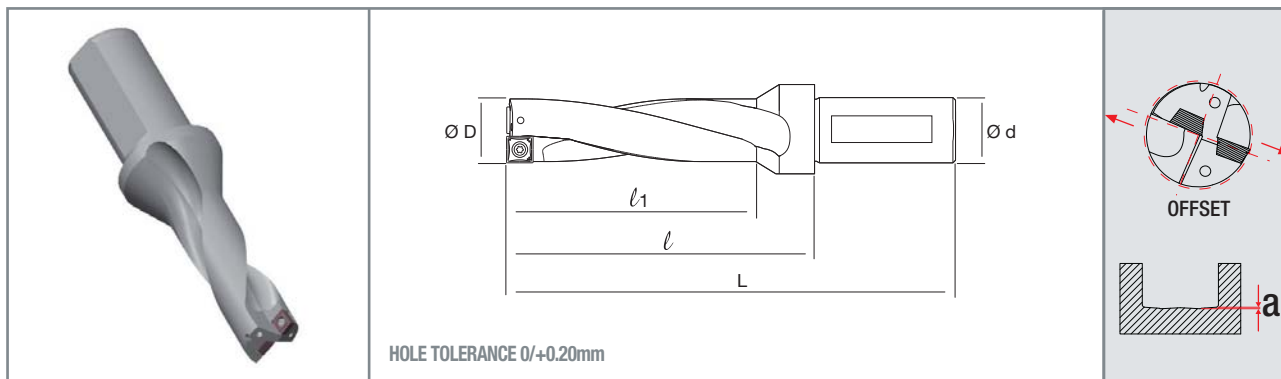
HC: coated carbide JP: PVD coating
 HW: uncoated carbide JU: uncoated

APPLICATION CHART



DRS DRILLING SYSTEM

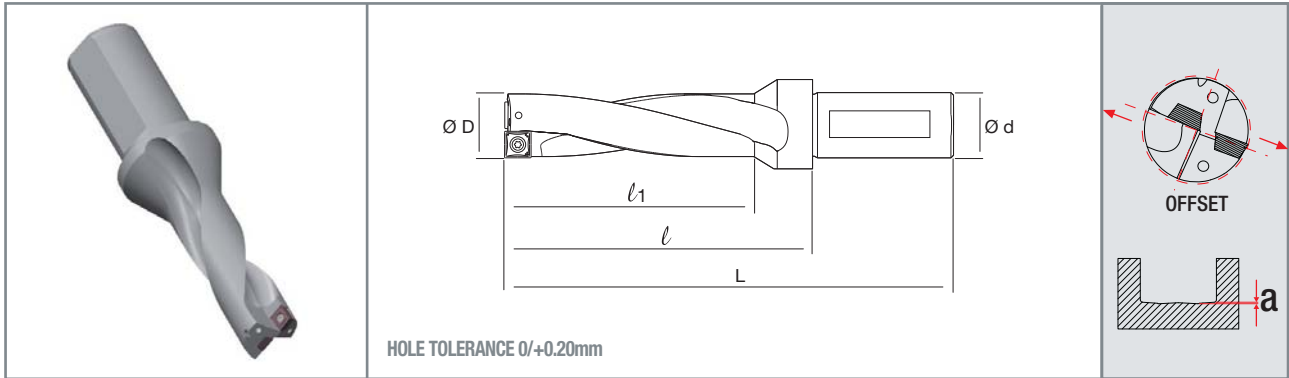
HOLDERS 2XD



INSERTS	DESCRIPTION	STOCK	DIMENSIONS					ØD	Ød	TORQUE Nm	MAX RADIAL OFFSET mm	a mm	
			ØD	Ød	L	l	l1						
SP□□05	NT-DRS-2D	D12.50-S20-05	○	12.5	20	94	44	26	NT-ST059	NT-FTB06	0.50	0.50	0.4
		D13.00-S20-05	●	13	20	94	44	26	NT-ST059	NT-FTB06	0.50	0.50	0.4
		D13.50-S20-05	○	13.5	20	96	46	28	NT-ST059	NT-FTB06	0.50	0.50	0.4
		D14.00-S20-05	●	14	20	96	46	28	NT-ST059	NT-FTB06	0.50	0.50	0.4
		D14.50-S20-05	○	14.5	20	99	49	30	NT-ST059	NT-FTB06	0.50	0.50	0.4
		D15.00-S20-05	●	15	20	99	49	30	NT-ST059	NT-FTB06	0.50	0.50	0.4
SP□□06	NT-DRS-2D	D15.50-S25-06	○	15.5	25	108	52	32	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D16.00-S25-06	●	16	25	108	52	32	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D16.50-S25-06	○	16.5	25	110	54	34	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D17.00-S25-06	●	17	25	110	54	34	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D17.50-S25-06	○	17.5	25	113	57	36	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D18.00-S25-06	●	18	25	113	57	36	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D18.50-S25-06	○	18.5	25	115	59	38	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D19.00-S25-06	●	19	25	115	59	38	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D19.50-S25-06	○	19.5	25	119	63	40	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D20.00-S25-06	●	20	25	119	63	40	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D20.50-S25-06	○	20.5	25	121	65	42	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D21.00-S25-06	●	21	25	121	65	42	NT-ST061	NT-FTB06	0.50	0.25	0.5
D21.50-S25-06	○	21.5	25	123	67	44	NT-ST061	NT-FTB06	0.50	0.25	0.5		
SP□□07	NT-DRS-2D	D22.00-S25-07	●	22	25	123	67	44	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D22.50-S32-07	○	22.5	32	131	71	46	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D23.00-S32-07	●	23	32	131	71	46	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D23.50-S32-07	○	23.5	32	134	74	48	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D24.00-S32-07	●	24	32	134	74	48	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D24.50-S32-07	○	24.5	32	137	77	50	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D25.00-S32-07	●	25	32	137	77	50	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D25.50-S32-07	○	25.5	32	139	79	52	NT-ST062	NT-FTB07	0.80	0.50	0.6
		D26.00-S32-07	●	26	32	139	79	52	NT-ST062	NT-FTB07	0.80	0.25	0.6
		D26.50-S32-07	○	26.5	32	141	81	54	NT-ST062	NT-FTB07	0.80	0.25	0.6
		D27.00-S32-07	●	27	32	141	81	54	NT-ST062	NT-FTB07	0.80	0.25	0.6
		D27.50-S32-07	○	27.5	32	144	84	56	NT-ST062	NT-FTB07	0.80	0.25	0.6
SP□□09	NT-DRS-2D	D28.00-S32-09	●	28	32	144	84	56	NT-ST063	NT-FTB15	3.50	0.50	0.8
		D28.50-S32-09	○	28.5	32	146	86	58	NT-ST063	NT-FTB15	3.50	0.50	0.8
		D29.00-S32-09	●	29	32	146	86	58	NT-ST063	NT-FTB15	3.50	0.50	0.8
		D29.50-S32-09	○	29.5	32	151	91	60	NT-ST063	NT-FTB15	3.50	0.50	0.8
		D30.00-S32-09	●	30	32	151	91	60	NT-ST063	NT-FTB15	3.50	0.50	0.8
		D31.00-S32-09	●	31	32	154	94	62	NT-ST063	NT-FTB15	3.50	0.25	0.8
		D32.00-S32-09	●	32	32	156	96	64	NT-ST063	NT-FTB15	3.50	0.25	0.8
		D33.00-S32-09	●	33	32	159	99	66	NT-ST063	NT-FTB15	3.50	0.25	0.8

● stock standard; ○ non stock standard

HOLDERS 2XD

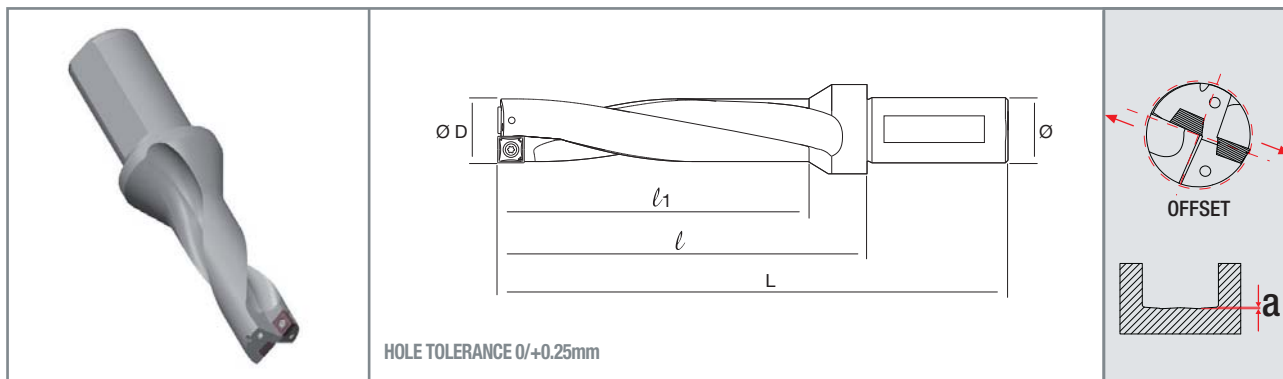


INSERTS	DESCRIPTION	STOCK	DIMENSIONS								TORQUE Nm	MAX RADIAL OFFSET mm	a mm
			ØD	Ød	L	l	l1						
SP□□11	NT-DRS-2D D34.00-S40-11	●	34	40	171	101	68	NT-ST064	NT-FTB15	3.50	0.50	0.9	
	D35.00-S40-11	●	35	40	174	104	70	NT-ST064	NT-FTB15	3.50	0.50	0.9	
	D36.00-S40-11	●	36	40	177	107	72	NT-ST064	NT-FTB15	3.50	0.50	0.9	
	D37.00-S40-11	●	37	40	180	110	74	NT-ST064	NT-FTB15	3.50	0.50	0.9	
	D38.00-S40-11	●	38	40	183	113	76	NT-ST064	NT-FTB15	3.50	0.50	0.9	
	D39.00-S40-11	●	39	40	185	115	78	NT-ST064	NT-FTB15	3.50	0.50	0.9	
	D40.00-S40-11	●	40	40	188	118	80	NT-ST064	NT-FTB15	3.50	0.25	0.9	
	D41.00-S40-11	●	41	40	191	121	82	NT-ST064	NT-FTB15	3.50	0.25	0.9	
SP□□14	NT-DRS-2D D42.00-S40-14	●	42	40	193	123	84	NT-ST066	NT-FTB20	4.50	0.50	1.0	
	D43.00-S40-14	●	43	40	196	126	86	NT-ST066	NT-FTB20	4.50	0.50	1.0	
	D44.00-S40-14	●	44	40	198	128	88	NT-ST066	NT-FTB20	4.50	0.50	1.0	
	D45.00-S40-14	●	45	40	202	132	90	NT-ST066	NT-FTB20	4.50	0.50	1.0	
	D46.00-S40-14	●	46	40	205	135	92	NT-ST066	NT-FTB20	4.50	0.50	1.0	
	D47.00-S40-14	●	47	40	207	137	94	NT-ST066	NT-FTB20	4.50	0.50	1.0	
	D48.00-S40-14	●	48	40	210	140	96	NT-ST066	NT-FTB20	4.50	0.25	1.0	
	D49.00-S40-14	●	49	40	212	142	98	NT-ST066	NT-FTB20	4.50	0.25	1.0	
	D50.00-S40-14	●	50	40	215	145	100	NT-ST066	NT-FTB20	4.50	0.25	1.0	

● stock standard

DRS DRILLING SYSTEM

HOLDERS 3XD

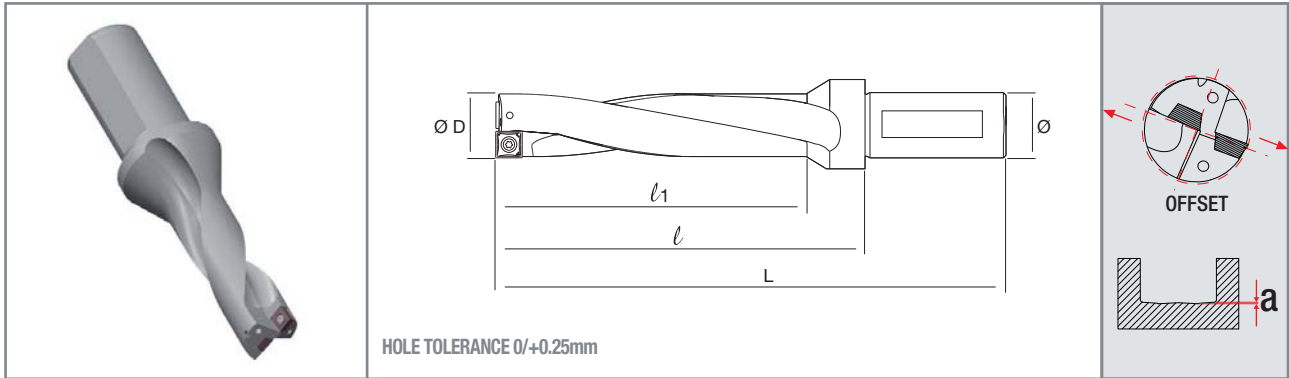


HOLE TOLERANCE 0/+0.25mm

INSERTS	DESCRIPTION	STOCK	DIMENSIONS								TORQUE Nm	MAX RADIAL OFFSET mm	a mm
			ØD	Ød	L	l	l1						
SP□□05	NT-DRS-3D D12.50-S20-05	●	12.5	20	107	57	39	NT-ST059	NT-FTB06	0.50	0.50	0.4	
	D13.00-S20-05	●	13	20	107	57	39	NT-ST059	NT-FTB06	0.50	0.50	0.4	
	D13.50-S20-05	●	13.5	20	110	60	42	NT-ST059	NT-FTB06	0.50	0.50	0.4	
	D14.00-S20-05	●	14	20	110	60	42	NT-ST059	NT-FTB06	0.50	0.50	0.4	
	D14.50-S20-05	●	14.5	20	114	64	45	NT-ST059	NT-FTB06	0.50	0.50	0.4	
	D15.00-S20-05	●	15	20	114	64	45	NT-ST059	NT-FTB06	0.50	0.50	0.4	
SP□□06	NT-DRS-3D D15.50-S25-06	●	15.5	25	124	68	48	NT-ST061	NT-FTB06	0.50	0.50	0.5	
	D16.00-S25-06	●	16	25	124	68	48	NT-ST061	NT-FTB06	0.50	0.50	0.5	
	D16.50-S25-06	●	16.5	25	127	71	51	NT-ST061	NT-FTB06	0.50	0.50	0.5	
	D17.00-S25-06	●	17	25	127	71	51	NT-ST061	NT-FTB06	0.50	0.50	0.5	
	D17.50-S25-06	●	17.5	25	131	75	54	NT-ST061	NT-FTB06	0.50	0.50	0.5	
	D18.00-S25-06	●	18	25	131	75	54	NT-ST061	NT-FTB06	0.50	0.50	0.5	
	D18.50-S25-06	●	18.5	25	134	78	57	NT-ST061	NT-FTB06	0.50	0.50	0.5	
	D19.00-S25-06	●	19	25	134	78	57	NT-ST061	NT-FTB06	0.50	0.50	0.5	
	D19.50-S25-06	●	19.5	25	139	83	60	NT-ST061	NT-FTB06	0.50	0.50	0.5	
	D20.00-S25-06	●	20	25	139	83	60	NT-ST061	NT-FTB06	0.50	0.50	0.5	
	D20.50-S25-06	●	20.5	25	142	86	63	NT-ST061	NT-FTB06	0.50	0.50	0.5	
	D21.00-S25-06	●	21	25	142	86	63	NT-ST061	NT-FTB06	0.50	0.25	0.5	
D21.50-S25-06	●	21.5	25	145	89	66	NT-ST061	NT-FTB06	0.50	0.25	0.5		
SP□□07	NT-DRS-3D D22.00-S25-07	●	22	25	145	89	66	NT-ST062	NT-FTB07	0.80	0.50	0.5	
	D22.50-S32-07	●	22.5	32	154	94	69	NT-ST062	NT-FTB07	0.80	0.50	0.5	
	D23.00-S32-07	●	23	32	154	94	69	NT-ST062	NT-FTB07	0.80	0.50	0.5	
	D23.50-S32-07	●	23.5	32	158	98	72	NT-ST062	NT-FTB07	0.80	0.50	0.5	
	D24.00-S32-07	●	24	32	158	98	72	NT-ST062	NT-FTB07	0.80	0.50	0.5	
	D24.50-S32-07	●	24.5	32	162	102	75	NT-ST062	NT-FTB07	0.80	0.50	0.5	
	D25.00-S32-07	●	25	32	162	102	75	NT-ST062	NT-FTB07	0.80	0.50	0.5	
	D25.50-S32-07	●	25.5	32	165	105	78	NT-ST062	NT-FTB07	0.80	0.50	0.6	
	D26.00-S32-07	●	26	32	165	105	78	NT-ST062	NT-FTB07	0.80	0.25	0.6	
	D26.50-S32-07	●	26.5	32	168	108	81	NT-ST062	NT-FTB07	0.80	0.25	0.6	
	D27.00-S32-07	●	27	32	168	108	81	NT-ST062	NT-FTB07	0.80	0.25	0.6	
	D27.50-S32-07	●	27.5	32	172	112	84	NT-ST062	NT-FTB07	0.80	0.25	0.6	
SP□□09	NT-DRS-3D D28.00-S32-09	●	28	32	172	112	84	NT-ST063	NT-FTB15	3.50	0.50	0.8	
	D28.50-S32-09	●	28.5	32	175	115	87	NT-ST063	NT-FTB15	3.50	0.50	0.8	
	D29.00-S32-09	●	29	32	175	115	87	NT-ST063	NT-FTB15	3.50	0.50	0.8	
	D29.50-S32-09	●	29.5	32	181	121	90	NT-ST063	NT-FTB15	3.50	0.50	0.8	
	D30.00-S32-09	●	30	32	181	121	90	NT-ST063	NT-FTB15	3.50	0.50	0.8	
	D31.00-S32-09	●	31	32	185	125	93	NT-ST063	NT-FTB15	3.50	0.25	0.8	
	D32.00-S32-09	●	32	32	188	128	96	NT-ST063	NT-FTB15	3.50	0.25	0.8	
	D33.00-S32-09	●	33	32	192	132	99	NT-ST063	NT-FTB15	3.50	0.25	0.8	

● stock standard

HOLDERS 3XD



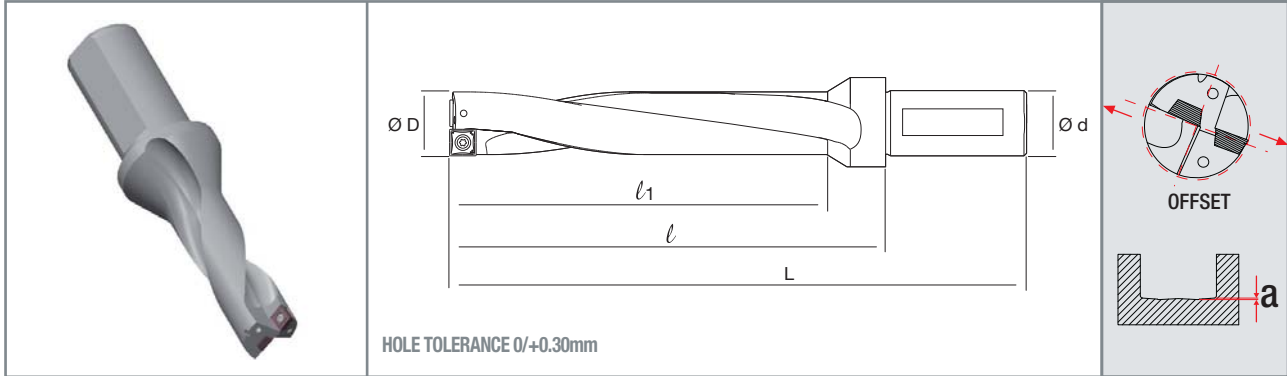
HOLE TOLERANCE 0/+0.25mm

INSERTS	DESCRIPTION	STOCK	DIMENSIONS							TORQUE Nm	MAX RADIAL OFFSET mm	a mm
			ØD	Ød	L	l	l1					
SP□□11	NT-DRS-3D D34.00-S40-11	●	34	40	205	135	102	NT-ST064	NT-FTB15	3.50	0.50	0.9
	D35.00-S40-11	●	35	40	209	139	105	NT-ST064	NT-FTB15	3.50	0.50	0.9
	D36.00-S40-11	●	36	40	213	143	108	NT-ST064	NT-FTB15	3.50	0.50	0.9
	D37.00-S40-11	●	37	40	217	147	111	NT-ST064	NT-FTB15	3.50	0.50	0.9
	D38.00-S40-11	●	38	40	221	151	114	NT-ST064	NT-FTB15	3.50	0.50	0.9
	D39.00-S40-11	●	39	40	224	154	117	NT-ST064	NT-FTB15	3.50	0.50	0.9
	D40.00-S40-11	●	40	40	228	158	120	NT-ST064	NT-FTB15	3.50	0.25	0.9
	D41.00-S40-11	●	41	40	232	162	123	NT-ST064	NT-FTB15	3.50	0.25	0.9
SP□□14	NT-DRS-3D D42.00-S40-14	●	42	40	235	165	126	NT-ST066	NT-FTB20	4.50	0.50	1.0
	D43.00-S40-14	●	43	40	239	169	129	NT-ST066	NT-FTB20	4.50	0.50	1.0
	D44.00-S40-14	●	44	40	242	172	132	NT-ST066	NT-FTB20	4.50	0.50	1.0
	D45.00-S40-14	●	45	40	247	177	135	NT-ST066	NT-FTB20	4.50	0.50	1.0
	D46.00-S40-14	●	46	40	251	181	138	NT-ST066	NT-FTB20	4.50	0.50	1.0
	D47.00-S40-14	●	47	40	254	184	141	NT-ST066	NT-FTB20	4.50	0.50	1.0
	D48.00-S40-14	●	48	40	258	188	144	NT-ST066	NT-FTB20	4.50	0.25	1.0
	D49.00-S40-14	●	49	40	261	191	147	NT-ST066	NT-FTB20	4.50	0.25	1.0
	D50.00-S40-14	●	50	40	265	195	150	NT-ST066	NT-FTB20	4.50	0.25	1.0

● stock standard

DRS DRILLING SYSTEM

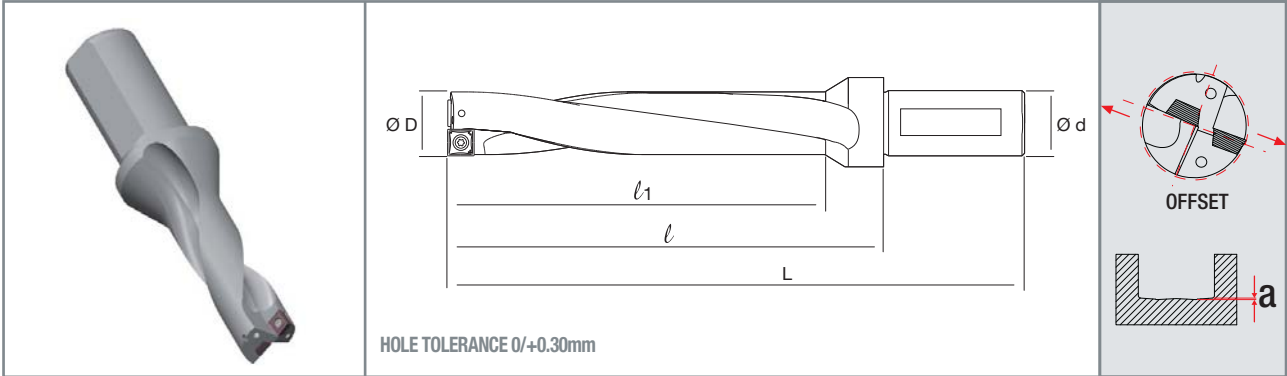
HOLDERS 4XD



INSERTS	DESCRIPTION	STOCK	DIMENSIONS					ST059	ST061	TORQUE Nm	MAX RADIAL OFFSET mm	a mm	
			ØD	Ød	L	l	l1						
SP□□05	NT-DRS-4D	D12.50-S20-05	●	12.5	20	120	70	52	NT-ST059	NT-FTB06	0.50	0.50	0.4
		D13.00-S20-05	●	13	20	120	70	52	NT-ST059	NT-FTB06	0.50	0.50	0.4
		D13.50-S20-05	●	13.5	20	124	74	56	NT-ST059	NT-FTB06	0.50	0.50	0.4
		D14.00-S20-05	●	14	20	124	74	56	NT-ST059	NT-FTB06	0.50	0.50	0.4
		D14.50-S20-05	●	14.5	20	129	79	60	NT-ST059	NT-FTB06	0.50	0.50	0.4
		D15.00-S20-05	●	15	20	129	79	60	NT-ST059	NT-FTB06	0.50	0.50	0.4
SP□□06	NT-DRS-4D	D15.50-S25-06	●	15.5	25	140	84	64	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D16.00-S25-06	●	16	25	140	84	64	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D16.50-S25-06	●	16.5	25	144	88	68	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D17.00-S25-06	●	17	25	144	88	68	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D17.50-S25-06	●	17.5	25	149	93	72	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D18.00-S25-06	●	18	25	149	93	72	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D18.50-S25-06	●	18.5	25	153	97	76	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D19.00-S25-06	●	19	25	153	97	76	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D19.50-S25-06	●	19.5	25	159	103	80	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D20.00-S25-06	●	20	25	159	103	80	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D20.50-S25-06	●	20.5	25	163	107	84	NT-ST061	NT-FTB06	0.50	0.50	0.5
		D21.00-S25-06	●	21	25	163	107	84	NT-ST061	NT-FTB06	0.50	0.25	0.5
		D21.50-S25-06	●	21.5	25	167	111	88	NT-ST061	NT-FTB06	0.50	0.25	0.5
SP□□07	NT-DRS-4D	D22.00-S25-07	●	22	25	167	111	88	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D22.50-S32-07	●	22.5	32	177	117	92	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D23.00-S32-07	●	23	32	177	117	92	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D23.50-S32-07	●	23.5	32	182	122	96	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D24.00-S32-07	●	24	32	182	122	96	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D24.50-S32-07	●	24.5	32	187	127	100	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D25.00-S32-07	●	25	32	187	127	100	NT-ST062	NT-FTB07	0.80	0.50	0.5
		D25.50-S32-07	●	25.5	32	191	131	104	NT-ST062	NT-FTB07	0.80	0.50	0.6
		D26.00-S32-07	●	26	32	191	131	104	NT-ST062	NT-FTB07	0.80	0.25	0.6
		D26.50-S32-07	●	26.5	32	195	135	108	NT-ST062	NT-FTB07	0.80	0.25	0.6
		D27.00-S32-07	●	27	32	195	135	108	NT-ST062	NT-FTB07	0.80	0.25	0.6
D27.50-S32-07	●	27.5	32	200	140	112	NT-ST062	NT-FTB07	0.80	0.25	0.6		
SP□□09	NT-DRS-4D	D28.00-S32-09	●	28	32	200	140	112	NT-ST063	NT-FTB15	3.50	0.50	0.8
		D28.50-S32-09	●	28.5	32	204	144	116	NT-ST063	NT-FTB15	3.50	0.50	0.8
		D29.00-S32-09	●	29	32	204	144	116	NT-ST063	NT-FTB15	3.50	0.50	0.8
		D29.50-S32-09	●	29.5	32	211	151	120	NT-ST063	NT-FTB15	3.50	0.50	0.8
		D30.00-S32-09	●	30	32	211	151	120	NT-ST063	NT-FTB15	3.50	0.50	0.8
		D31.00-S32-09	●	31	32	216	156	124	NT-ST063	NT-FTB15	3.50	0.25	0.8
		D32.00-S32-09	●	32	32	220	160	128	NT-ST063	NT-FTB15	3.50	0.25	0.8
D33.00-S32-09	●	33	32	225	165	132	NT-ST063	NT-FTB15	3.50	0.25	0.8		

● stock standard

HOLDERS 4XD



INSERTS	DESCRIPTION	STOCK	DIMENSIONS					ØD	Ød	TORQUE Nm	MAX RADIAL OFFSET mm	a mm
			L	l	l ₁							
SP□□11	NT-DRS-4D D34.00-S40-11	●	34	40	239	169	136	NT-ST064	NT-FTB15	3.50	0.50	0.9
	D35.00-S40-11	●	35	40	244	174	140	NT-ST064	NT-FTB15	3.50	0.50	0.9
	D36.00-S40-11	●	36	40	249	179	144	NT-ST064	NT-FTB15	3.50	0.50	0.9
	D37.00-S40-11	●	37	40	254	184	148	NT-ST064	NT-FTB15	3.50	0.50	0.9
	D38.00-S40-11	●	38	40	259	189	152	NT-ST064	NT-FTB15	3.50	0.50	0.9
	D39.00-S40-11	●	39	40	263	193	156	NT-ST064	NT-FTB15	3.50	0.50	0.9
	D40.00-S40-11	●	40	40	268	198	160	NT-ST064	NT-FTB15	3.50	0.25	0.9
	D41.00-S40-11	●	41	40	273	203	164	NT-ST064	NT-FTB15	3.50	0.25	0.9
SP□□14	NT-DRS-4D D42.00-S40-14	●	42	40	277	207	168	NT-ST066	NT-FTB20	4.50	0.50	1.0
	D43.00-S40-14	●	43	40	282	212	172	NT-ST066	NT-FTB20	4.50	0.50	1.0
	D44.00-S40-14	●	44	40	286	216	176	NT-ST066	NT-FTB20	4.50	0.50	1.0
	D45.00-S40-14	●	45	40	292	222	180	NT-ST066	NT-FTB20	4.50	0.50	1.0
	D46.00-S40-14	●	46	40	297	227	184	NT-ST066	NT-FTB20	4.50	0.50	1.0
	D47.00-S40-14	●	47	40	301	231	188	NT-ST066	NT-FTB20	4.50	0.50	1.0
	D48.00-S40-14	●	48	40	306	236	192	NT-ST066	NT-FTB20	4.50	0.25	1.0
	D49.00-S40-14	●	49	40	310	240	196	NT-ST066	NT-FTB20	4.50	0.25	1.0
	D50.00-S40-14	●	50	40	315	245	200	NT-ST066	NT-FTB20	4.50	0.25	1.0

● stock standard

NEW

OLD

The current DRS 4xD will be available while stocks last and will be replaced by a version with modified helix geometry and double cooling hole, these implementation will ensure higher performance and accuracy.

Le attuali DRS 4xD saranno disponibili fino ad esaurimento scorte e verranno sostituite da una versione con geometria dell'elica modificata e foro di refrigerazione sdoppiato, implementazioni che garantiranno prestazioni e precisione ancora superiori.

Die aktuellen DRS 4xD sind verfügbar solange der Vorrat reicht und wird durch eine Version mit modifizierter Geometrie und Innenkühlung geteilt, Implementierungen gewährleisten eine noch höhere Leistung und Genauigkeit.

Les DRS 4xD actuelles seront disponibles jusqu'à épuisement des stocks et seront substituées par une géométrie à hélice modifiée et avec un trou de réfrigération scindé, des améliorations qui garantiront des prestations et une précision supérieures.

Las actuales DRS 4xD estarán disponibles hasta agotamiento existencias y se sustituirán por una versión con geometría de la hélice modificada y doble foro refrigerante, implementaciones que garantizarán rendimiento y precisión superiores.

Свёрла DRS 4xD будут в наличии до окончания их на складе, и в последствии, будут заменены на модель с улучшенной геометрией стружечной канавки и удвоенной канавки для подачи СОЖ, эти улучшения приведут к повышению рабочих характеристик этих свёрел.

DRS DRILLING SYSTEM

CUTTING SPEED (Vc m/min)

Gr.	MATERIAL		
P1	Free cutting steel and structural steel	Rm < 500 N/mm ²	(9SMn28 / 1.0715 / AVP)
P2	Carbon steel and low alloy steel	Rm 500-700 N/mm ²	(C40 / 1.0511)
P3	Medium alloy steel and heat treated steel	Rm 600-800 N/mm ²	(42CrMo4 / 1.7225)
P4	High alloy steel	Rm 800-1000 N/mm ²	(100Cr6 / 1.3505)
P5	Tool steel	Rm 900-1200 N/mm ²	(X210Cr12 / 1.2080 / K100)
P6	High tensile strength steel	Rm 1200-1600 N/mm ²	(X2NiCrMo18.9.5 / 1.6358 / W720)
M1	Ferritic stainless steel	Rm 400-700 N/mm ²	(X40Cr13 / 1.4034 / AISI420)
M2	Austenitic stainless steel (good machinability)	Rm 500-750 N/mm ²	(X5CrNi18.10 / 1.4301 / AISI304)
M3	Austenitic stainless steel (medium machinability)	Rm 550-850 N/mm ²	(X2CrNiMo18.12 / 1.4435 / AISI316L)
M4	Martensitic stainless steel	Rm 650-950 N/mm ²	(X2CrNiMoN25.7.4 / 1.4410 / Super Duplex)
M5	PH stainless steel	Rm 800-1250 N/mm ²	(X5CrNiNb16.4 / 1.4542 / 17-4PH)
K1	Grey cast iron	HB 150-250	(GG-25 / 0.6025)
K2	Nodular cast iron	HB 150-350	(GGG-50 / 0.7050)
K3	Austenitic cast iron	HB 120-260	(GGL-NiCr20.2 / 0.6660)
K4	ADI cast iron	HB 250-500	(GJS-1000-5 / ADI 1000)
N1	Aluminium alloys < 12% Si		(AlMgSi0.5 / 3.3206)
N2	Aluminium alloys > 12% Si		(AISI12 / 3.2582)
N3	Copper alloys		(E-Cu57 / 2.0060)
N4	Brass alloys and bronze alloys		(CuZn20Al2 / 2.0460)
S1	Heat resistant super alloys HRSA (good machinability)	HRC < 25	(NiCr17Mo17FeW / 2.4802 / Hastelloy)
S2	Heat resistant super alloys HRSA (medium machinability)	HRC 25-35	(NiCr20Ti / 2.4630 / Nimonic 80)
S3	Heat resistant super alloys HRSA (low machinability)	HRC 35-45	(NiCr19Fe19NbMo / 2.4668 / Inconel 718)
S4	Low alloy titanium		(Ti99.6 / 3.7055 / Titanium grade 3)
S5	High alloy titanium		(Ti5Al2.5Sn / 3.7115 / Titanium grade 6)

Gr.	Vc m/min			fn mm/rev Ø12.50÷15.00		fn mm/rev Ø15.50÷21.50		fn mm/rev Ø22.00÷33.00		fn mm/rev Ø34.00÷50.00	
	JP5625	JP9635	JU6520	2D, 3D	4D	2D, 3D	4D	2D, 3D	4D	2D, 3D	4D
P1	180 ÷ 250			0.05 ÷ 0.10	0.04 ÷ 0.07	0.06 ÷ 0.12	0.05 ÷ 0.08	0.07 ÷ 0.14	0.06 ÷ 0.11	0.08 ÷ 0.16	0.07 ÷ 0.14
P2	120 ÷ 200			0.07 ÷ 0.14	0.05 ÷ 0.10	0.09 ÷ 0.18	0.06 ÷ 0.13	0.11 ÷ 0.22	0.09 ÷ 0.18	0.12 ÷ 0.25	0.11 ÷ 0.22
P3	100 ÷ 180			0.06 ÷ 0.12	0.04 ÷ 0.08	0.08 ÷ 0.16	0.06 ÷ 0.11	0.10 ÷ 0.20	0.08 ÷ 0.16	0.11 ÷ 0.22	0.10 ÷ 0.20
P4	100 ÷ 150			0.06 ÷ 0.12	0.04 ÷ 0.08	0.08 ÷ 0.16	0.06 ÷ 0.11	0.10 ÷ 0.20	0.08 ÷ 0.16	0.11 ÷ 0.22	0.10 ÷ 0.20
P5	80 ÷ 140			0.05 ÷ 0.10	0.04 ÷ 0.07	0.07 ÷ 0.12	0.05 ÷ 0.08	0.09 ÷ 0.18	0.07 ÷ 0.14	0.10 ÷ 0.20	0.09 ÷ 0.18
P6	80 ÷ 120			0.04 ÷ 0.08	0.03 ÷ 0.06	0.06 ÷ 0.12	0.04 ÷ 0.08	0.08 ÷ 0.16	0.06 ÷ 0.13	0.09 ÷ 0.18	0.08 ÷ 0.16
M1	100 ÷ 150	120 ÷ 220		0.05 ÷ 0.10	0.04 ÷ 0.07	0.06 ÷ 0.12	0.05 ÷ 0.08	0.07 ÷ 0.14	0.06 ÷ 0.12	0.08 ÷ 0.16	0.07 ÷ 0.14
M2	80 ÷ 140	120 ÷ 200		0.05 ÷ 0.08	0.04 ÷ 0.06	0.06 ÷ 0.10	0.04 ÷ 0.08	0.07 ÷ 0.12	0.06 ÷ 0.10	0.08 ÷ 0.14	0.07 ÷ 0.13
M3	80 ÷ 120	100 ÷ 180		0.04 ÷ 0.08	0.03 ÷ 0.06	0.05 ÷ 0.10	0.04 ÷ 0.08	0.06 ÷ 0.12	0.05 ÷ 0.10	0.07 ÷ 0.14	0.06 ÷ 0.13
M4		90 ÷ 150		0.04 ÷ 0.07	0.03 ÷ 0.06	0.04 ÷ 0.08	0.03 ÷ 0.07	0.05 ÷ 0.10	0.04 ÷ 0.08	0.06 ÷ 0.12	0.05 ÷ 0.11
M5		80 ÷ 140		0.04 ÷ 0.07	0.03 ÷ 0.06	0.04 ÷ 0.08	0.03 ÷ 0.07	0.05 ÷ 0.10	0.04 ÷ 0.08	0.06 ÷ 0.12	0.05 ÷ 0.11
K1	120 ÷ 180			0.08 ÷ 0.16	0.06 ÷ 0.11	0.09 ÷ 0.18	0.06 ÷ 0.13	0.12 ÷ 0.25	0.10 ÷ 0.20	0.15 ÷ 0.30	0.13 ÷ 0.27
K2	80 ÷ 160			0.07 ÷ 0.14	0.05 ÷ 0.10	0.08 ÷ 0.16	0.05 ÷ 0.11	0.10 ÷ 0.20	0.08 ÷ 0.16	0.12 ÷ 0.24	0.11 ÷ 0.21
K3	80 ÷ 120			0.06 ÷ 0.12	0.04 ÷ 0.09	0.07 ÷ 0.14	0.05 ÷ 0.10	0.10 ÷ 0.16	0.08 ÷ 0.13	0.12 ÷ 0.20	0.10 ÷ 0.18
K4	60 ÷ 100			0.05 ÷ 0.10	0.04 ÷ 0.07	0.06 ÷ 0.12	0.04 ÷ 0.08	0.08 ÷ 0.14	0.06 ÷ 0.11	0.10 ÷ 0.18	0.08 ÷ 0.16
N1			250 ÷ 450	0.06 ÷ 0.12	0.04 ÷ 0.08	0.08 ÷ 0.16	0.06 ÷ 0.11	0.10 ÷ 0.20	0.08 ÷ 0.16	0.11 ÷ 0.22	0.10 ÷ 0.20
N2			230 ÷ 400	0.06 ÷ 0.12	0.04 ÷ 0.08	0.08 ÷ 0.16	0.06 ÷ 0.11	0.10 ÷ 0.20	0.08 ÷ 0.16	0.11 ÷ 0.22	0.10 ÷ 0.20
N3			200 ÷ 350	0.06 ÷ 0.12	0.04 ÷ 0.08	0.08 ÷ 0.16	0.06 ÷ 0.11	0.10 ÷ 0.20	0.08 ÷ 0.16	0.11 ÷ 0.22	0.10 ÷ 0.20
N4			150 ÷ 300	0.06 ÷ 0.12	0.04 ÷ 0.08	0.08 ÷ 0.16	0.06 ÷ 0.11	0.10 ÷ 0.20	0.08 ÷ 0.16	0.11 ÷ 0.22	0.10 ÷ 0.20
S1		30 ÷ 60		0.04 ÷ 0.07	0.03 ÷ 0.06	0.04 ÷ 0.08	0.03 ÷ 0.07	0.05 ÷ 0.10	0.04 ÷ 0.08	0.06 ÷ 0.12	0.05 ÷ 0.11
S2		30 ÷ 50		0.04 ÷ 0.07	0.03 ÷ 0.06	0.04 ÷ 0.08	0.03 ÷ 0.07	0.05 ÷ 0.10	0.04 ÷ 0.08	0.06 ÷ 0.12	0.05 ÷ 0.11
S3		20 ÷ 40		0.04 ÷ 0.07	0.03 ÷ 0.06	0.04 ÷ 0.08	0.03 ÷ 0.07	0.05 ÷ 0.10	0.04 ÷ 0.08	0.06 ÷ 0.12	0.05 ÷ 0.11
S4		50 ÷ 100		0.05 ÷ 0.08	0.04 ÷ 0.06	0.06 ÷ 0.10	0.04 ÷ 0.08	0.07 ÷ 0.12	0.06 ÷ 0.10	0.08 ÷ 0.14	0.07 ÷ 0.13
S5		40 ÷ 80		0.05 ÷ 0.08	0.04 ÷ 0.06	0.06 ÷ 0.10	0.04 ÷ 0.08	0.07 ÷ 0.12	0.06 ÷ 0.10	0.08 ÷ 0.14	0.07 ÷ 0.13



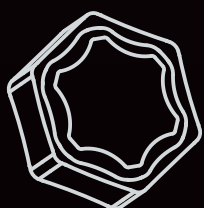
DOUBLE HEX SERIES

The first choice for cast iron milling.

ISO

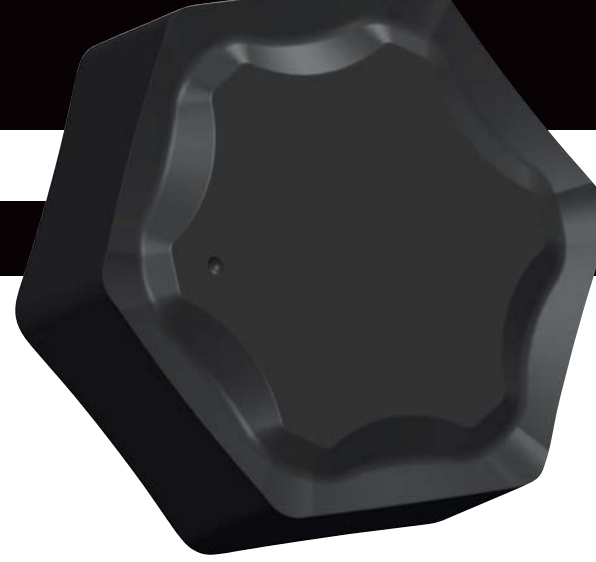
K

- carbide (CVD, PVD)
- ceramic (Si_3N_4)
- solid PCBN



12 edges

nixkoTOOLS



DOUBLE HEX SERIES

The first choice for cast iron milling.



- High performance milling system based on double-sided 12-edged inserts
- The 60° positioning angle and the proprietary insert geometries provide a balanced mix of machining stability and low cutting forces.
- The broad range available, including coated carbide grades (both PVD and CVD), Silicon Nitride and solid PCBN, can match a wide variety of applications.



- Sistema di fresatura con inserti bilaterali a 12 taglienti estremamente performante e competitivo.
- L'angolo di registrazione di 60° e le speciali geometrie degli inserti assicurano un'ottima combinazione tra stabilità di lavorazione e sforzi di taglio.
- Grande versatilità grazie alla disponibilità di inserti in metallo duro rivestito (sia PVD che CVD), nitrato di silicio e PCBN solido in grado di soddisfare qualsiasi esigenza produttiva.



- Frässystem mit doppelseitigen Einsätzen mit 12 Schneiden. sehr Leistungs- und konkurrenzfähig.
- Der Aufnahmewinkel von 60° und die speziellen Wendepultengeometrien sorgen für eine gute Kombination von Maschinenstabilität und Schneid Aufwand.
- Große Vielseitigkeit dank der Verfügbarkeit von beschichteten Wendeschneidplatten (sowohl PVD, CVD), Siliziumnitrid und PCBN können alle Produktionsanforderungen erfüllen.



- Système de fraisage avec plaquette bi-latérale à 12 arrêtes de coupe, extrêmement performant et compétitif.
- L'angle de prise de 60° et les géométries de plaquettes spéciales assurent une excellente combinaison de la stabilité et de l'effort de coupe.
- Une grande polyvalence grâce à la disponibilité d'inserts en carbure revêtus (à la fois PVD CVD), nitrure de silicium et PCBN solide capables de répondre à toutes les exigences de production.

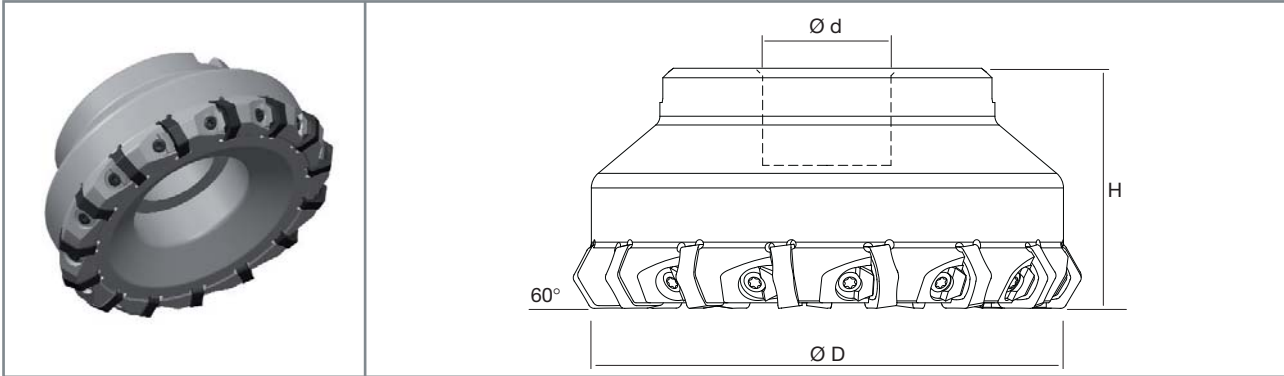


- Sistema de fresado con placas de doble cara con 12 filos de corte de alto rendimiento.
- El ángulo de grabación de 60° y las geometrías especiales de los insertos garantizan una buena combinación de estabilidad de proceso y esfuerzo de corte.
- Gran versatilidad gracias a la disponibilidad de placas de metal duro recubiertas tanto PVD que CVD, nitrato de silicio y PCBN sólido que pueden cumplir con todas las necesidades de producción.



- Высокопроизводительная система для фрезерования с 12ю режущими кромками.
- 60° угол установки в сочетании со специальной геометрией пластины обеспечивает стабильность обработки и низкие рабочие усилия резания.
- Широкая гамма пластин из твёрдого сплава с покрытием (PVD или CVD), нитрида кремния и цельного КБН может быть применена для широкого круга задач.

HOLDERS



INSERTS	DESCRIPTION	STOCK	DIMENSIONS					TORQUE Nm							
			ØD	Z	Ød	H									
HN□□0905	NT-HN09	D080-F27-Z8	●	80	8	27	50	×	NT-WD090	NT-SC090	NT-WR030	7.0			
		D080-F27-Z10	●	80	10	27	50	×	NT-WD090	NT-SC090	NT-WR030	7.0			
		D100-F32-Z10	●	100	10	32	50	×	NT-WD090	NT-SC090	NT-WR030	7.0			
		D100-F32-Z14	●	100	14	32	50	×	NT-WD090	NT-SC090	NT-WR030	7.0			
		D125-F40-Z12	●	125	12	40	63	×	NT-WD090	NT-SC090	NT-WR030	7.0			
		D125-F40-Z15	●	125	15	40	63	×	NT-WD090	NT-SC090	NT-WR030	7.0			
		D160-F40-Z15	●	160	15	40	63	×	NT-WD090	NT-SC090	NT-WR030	7.0			
		D160-F40-Z20	●	160	20	40	63	×	NT-WD090	NT-SC090	NT-WR030	7.0			

● stock standard

INSERTS

	DESCRIPTION				HC	CN	BH					
		IC	T	r	JC7515	JP7525	NSM400	NBS5050				
GL	HNEX 090510-GL	16.20	5.56	1.0	●	●						
	090520-GL	16.20	5.56	2.0	●	●						
GG	HNEX 090520-GG	16.20	5.56	2.0	●	●						
	HNMX 090520-GG NEW	16.20	5.56	2.0		●						
GH	HNEX 090516-GH	16.20	5.56	1.6	●	●						
	090530-GH	16.20	5.56	3.0	●	●						
GP	HNEN 090520-GP	16.20	5.56	2.0			●	★				
	090530-GP	16.20	5.56	3.0			●					

● stock standard; ★ upcoming introduction

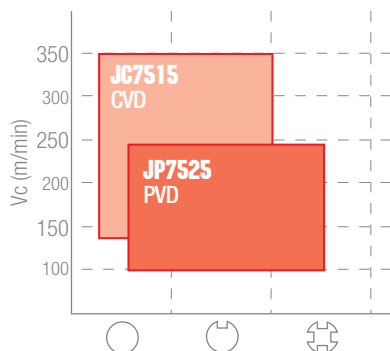
BH: PCBN with high CBN content
 CN: silicon nitride S₃N₄
 HC: coated carbide

JC: CVD coating
 JP: PVD coating

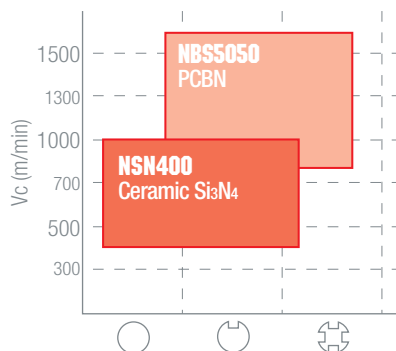
DOUBLEHEX SERIES

GRADES APPLICATION CHART

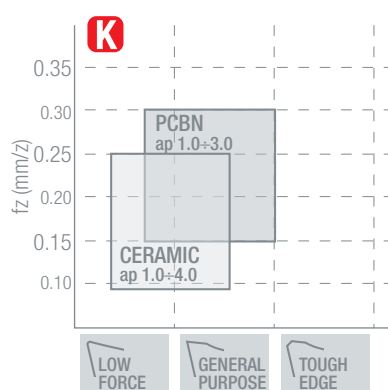
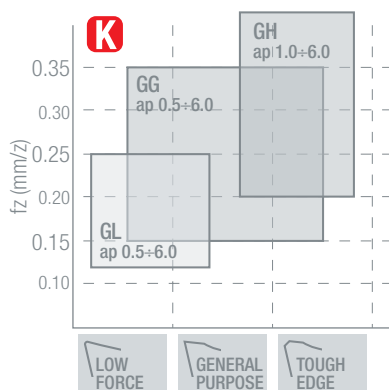
CARBIDE



ADVANCED MATERIALS



CHIPBREAKERS APPLICATION CHART



CUTTING SPEED (Vc m/min)

Gr.	MATERIAL	JC7515	JP7525	NSN400	NBS5050
K1	Grey cast iron HB 150-250 (GG-25 / 0.6025)	200 ÷ 350	150 ÷ 240	600 ÷ 1000	800 ÷ 1500
K2	Nodular cast iron HB 150-350 (GGG-50 / 0.7050)	180 ÷ 280	120 ÷ 200	400 ÷ 700	
K3	Austenitic cast iron HB 120-260 (GGL-NiCr20.2 / 0.6660)	140 ÷ 200	100 ÷ 150		
K4	ADI cast iron HB 250-500 (GJS-1000-5 / ADI 1000)	120 ÷ 180			



DOUBLE 4F FACE SERIES

Double up your productivity on face milling.

ISO

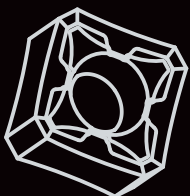
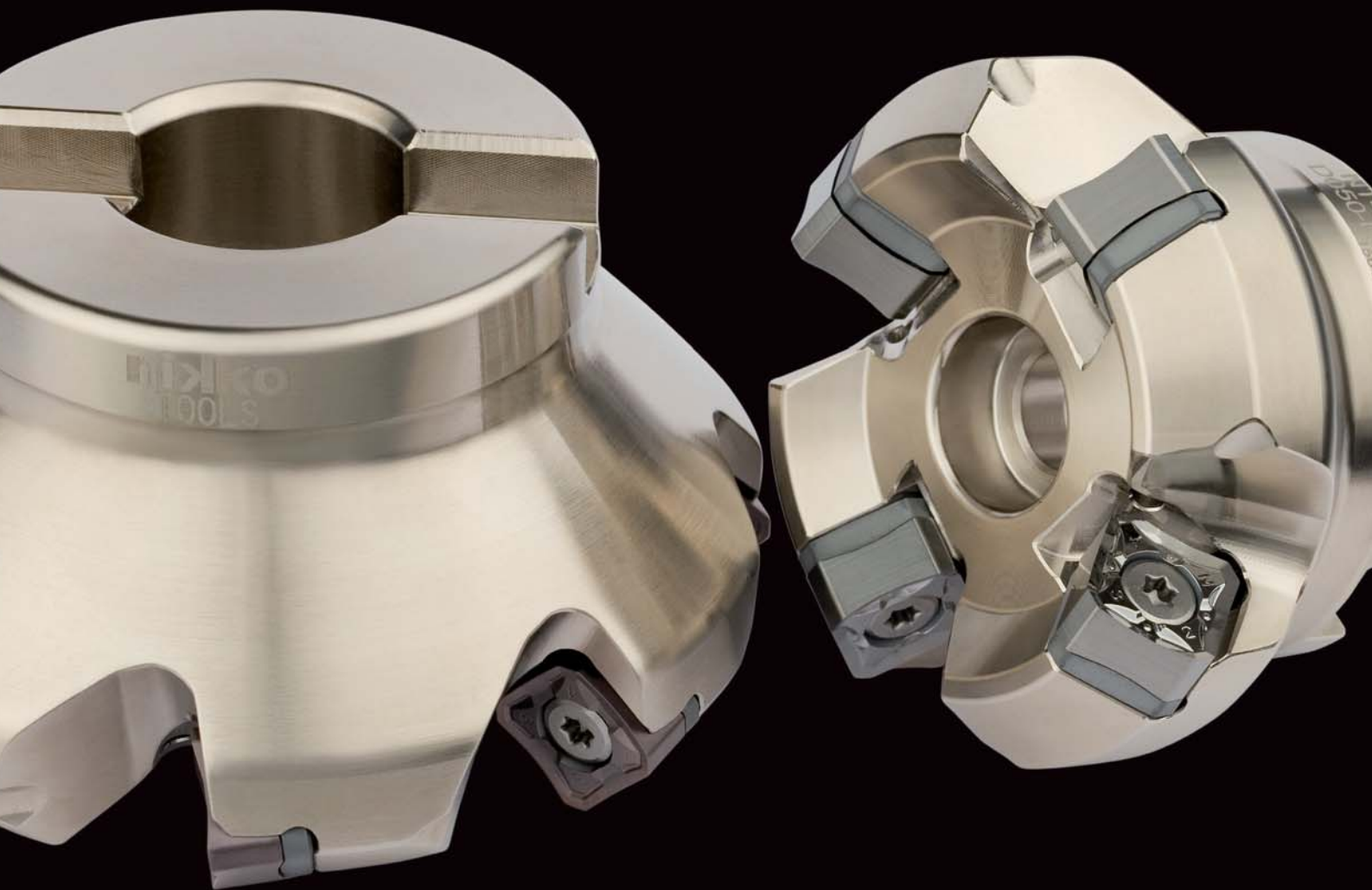
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M

K

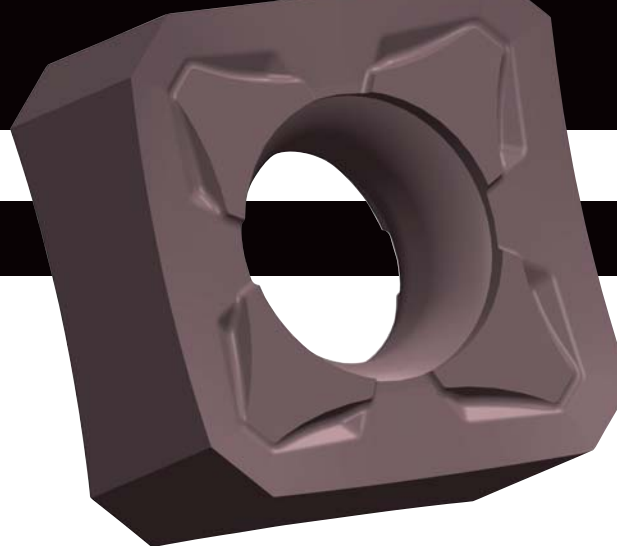
N

S



8 edges

nixkoTOOLS



DOUBLE4FACE SERIES

Double up your productivity on face milling.



- Face milling with double-sided 8-edged square inserts.
- The lineup includes 5 different insert styles combined with 6 carbide grades, matching a wide range of applications.
- Thanks to the curved design of the cutting edge, allowing a dramatic reduction of cutting forces, the Double4Face system is eligible for use on setups where a limited power is available, as well as being an effective replacement for conventional positive inserts.



- Sistema per spianatura con inserti bilaterali quadrati ad 8 taglianti.
- 5 differenti geometrie di taglio abbinata a 6 gradi di metallo duro consentono l'applicazione su una grandissima varietà di materiali.
- La speciale geometria arcuata del tagliente riduce drasticamente gli sforzi di taglio consentendo l'utilizzo del sistema Double4Face anche su macchine poco potenti o in concorrenza a geometrie positive convenzionali.



- Stirnfräsen mit bilateralen 8 kantigen Wendescheidplatten.
- 5 verschiedene Schneidgeometrien kombiniert mit 6 Hartmetallsorten ermöglichen die Anwendung einer Vielzahl von Materialien.
- Die spezielle Geometrie der Schneidkante reduziert drastisch den Schneidaufwand, unter Verwendung des Systems Double4Face an Maschinen Poso mit leistungsstarken oder herkömmlichen positiven Geometrien.



- Système pour surfacage avec plaque bilatérale carrée à 8 arêtes de coupe.
- 5 différentes géométries de coupe associées à 6 nuances de carbure permettent une grande variété d'utilisation sur différents matériaux.
- La géométrie spéciale de l'arête de coupe arquée réduit drastiquement les efforts de coupe, permettant l'utilisation du système Double4Face même sur des machines peu puissantes ou en concurrence avec des géométries de plaque positives conventionnelles.

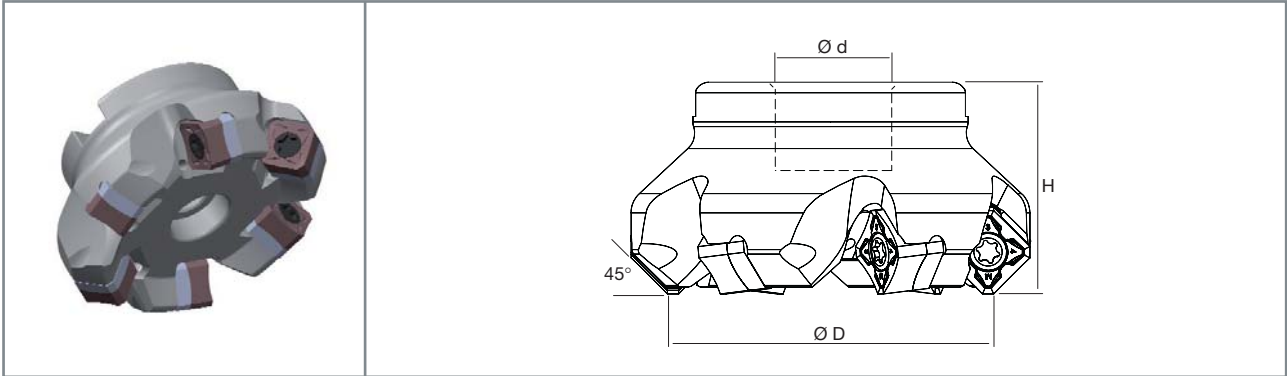


- Sistema de fresado frontal con placas cuadrada de doble cara con 8 filos.
- 5 geometrías de corte diferentes combinados con 6 grados de metal duro que permiten su aplicación a una amplia gama de materiales.
- La especial geometría arqueada del filo reduce drásticamente los esfuerzos de corte permitiendo el uso del sistema Double4Face también en máquinas con poca potencia o en competencia con geometrías positivas convencionales.



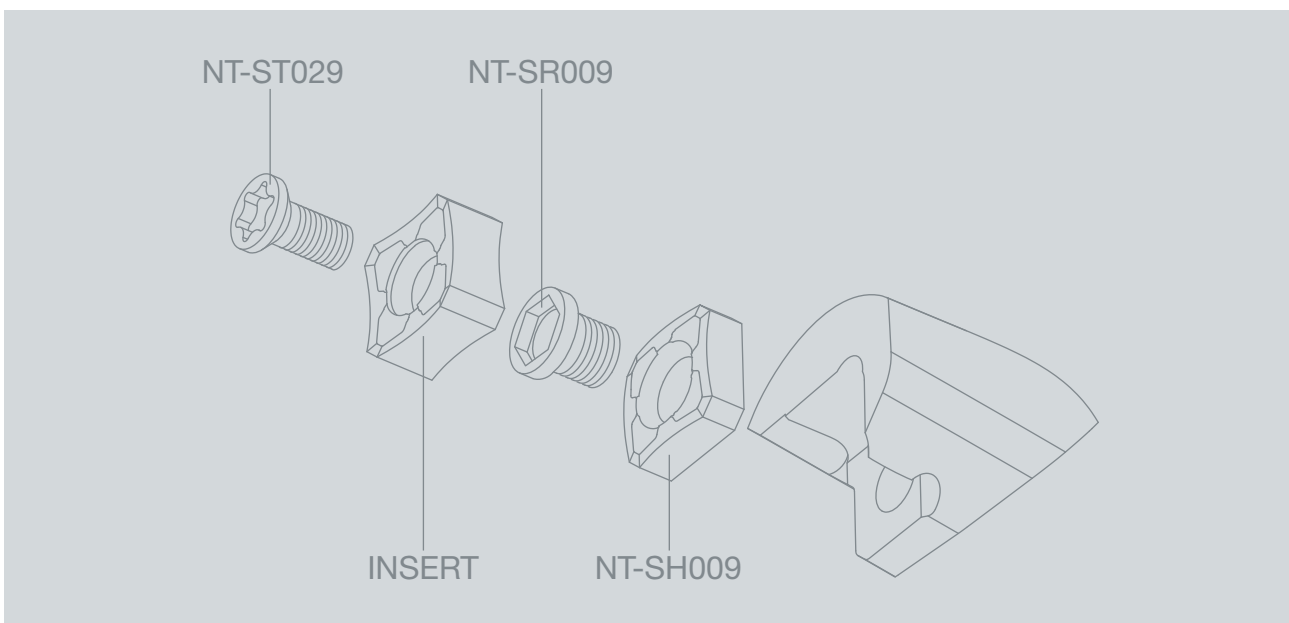
- Система для фрезерования плоскости с двухсторонними квадратными пластинами с 8-ю кромками.
- 5 различных режущих геометрий в комбинации с 6-ю твёрдыми сплавами делает возможным их применение для широкого спектра задач.
- Специальная аркообразная геометрии режущей кромки позволяет существенно понизить режущее усилие, система Double4Face даёт возможность работать на станках с ограниченной мощностью, так и замену общеприменяемых позитивных пластин.

HOLDERS



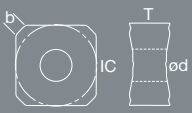
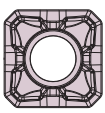
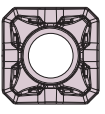
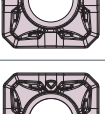
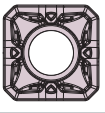
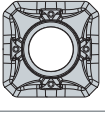
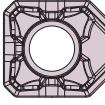
INSERTS	DESCRIPTION	STOCK	DIMENSIONS				✓	← TORQUE Nm			← TORQUE Nm				
			ØD	Z	Ød	H		NT-SH009	NT-SR009	NT-WR040	NT-ST029	NT-FTB15	3.5		
SN□□1205	NT-SX12H	D050-F22-Z4	●	50	4	22	40	✓	NT-SH009	NT-SR009	NT-WR040	7.0	NT-ST029	NT-FTB15	3.5
		D050-F22-Z5	●	50	5	22	40	✓	NT-SH009	NT-SR009	NT-WR040	7.0	NT-ST029	NT-FTB15	3.5
		D063-F22-Z5	●	63	5	22	40	✓	NT-SH009	NT-SR009	NT-WR040	7.0	NT-ST029	NT-FTB15	3.5
		D063-F22-Z6	●	63	6	22	40	✓	NT-SH009	NT-SR009	NT-WR040	7.0	NT-ST029	NT-FTB15	3.5
		D080-F27-Z6	●	80	6	27	50	✓	NT-SH009	NT-SR009	NT-WR040	7.0	NT-ST029	NT-FTB15	3.5
		D080-F27-Z7	●	80	7	27	50	✓	NT-SH009	NT-SR009	NT-WR040	7.0	NT-ST029	NT-FTB15	3.5
		D080-F27-Z8 NEW	●	80	8	27	50	✓	NT-SH009	NT-SR009	NT-WR040	7.0	NT-ST029	NT-FTB15	3.5
		D100-F32-Z7	●	100	7	32	50	✓	NT-SH009	NT-SR009	NT-WR040	7.0	NT-ST029	NT-FTB15	3.5
		D100-F32-Z8	●	100	8	32	50	✓	NT-SH009	NT-SR009	NT-WR040	7.0	NT-ST029	NT-FTB15	3.5
		D100-F32-Z9 NEW	●	100	9	32	50	✓	NT-SH009	NT-SR009	NT-WR040	7.0	NT-ST029	NT-FTB15	3.5
		D125-F40-Z10	●	125	10	40	63	✓	NT-SH009	NT-SR009	NT-WR040	7.0	NT-ST029	NT-FTB15	3.5
		D160-F40-Z12	●	160	12	40	63	✓	NT-SH009	NT-SR009	NT-WR040	7.0	NT-ST029	NT-FTB15	3.5

● stock standard



DOUBLE4FACE SERIES

INSERTS

	DESCRIPTION					HC					HW				
		IC	T	b	Ød	JP5520	JP5530	JP9535	JC7515	JP7525	JU6520				
SC	 SNEX 1205ANEN-SC	12.70	6.35	2.20	5.90	●	●	● ^{NEW}	●	●					
GP	 SNEX 1205ANEN-GP	12.70	6.35	2.20	5.90	●	●	● ^{NEW}	●	●					
	 SNMX 1205ANEN-GP ^{NEW}	12.70	6.35	2.20	5.90	●									
TE	 SNEX 1205ANSN-TE	12.70	6.35	2.20	5.90	●	●		●	●					
AL	 POLISHED SNEX 1205ANFN-AL	12.70	6.35	2.20	5.90						●				
WU WIPER	 SNEX 1205-WU	12.70	6.35	5.60	5.90	●	●		●	●					

● stock standard

HC: coated carbide

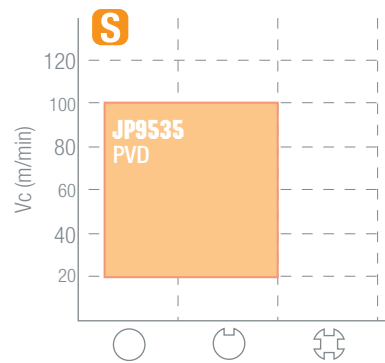
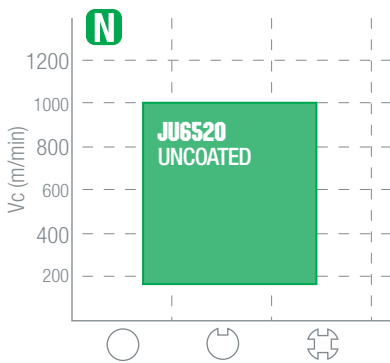
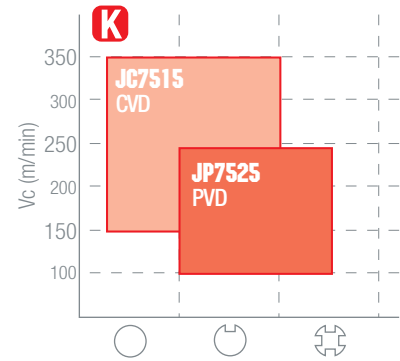
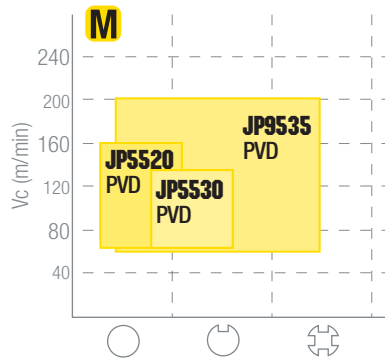
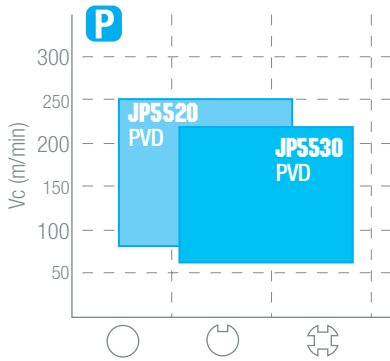
HW: uncoated carbide

JC: CVD coating

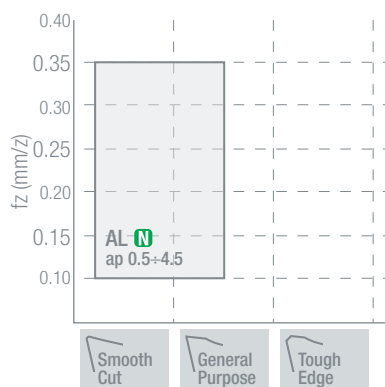
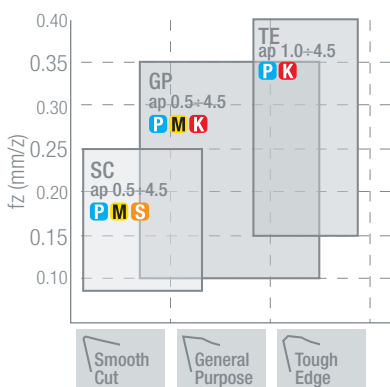
JP: PVD coating

JU: uncoated

GRADES APPLICATION CHART

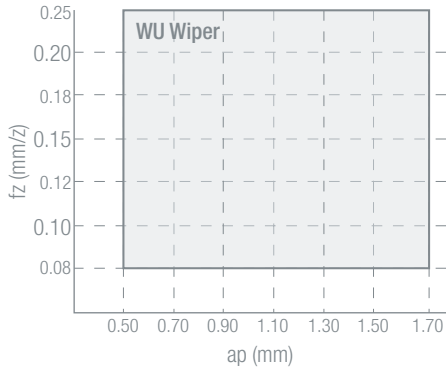


CHIPBREAKERS APPLICATION CHART

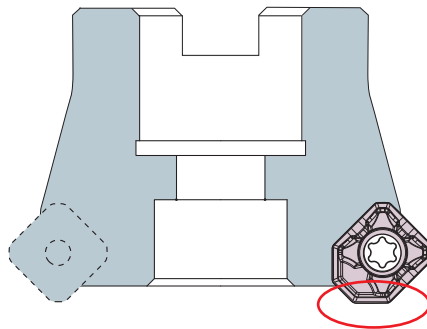


DOUBLE4FACE SERIES

WIPER APPLICATION CHART



WIPER INSTALLATION



- The wiper insert must be mounted face towards the centre of the holder (see picture)
- WU style inserts feature 2 cutting edges (one on each side)
- Only 1 wiper insert per setup



- Installare l'inserto wiper rivolto verso il centro della fresa (vedere figura).
- La geometria WU ha 2 taglienti utilizzabili (uno per ogni lato)
- Installare un solo inserto wiper sul corpo fresa.



- Befestigen Sie die Wendeschneidplatte WIPER gegenüber der Mitte des Werkzeugs (siehe Abbildung).
- Die Geometrie WU hat zwei nutzbare Schneiden (eine pro Seite).
- Befestigen Sie nur eine Wendeschneidplatte WIPER auf den Schneidkörper



- Installer la plaquette wiper en face du centre de la fraise (voir photo).
- La géométrie WU a 2 arêtes utilisables (une pour chaque côté).
- Installer une seule plaquette wiper sur le corps d'outil.



- Instalar el inserto wiper frente al centro de la herramienta (ver figura).
- La geometría WU tiene dos filos útiles (uno por cada lado).
- Instalar un solo inserto wiper en el cuerpo fresa.



- Устанавливайте пластину wiper в направлении к центру фрезы(см. рисунок).
- Пластины геометрии WU обладают 2мя режущими кромками (одна на каждую сторону).
- Только одну пластину wiper устанавливайте на фрезу.

CUTTING SPEED (Vc m/min)

Gr.	MATERIAL		
P1	Free cutting steel and structural steel	Rm < 500 N/mm ²	(9SMn28 / 1.0715 / AVP)
P2	Carbon steel and low alloy steel	Rm 500-700 N/mm ²	(C40 / 1.0511)
P3	Medium alloy steel and heat treated steel	Rm 600-800 N/mm ²	(42CrMo4 / 1.7225)
P4	High alloy steel	Rm 800-1000 N/mm ²	(100Cr6 / 1.3505)
P5	Tool steel	Rm 900-1200 N/mm ²	(X210Cr12 / 1.2080 / K100)
P6	High tensile strength steel	Rm 1200-1600 N/mm ²	(X2NiCrMo18.9.5 / 1.6358 / W720)
M1	Ferritic stainless steel	Rm 400-700 N/mm ²	(X40Cr13 / 1.4034 / AISI420)
M2	Austenitic stainless steel (good machinability)	Rm 500-750 N/mm ²	(X5CrNi18.10 / 1.4301 / AISI304)
M3	Austenitic stainless steel (medium machinability)	Rm 550-850 N/mm ²	(X2CrNiMo18.12 / 1.4435 / AISI316L)
M4	Martensitic stainless steel	Rm 650-950 N/mm ²	(X2CrNiMoN25.7.4 / 1.4410 / Super Duplex)
M5	PH stainless steel	Rm 800-1250 N/mm ²	(X5CrNiNb16.4 / 1.4542 / 17-4PH)
K1	Grey cast iron	HB 150-250	(GG-25 / 0.6025)
K2	Nodular cast iron	HB 150-350	(GGG-50 / 0.7050)
K3	Austenitic cast iron	HB 120-260	(GGL-NiCr20.2 / 0.6660)
K4	ADI cast iron	HB 250-500	(GJS-1000-5 / ADI 1000)
N1	Aluminium alloys < 12% Si		(AlMgSi0.5 / 3.3206)
N2	Aluminium alloys > 12% Si		(AlSi12 / 3.2582)
N3	Copper alloys		(E-Cu57 / 2.0060)
N4	Brass alloys and bronze alloys		(CuZn20Al2 / 2.0460)
S1	Heat resistant super alloys HRSA (good machinability)	HRC < 25	(NiCr17Mo17FeW / 2.4802 / Hastelloy)
S2	Heat resistant super alloys HRSA (medium machinability)	HRC 25-35	(NiCr20Ti / 2.4630 / Nimonic 80)
S3	Heat resistant super alloys HRSA (low machinability)	HRC 35-45	(NiCr19Fe19NbMo / 2.4668 / Inconel 718)
S4	Low alloy titanium		(Ti99.6 / 3.7055 / Titanium grade 3)
S5	High alloy titanium		(Ti5Al2.5Sn / 3.7115 / Titanium grade 6)

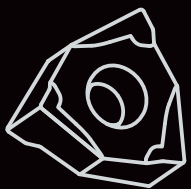
Gr.	JP5520	JP5530	JP9535	JC7515	JP7525	JU6520
P1	200 ÷ 250	180 ÷ 230				
P2	160 ÷ 220	150 ÷ 210				
P3	140 ÷ 200	120 ÷ 180				
P4	120 ÷ 160	100 ÷ 150				
P5	100 ÷ 140	80 ÷ 130				
P6	80 ÷ 120	60 ÷ 110				
M1	100 ÷ 160	90 ÷ 150	120 ÷ 220			
M2	80 ÷ 140	80 ÷ 130	120 ÷ 200			
M3	60 ÷ 120	60 ÷ 100	100 ÷ 180			
M4			90 ÷ 150			
M5			80 ÷ 140			
K1				200 ÷ 350	150 ÷ 240	
K2				180 ÷ 280	120 ÷ 200	
K3				140 ÷ 200	100 ÷ 150	
K4				120 ÷ 180		
N1						400 ÷ 1000
N2						300 ÷ 600
N3						300 ÷ 500
N4						200 ÷ 400
S1			30 ÷ 60			
S2			30 ÷ 50			
S3			20 ÷ 40			
S4			50 ÷ 100			
S5			40 ÷ 80			



DOUBLE 3GON SERIES

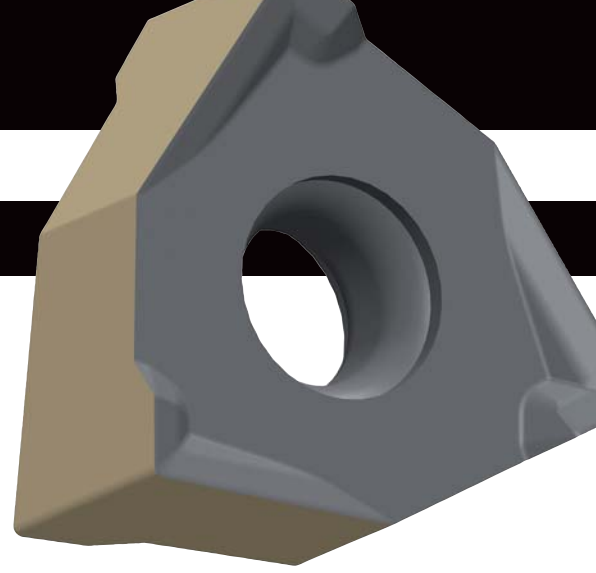
Double up your productivity on shouldering.

ISO



6 edges

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DOUBLE 3GON SERIES

Double up your productivity on shouldering.



- Milling system for 90° shouldering based on double-sided trigonal inserts.
- High reliability thanks to the greater thickness of WNEX inserts.
- Massive savings are enabled by the 6-cutting edges insert design.
- High versatility: 4 cutting geometries combined with 8 different carbide grades for a wide range of applications.



- Sistema di fresatura con inserti trigonali bilaterali per operazioni di spallamento retto.
- Affidabile: grazie all'elevato spessore degli inserti WNEX.
- Economico: costo tagliente molto vantaggioso grazie ai 6 posizionamenti.
- Versatile: 4 geometrie di taglio e 8 gradi di metallo duro garantiscono un vasto campo applicativo.



- Frässystem für 90 ° Eckfräsen basierend auf negative trigonale WSP.
- Hohe Zuverlässigkeit, dank der größeren Dicke der WNEX WSP.
- Große Einsparungen werden durch die 6-Schneiden erreicht.
- Hohe Vielseitigkeit: 4 Schneidgeometrien kombiniert mit 8 verschiedenen Hartmetallsorten für eine Vielzahl von Anwendungen.



- Système de fraisage avec plaquettes triangulaires bilatérales pour des opérations d'épaulement droit.
- Fiable: grâce à l'épaisseur de la plaquette WNEX.
- Economique: coût par arrête très avantageux grâce aux 6 cotés interchangeables.
- Polyvalent: 4 géométries de coupe combinées à 8 nuances de carbure garantissent un large champ d'application.

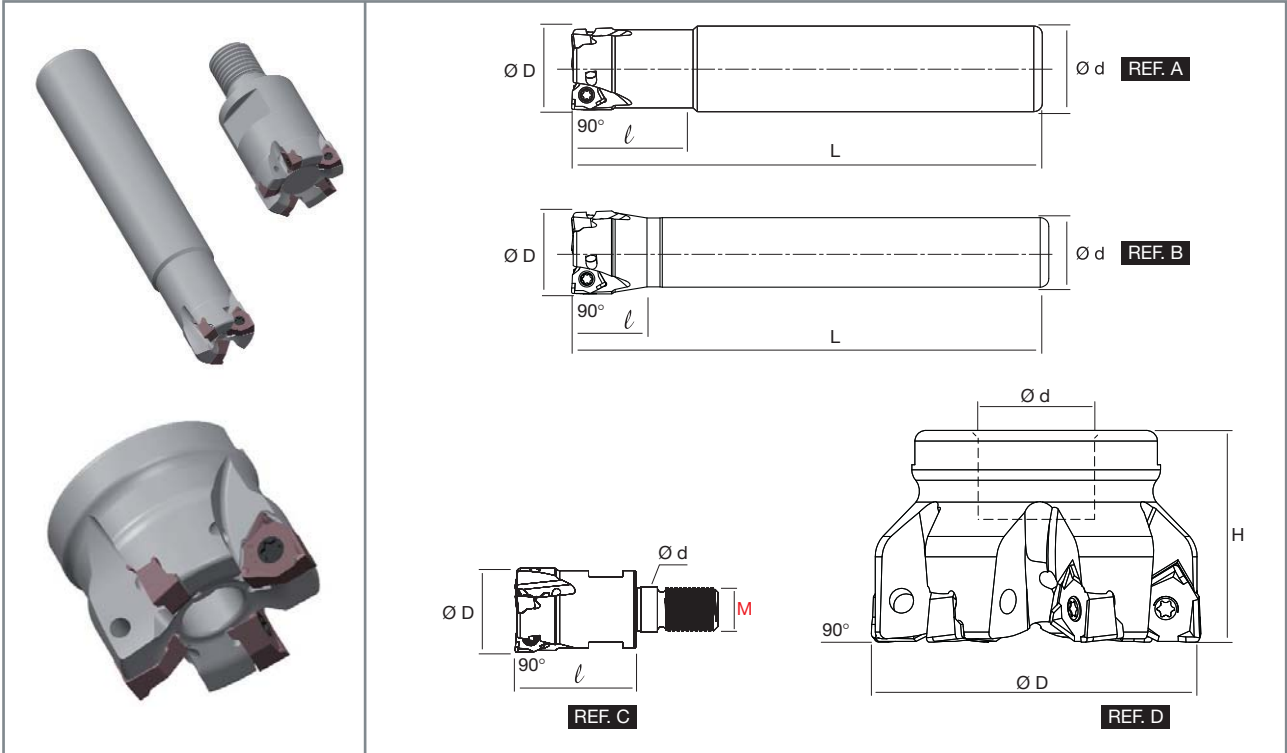


- Sistema de fresado con placas trigonales de doble cara para operaciones en escuadra.
- Fiable: gracias al espesor de las placas WNEX.
- Económico: costo por corte muy ventajoso gracias a la 6 posiciones.
- 4 geometrías de corte y 8 grados de metal duro ofrecen una amplia gama de aplicaciones.



- Треугольные двухсторонние пластины для фрезерования по уступу с углом 90°.
- Повышенная надежность благодаря большей толщине WNEX пластин.
- Значительная экономия благодаря наличию 6-ти режущих кромок.
- Широкая область применения обеспечивается наличием 4-х режущих геометрий и 8-мя сплавами.

HOLDERS



INSERTS	DESCRIPTION	STOCK	DIMENSIONS							REF	REF. A	REF. B	REF. C	REF. D	TORQUE Nm
			ØD	Z	Ød	L	ℓ	H							
WN□□0403	NT-WX04H	D020-M10-Z3	●	20	3	10.5	-	28	-	C	✓	NT-ST018	NT-FTB08	1.2	
		D020-S16-Z3 NEW	●	20	3	16	110	20	-	B	✓	NT-ST018	NT-FTB08	1.2	
		D020-S20-Z3	●	20	3	20	110	28	-	A	✓	NT-ST018	NT-FTB08	1.2	
		D025-M12-Z4	●	25	4	12.5	-	30	-	C	✓	NT-ST018	NT-FTB08	1.2	
		D025-S20-Z4 NEW	●	25	4	20	120	22	-	B	✓	NT-ST018	NT-FTB08	1.2	
		D025-S25-Z4	●	25	4	25	120	30	-	A	✓	NT-ST018	NT-FTB08	1.2	
		D032-M16-Z5	●	32	5	16.5	-	40	-	C	✓	NT-ST018	NT-FTB08	1.2	
		D032-S25-Z5 NEW	●	32	5	25	130	25	-	B	✓	NT-ST018	NT-FTB08	1.2	
		D032-S32-Z5	●	32	5	32	130	40	-	A	✓	NT-ST018	NT-FTB08	1.2	
		D040-F16-Z7	●	40	7	16	-	-	40	D	✓	NT-ST018	NT-FTB08	1.2	
D050-F22-Z9	●	50	9	22	-	-	40	D	✓	NT-ST018	NT-FTB08	1.2			
WN□□0806	NT-WX08H	D050-F22-Z4	●	50	4	22	-	-	40	D	✓	NT-ST017	NT-FTB15	3.5	
		D050-F22-Z5	●	50	5	22	-	-	40	D	✓	NT-ST017	NT-FTB15	3.5	
		D063-F22-Z6	●	63	6	22	-	-	40	D	✓	NT-ST017	NT-FTB15	3.5	
		D063-F27-Z6 NEW	●	63	6	27	-	-	40	D	✓	NT-ST017	NT-FTB15	3.5	
		D063-F22-Z7 NEW	●	63	7	22	-	-	40	D	✓	NT-ST017	NT-FTB15	3.5	
		D080-F27-Z7	●	80	7	27	-	-	50	D	✓	NT-ST017	NT-FTB15	3.5	
		D080-F27-Z9 NEW	●	80	9	27	-	-	50	D	✓	NT-ST017	NT-FTB15	3.5	
		D100-F32-Z8	●	100	8	32	-	-	50	D	✓	NT-ST017	NT-FTB15	3.5	
		D100-F32-Z11 NEW	●	100	11	32	-	-	50	D	✓	NT-ST017	NT-FTB15	3.5	
		D125-F40-Z11 NEW	●	125	11	40	-	-	63	D	✓	NT-ST017	NT-FTB15	3.5	
D160-F40-Z12 NEW	●	160	12	40	-	-	63	D	✓	NT-ST017	NT-FTB15	3.5			

● stock standard

DOUBLE3GON SERIES

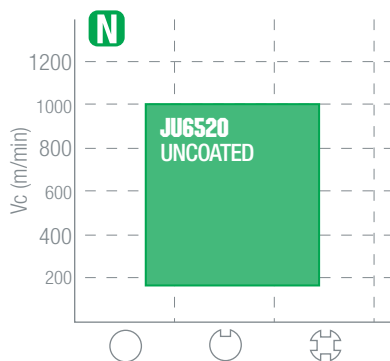
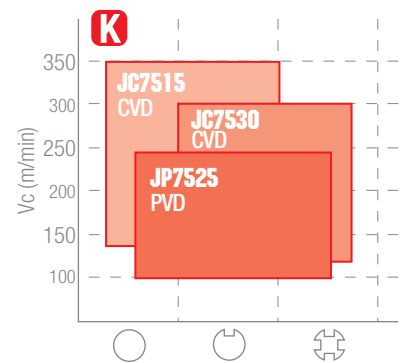
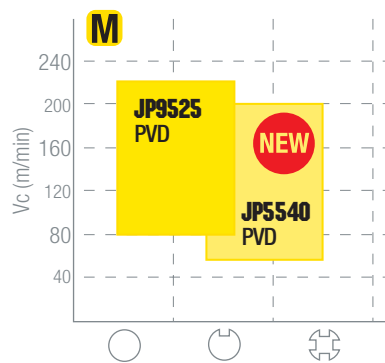
INSERTS

DESCRIPTION							HC							HW
	IC	T	r	b	Ød	JP5540	JP8525	JC8530	JP9525	JC7515	JP7525	JC7530	JU6520	
 WNEX 080604R-SC NEW 080608R-SC NEW	12.50	6.45	0.4	1.80	4.40	★	★							
	12.50	6.45	0.8	1.50	4.40	★	★							
 WNEX 040304R-GP	6.72	3.30	0.4	0.90	3.10	★	●	●	●			●		
 WNEX 080608R-GP	12.50	6.45	0.8	1.50	4.40	★	●	●	●	★	★	●		
 WNEX 080608R-TE 080612R-TE NEW	12.50	6.45	0.8	1.50	4.40	★	●	●	■	★	★	●		
	12.50	6.45	1.2	1.10	4.40	★	★	★				★		
 WNEX 080608R-AL NEW	12.50	6.45	0.8	1.40	4.40							●		

● stock standard; ■ stock exhaustion; ★ upcoming introduction

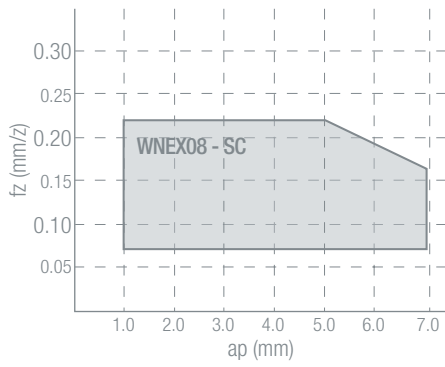
HC: coated carbide
 HW: uncoated carbide
 JC: CVD coating
 JP: PVD coating
 JU: uncoated

GRADES APPLICATION CHART

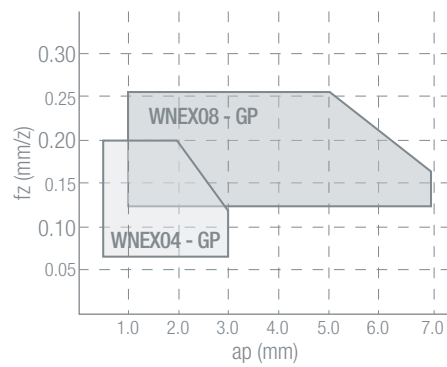


CHIPBREAKERS APPLICATION CHART

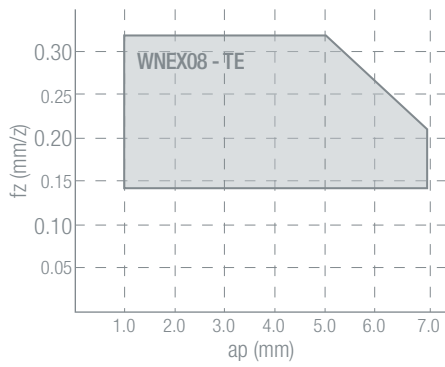
P M



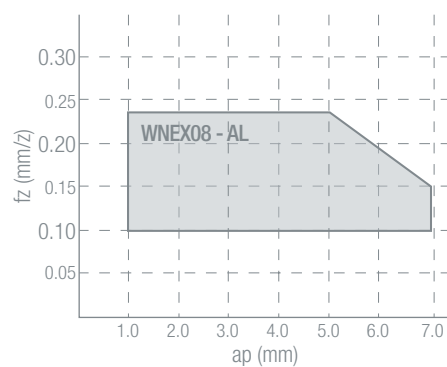
P M K



P K



N



DOUBLE3GON SERIES

CUTTING SPEED (Vc m/min)

Gr.	MATERIAL		
P1	Free cutting steel and structural steel	Rm < 500 N/mm ²	(9SMn28 / 1.0715 / AVP)
P2	Carbon steel and low alloy steel	Rm 500-700 N/mm ²	(C40 / 1.0511)
P3	Medium alloy steel and heat treated steel	Rm 600-800 N/mm ²	(42CrMo4 / 1.7225)
P4	High alloy steel	Rm 800-1000 N/mm ²	(100Cr6 / 1.3505)
P5	Tool steel	Rm 900-1200 N/mm ²	(X210Cr12 / 1.2080 / K100)
P6	High tensile strength steel	Rm 1200-1600 N/mm ²	(X2NiCrMo18.9.5 / 1.6358 / W720)
M1	Ferritic stainless steel	Rm 400-700 N/mm ²	(X40Cr13 / 1.4034 / AISI420)
M2	Austenitic stainless steel (good machinability)	Rm 500-750 N/mm ²	(X5CrNi18.10 / 1.4301 / AISI304)
M3	Austenitic stainless steel (medium machinability)	Rm 550-850 N/mm ²	(X2CrNiMo18.12 / 1.4435 / AISI316L)
M4	Martensitic stainless steel	Rm 650-950 N/mm ²	(X2CrNiMoN25.7.4 / 1.4410 / Super Duplex)
M5	PH stainless steel	Rm 800-1250 N/mm ²	(X5CrNiNb16.4 / 1.4542 / 17-4PH)
K1	Grey cast iron	HB 150-250	(GG-25 / 0.6025)
K2	Nodular cast iron	HB 150-350	(GGG-50 / 0.7050)
K3	Austenitic cast iron	HB 120-260	(GGL-NiCr20.2 / 0.6660)
K4	ADI cast iron	HB 250-500	(GJS-1000-5 / ADI 1000)
N1	Aluminium alloys < 12% Si		(AlMgSi0.5 / 3.3206)
N2	Aluminium alloys > 12% Si		(AlSi12 / 3.2582)
N3	Copper alloys		(E-Cu57 / 2.0060)
N4	Brass alloys and bronze alloys		(CuZn20Al2 / 2.0460)

Gr.	JP5540	JP8525	JC8530	JP9525	JC7515	JP7525	JC7530	JU6520
P1	180 ÷ 220	200 ÷ 250	240 ÷ 320					
P2	140 ÷ 200	160 ÷ 220	200 ÷ 280					
P3	130 ÷ 180	140 ÷ 200	180 ÷ 240					
P4	110 ÷ 140	120 ÷ 160	140 ÷ 200					
P5	90 ÷ 130	100 ÷ 140	120 ÷ 180					
P6	70 ÷ 110	80 ÷ 120	100 ÷ 160					
M1	110 ÷ 200			130 ÷ 220				
M2	100 ÷ 180			110 ÷ 180				
M3	80 ÷ 150			90 ÷ 160				
M4	70 ÷ 130			80 ÷ 140				
M5	60 ÷ 110			70 ÷ 120				
K1					200 ÷ 350	150 ÷ 240	160 ÷ 300	
K2					180 ÷ 280	120 ÷ 200	140 ÷ 240	
K3					140 ÷ 200	100 ÷ 150	120 ÷ 180	
K4					120 ÷ 180		100 ÷ 150	
N1								400 ÷ 1000
N2								300 ÷ 600
N3								300 ÷ 500
N4								200 ÷ 400



REK PLUS SERIES

The all-around solution for shouldering.

ISO

P

M

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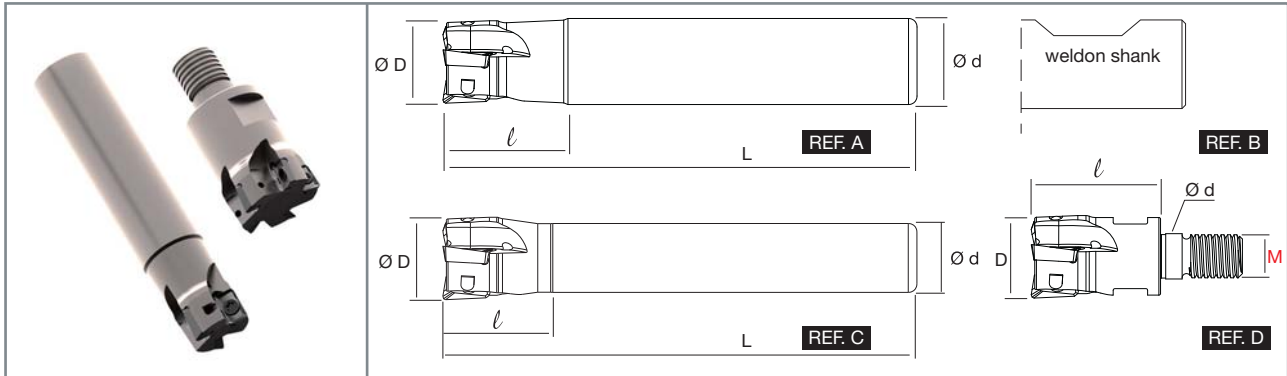


New **helical** type for extremely high performance

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REKPLUS SERIES

HOLDERS



INSERTS	DESCRIPTION				STOCK	DIMENSIONS					REF	REF. A	REF. B	REF. C	REF. D	TORQUE Nm
	NEW	OLD	ØD	Z		Ød	L	l								
NT-RKP11	NT-RKP11	D0155-S16-Z2	NT-AP11H	D0155-S16-Z2	★	15.5	2	16	100	28	A	✓	NT-ST018	NT-FTB08	1.20	
		D016-S16-Z2		D016-S16-Z2	●	16	2	16	100	28	A	✓	NT-ST018	NT-FTB08	1.20	
		D016-S16-Z2-L150		D016-S16-Z2-L150	●	16	2	16	150	28	A	✓	NT-ST018	NT-FTB08	1.20	
		D016-W16-Z2-L080		D016-W16-Z2-L080	●	16	2	16	80	28	B	✓	NT-ST018	NT-FTB08	1.20	
		D020-S16-Z3		D020-S16-Z3	●	20	3	16	110	28	C	✓	NT-ST018	NT-FTB08	1.20	
		D020-S20-Z3		D020-S20-Z3	●	20	3	20	110	28	A	✓	NT-ST018	NT-FTB08	1.20	
		D020-S20-Z3-L200		D020-S20-Z3-L200	●	20	3	20	200	28	A	✓	NT-ST018	NT-FTB08	1.20	
		D020-W20-Z3-L090		D020-W20-Z3-L090	●	20	3	20	90	28	B	✓	NT-ST018	NT-FTB08	1.20	
		D025-S20-Z3		D025-S20-Z3	●	25	3	20	120	35	C	✓	NT-ST018	NT-FTB08	1.20	
		D025-S25-Z3		D025-S25-Z3	●	25	3	25	120	35	A	✓	NT-ST018	NT-FTB08	1.20	
		D025-S25-Z4		D025-S25-Z4	●	25	4	25	120	35	A	✓	NT-ST018	NT-FTB08	1.20	
		D025-W25-Z4-L100		D025-W25-Z4-L100	●	25	4	25	100	35	B	✓	NT-ST018	NT-FTB08	1.20	
		D032-S25-Z4		D032-S25-Z4	●	32	4	25	130	35	C	✓	NT-ST018	NT-FTB08	1.20	
		D032-S32-Z4		D032-S32-Z4	★	32	4	32	130	35	A	✓	NT-ST018	NT-FTB08	1.20	
D032-S32-Z5	D032-S32-Z5	★	32	5	32	130	35	A	✓	NT-ST018	NT-FTB08	1.20				
NT-RKP16	NT-RKP16	D025-S25-Z2	NT-AP16H	D025-S25-Z2	●	25	2	25	120	40	A	✓	NT-ST019	NT-FTB15	3.50	
		D032-S32-Z3		D032-S32-Z3	●	32	3	32	130	45	A	✓	NT-ST017	NT-FTB15	3.50	
		D040-S32-Z4		D040-S32-Z4	★	40	4	32	150	40	A	✓	NT-ST017	NT-FTB15	3.50	

● stock standard; ★ upcoming introduction

MODULAR TYPE

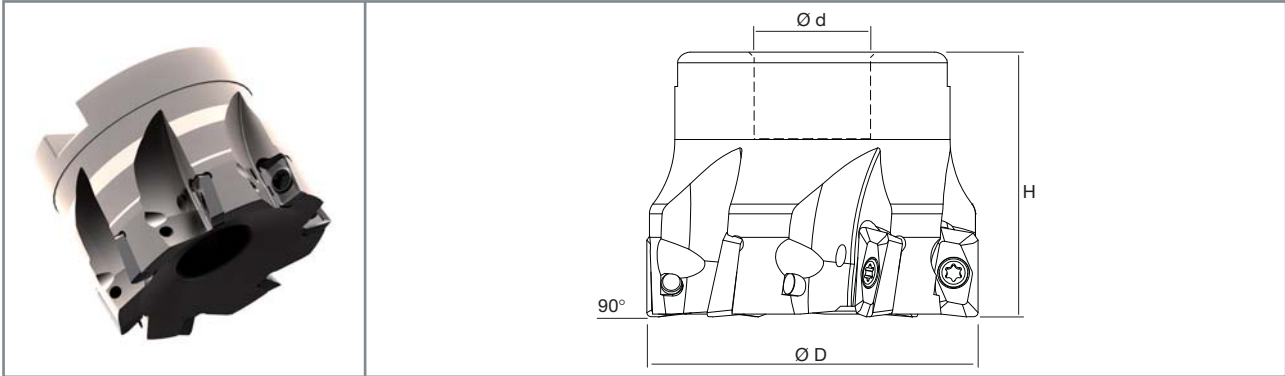
INSERTS	DESCRIPTION				STOCK	DIMENSIONS					REF	REF. A	REF. B	REF. C	REF. D	TORQUE Nm
	NEW	OLD	ØD	Z		Ød	M	l								
NT-RKP11	NT-RKP11	D016-M08-Z2	NT-AP11H	D016-M08-Z2	●	16	2	8.5	M8	25	D	✓	NT-ST018	NT-FTB08	1.20	
		D020-M10-Z2		D020-M10-Z2	★	20	2	10.5	M10	30	D	✓	NT-ST018	NT-FTB08	1.20	
		D020-M10-Z3		D020-M10-Z3	●	20	3	10.5	M10	30	D	✓	NT-ST018	NT-FTB08	1.20	
		D025-M12-Z3		D025-M12-Z3	●	25	3	12.5	M12	35	D	✓	NT-ST018	NT-FTB08	1.20	
		D025-M12-Z4		D025-M12-Z4	★	25	4	12.5	M12	35	D	✓	NT-ST018	NT-FTB08	1.20	
		D032-M16-Z4		D032-M16-Z4	●	32	4	16.5	M16	43	D	✓	NT-ST018	NT-FTB08	1.20	
		D032-M16-Z5		D032-M16-Z5	●	32	5	16.5	M16	43	D	✓	NT-ST018	NT-FTB08	1.20	

● stock standard; ★ upcoming introduction



We will continue to supply the equivalent milling cutters without coolant holes (description: NT-AP11 and NT-AP16) until availability of items marked with ★.

HOLDERS



INSERTS	DESCRIPTION		STOCK	DIMENSIONS				Coolant	Screw	Key	TORQUE Nm		
	NEW	OLD		ØD	Z	Ød	H						
NT-RKP11	NT-RKP11	D040-F16-Z5	NT-AP11H	D040-F16-Z5	●	40	5	16	40	✓	NT-ST018	NT-FTB08	1.20
		D040-F16-Z6		D040-F16-Z6	●	40	6	16	40	✓	NT-ST018	NT-FTB08	1.20
		D050-F22-Z5		D050-F22-Z5	●	50	5	22	40	✓	NT-ST018	NT-FTB08	1.20
		D050-F22-Z7		D050-F22-Z7	★	50	7	22	40	✓	NT-ST018	NT-FTB08	1.20
		D063-F22-Z6 NEW		D063-F22-Z6	●	63	6	22	40	✓	NT-ST018	NT-FTB08	1.20
		D063-F22-Z8		D063-F22-Z8	●	63	8	22	40	✓	NT-ST018	NT-FTB08	1.20
		D080-F27-Z7 NEW		D080-F27-Z7	●	80	7	27	50	✓	NT-ST018	NT-FTB08	1.20
		D080-F27-Z10 NEW		D080-F27-Z10	●	80	10	27	50	✓	NT-ST018	NT-FTB08	1.20
NT-RKP16	NT-RKP16	D040-F16-Z4	NT-AP16H	D040-F16-Z4	●	40	4	16	40	✓	NT-ST017	NT-FTB15	3.50
		D050-F22-Z4		D050-F22-Z4	●	50	4	22	50	✓	NT-ST017	NT-FTB15	3.50
		D050-F22-Z5		D050-F22-Z5	●	50	5	22	50	✓	NT-ST017	NT-FTB15	3.50
		D063-F22-Z5		D063-F22-Z5	●	63	5	22	50	✓	NT-ST017	NT-FTB15	3.50
		D063-F22-Z6		D063-F22-Z6	●	63	6	22	50	✓	NT-ST017	NT-FTB15	3.50
		D080-F27-Z6		D080-F27-Z6	★	80	6	27	50	✓	NT-ST017	NT-FTB15	3.50
		D080-F27-Z8		D080-F27-Z8	★	80	8	27	50	✓	NT-ST017	NT-FTB15	3.50
		D100-F32-Z8		D100-F32-Z8	●	100	8	32	50	✓	NT-ST017	NT-FTB15	3.50

● stock standard; ★ upcoming introduction



We will continue to supply the equivalent milling cutters without coolant holes (description: NT-AP11 and NT-AP16) until availability of items marked with ★.

REKPLUS SERIES

INSERTS

STRAIGHT TYPE	DESCRIPTION	NEW	OLD	RADIUS	HC					HW	HT
					JP5520	JP5530	JP9535	JC7515	JP7525	JU6520	JU4525
					NEW	NEW	NEW	NEW	NEW	NEW	NEW
SC		NT-RKP 11R08M-SC	APMT 113508ER-SC	0.8	●	●	● NEW				
		NT-RKP 16R08M-SC	APMT 160408ER-SC	0.8	●	●	● NEW				
GP		NT-RKP 11R08M-GP	APMT 113508ER-GP	0.8	●	●	● NEW	●	●	● NEW	
		NT-RKP 16R08M-GP	APMT 160408ER-GP	0.8	●	●	● NEW	●	●	● NEW	
TE		NT-RKP 11R08M-TE	APMT 113508ER-TE	0.8	●	●		●			
		NT-RKP 16R08M-TE	APMT 160408ER-TE	0.8	●	●		●			
AL		NT-RKP 11R04G-AL	APGT 113504FR-AL	0.4					●		
		11R08G-AL	113508FR-AL	0.8					●		
		NT-RKP 16R08G-AL	APGT 160408FR-AL	0.8					●		

● stock standard

HC: coated carbide

HT: cermet

HW: uncoated carbide

JC: CVD coating

JP: PVD coating

JU: uncoated

A NEW GENERATION OF INSERTS FOR EXTREMELY HIGH PERFORMANCE

HELICAL TYPE	DESCRIPTION	RADIUS	HC			
			JP8625	JP9635	JP7615	
			NEW	NEW	NEW	
HSC		NT-RKP 11R04M-HSC	0.4	●	●	
		11R08M-HSC	0.8	●	●	
		11R12M-HSC	1.2	●	●	
		NT-RKP 16R08M-HSC	0.8	●	●	
		16R12M-HSC	1.2	●	●	
HGP		NT-RKP 11R04M-HGP	0.4	●	●	●
		11R08M-HGP	0.8	●	●	●
		11R12M-HGP	1.2	●	●	●
		11R16M-HGP	1.6	●	●	●
		NT-RKP 16R08M-HGP	0.8	●	●	●
		16R12M-HGP	1.2	●	●	●
		16R16M-HGP	1.6	●	●	●
		16R20M-HGP	2.0	●	●	●
		16R31M-HGP	3.1	●	●	●

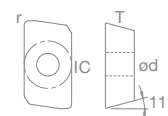
● stock standard

HC: coated carbide

JP: PVD coating

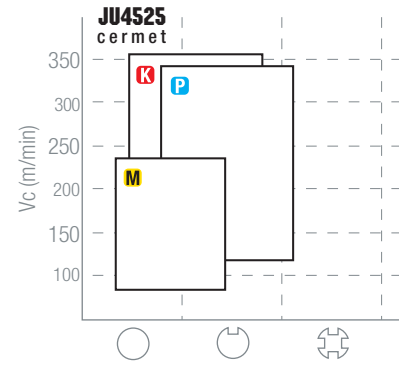
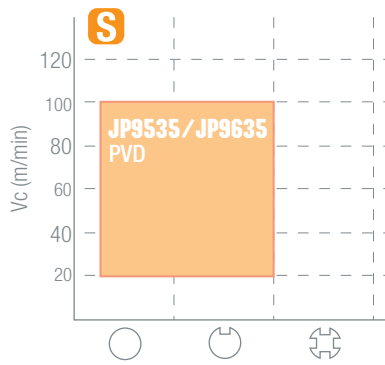
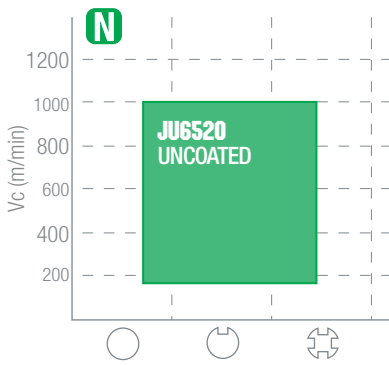
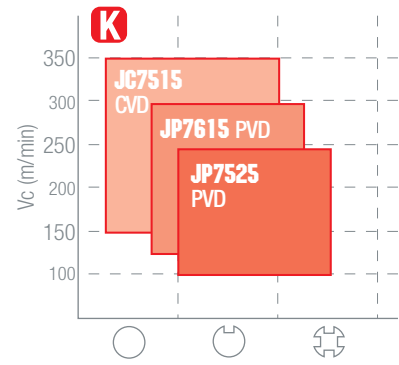
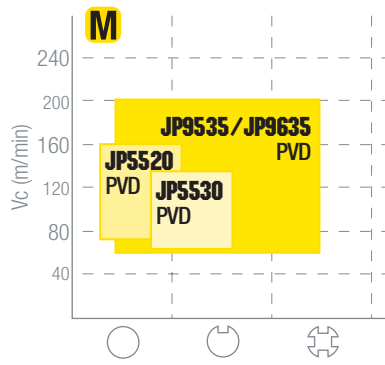
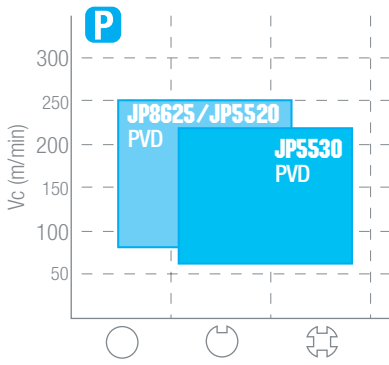
HELICAL TYPE	CUTTING EDGE PROFILE	NO SIGNS ON SHOULDERING WALL	EXCELLENT SURFACE FINISHING

(material: C45; Vc: 180m/min; fz: 0.08mm/z; ap: 5mm; ae: 0.6mm)



NT-RKP11	NT-RKP16
IC 6.35	IC 9.53
T 3.50	T 4.76
Ød 2.80	Ød 4.50

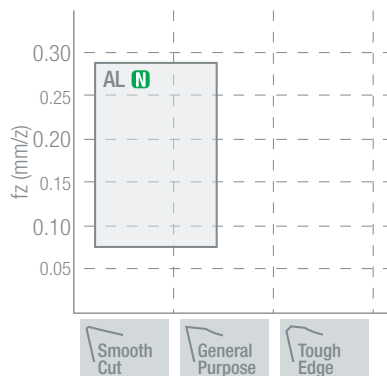
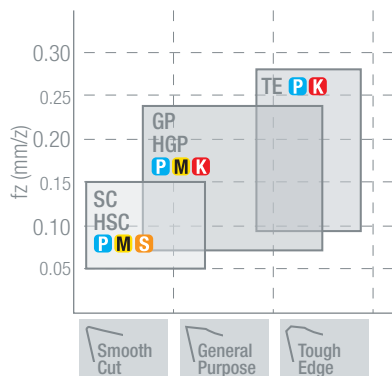
GRADES APPLICATION CHART



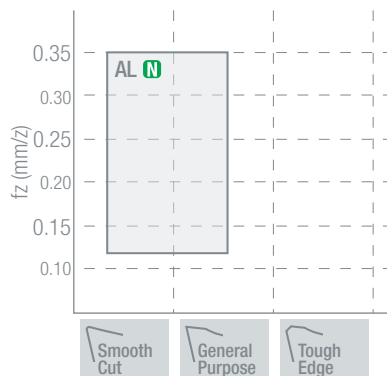
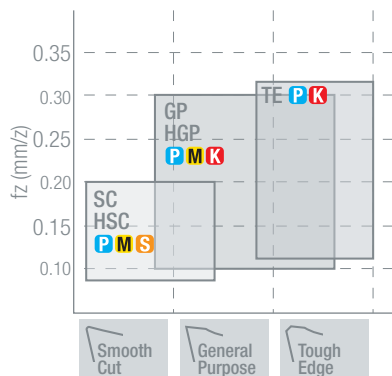
REKPLUS SERIES

CHIPBREAKERS APPLICATION CHART

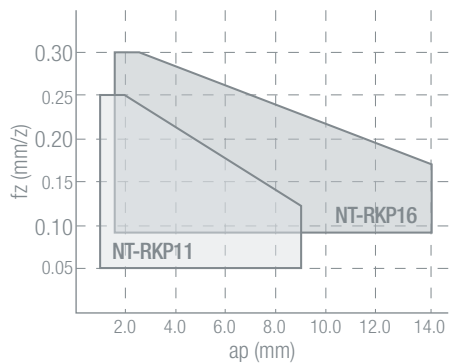
NT-RKP11



NT-RKP16



INSERT APPLICATION CHART



cermet JU4525 → fz-20%
Please reduce the feed rate by 20%

CUTTING SPEED (Vc m/min)

Gr.	MATERIAL		
P1	Free cutting steel and structural steel	Rm < 500 N/mm ²	(9SMn28 / 1.0715 / AVP)
P2	Carbon steel and low alloy steel	Rm 500-700 N/mm ²	(C40 / 1.0511)
P3	Medium alloy steel and heat treated steel	Rm 600-800 N/mm ²	(42CrMo4 / 1.7225)
P4	High alloy steel	Rm 800-1000 N/mm ²	(100Cr6 / 1.3505)
P5	Tool steel	Rm 900-1200 N/mm ²	(X210Cr12 / 1.2080 / K100)
P6	High tensile strength steel	Rm 1200-1600 N/mm ²	(X2NiCrMo18.9.5 / 1.6358 / W720)
M1	Ferritic stainless steel	Rm 400-700 N/mm ²	(X40Cr13 / 1.4034 / AISI420)
M2	Austenitic stainless steel (good machinability)	Rm 500-750 N/mm ²	(X5CrNi18.10 / 1.4301 / AISI304)
M3	Austenitic stainless steel (medium machinability)	Rm 550-850 N/mm ²	(X2CrNiMo18.12 / 1.4435 / AISI316L)
M4	Martensitic stainless steel	Rm 650-950 N/mm ²	(X2CrNiMoN25.7.4 / 1.4410 / Super Duplex)
M5	PH stainless steel	Rm 800-1250 N/mm ²	(X5CrNiNb16.4 / 1.4542 / 17-4PH)
K1	Grey cast iron	HB 150-250	(GG-25 / 0.6025)
K2	Nodular cast iron	HB 150-350	(GGG-50 / 0.7050)
K3	Austenitic cast iron	HB 120-260	(GGL-NiCr20.2 / 0.6660)
K4	ADI cast iron	HB 250-500	(GJS-1000-5 / ADI 1000)
N1	Aluminium alloys < 12% Si		(AlMgSi0.5 / 3.3206)
N2	Aluminium alloys > 12% Si		(AlSi12 / 3.2582)
N3	Copper alloys		(E-Cu57 / 2.0060)
N4	Brass alloys and bronze alloys		(CuZn20Al2 / 2.0460)
S1	Heat resistant super alloys HRSA (good machinability)	HRC < 25	(NiCr17Mo17FeW / 2.4802 / Hastelloy)
S2	Heat resistant super alloys HRSA (medium machinability)	HRC 25-35	(NiCr20Ti / 2.4630 / Nimonic 80)
S3	Heat resistant super alloys HRSA (low machinability)	HRC 35-45	(NiCr19Fe19NbMo / 2.4668 / Inconel 718)
S4	Low alloy titanium		(Ti99.6 / 3.7055 / Titanium grade 3)
S5	High alloy titanium		(Ti5Al2.5Sn / 3.7115 / Titanium grade 6)

Gr.	JP5520	JP5530	JP8625	JP9535	JP9635	JC7515	JP7615	JP7525	JU6520	JU4525
P1	200 ÷ 250	180 ÷ 230	200 ÷ 250							250 ÷ 350
P2	160 ÷ 220	150 ÷ 210	160 ÷ 220							220 ÷ 300
P3	140 ÷ 200	120 ÷ 180	140 ÷ 200							200 ÷ 280
P4	120 ÷ 160	100 ÷ 150	120 ÷ 160							160 ÷ 220
P5	100 ÷ 140	80 ÷ 130	100 ÷ 140							
P6	80 ÷ 120	60 ÷ 110	80 ÷ 120							
M1	100 ÷ 160	90 ÷ 150		120 ÷ 220	120 ÷ 220					140 ÷ 240
M2	80 ÷ 140	80 ÷ 130		120 ÷ 200	120 ÷ 200					120 ÷ 200
M3	60 ÷ 120	60 ÷ 100		100 ÷ 180	100 ÷ 180					100 ÷ 180
M4				90 ÷ 150	90 ÷ 150					
M5				80 ÷ 140	80 ÷ 140					
K1						200 ÷ 350	160 ÷ 250	150 ÷ 240		250 ÷ 380
K2						180 ÷ 280	140 ÷ 220	120 ÷ 200		200 ÷ 300
K3						140 ÷ 200	120 ÷ 160	100 ÷ 150		160 ÷ 220
K4						120 ÷ 180				
N1									400 ÷ 1000	
N2									300 ÷ 600	
N3									300 ÷ 500	
N4									200 ÷ 400	
S1				30 ÷ 60	30 ÷ 60					
S2				30 ÷ 50	30 ÷ 50					
S3				20 ÷ 40	20 ÷ 40					
S4				50 ÷ 100	50 ÷ 100					
S5				40 ÷ 80	40 ÷ 80					

HIGH
FEED

HF4P PLUS SERIES

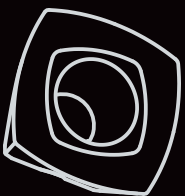
Speed up your performance.

ISO

P

M

K

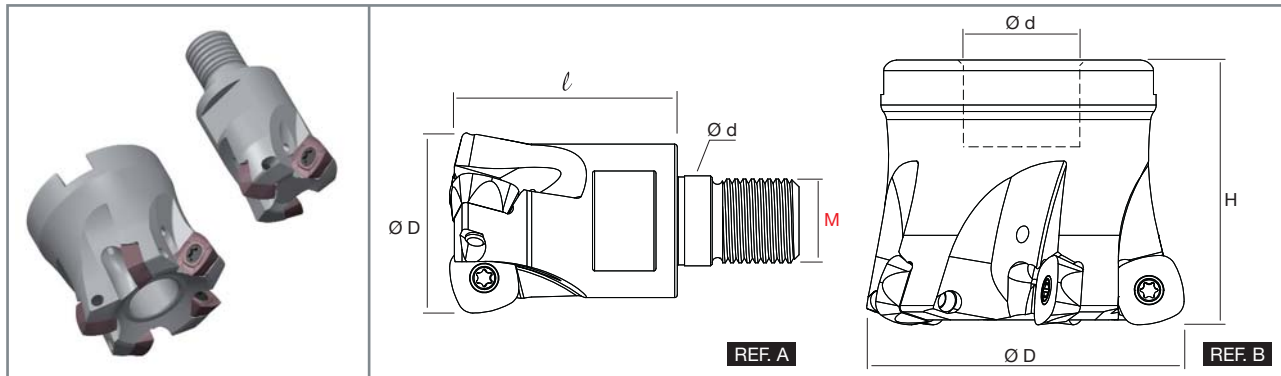


4 edges

nixkoTOOLS

HF4PLUS SERIES

HOLDERS



INSERTS	DESCRIPTION	STOCK	DIMENSIONS					REF				TORQUE Nm				
			ØD	Z	Ød	l	H									
SD□□1205	NT-SD12HF D032-M16-Z2	●	32	2	16.5	43	-	A	✓	NT-ST024	NT-FTB15	3.50				
	D035-M16-Z3	●	35	3	16.5	43	-	A	✓	NT-ST024	NT-FTB15	3.50				
	D040-M16-Z4	●	40	4	16.5	43	-	A	✓	NT-ST024	NT-FTB15	3.50				
	D042-M16-Z4	●	42	4	16.5	43	-	A	✓	NT-ST024	NT-FTB15	3.50				
	D042-F16-Z4	●	42	4	16	-	40	B	✓	NT-ST024	NT-FTB15	3.50				
	D050-F22-Z4	●	50	4	22	-	50	B	✓	NT-ST024	NT-FTB15	3.50				
	D050-F22-Z5	●	50	5	22	-	50	B	✓	NT-ST024	NT-FTB15	3.50				
	D052-F22-Z4	●	52	4	22	-	50	B	✓	NT-ST024	NT-FTB15	3.50				
	D052-F22-Z5	●	52	5	22	-	50	B	✓	NT-ST024	NT-FTB15	3.50				
	D063-F22-Z4	●	63	4	22	-	50	B	✓	NT-ST024	NT-FTB15	3.50				
	D063-F27-Z4	●	63	4	27	-	50	B	✓	NT-ST024	NT-FTB15	3.50				
	D063-F22-Z5	●	63	5	22	-	50	B	✓	NT-ST024	NT-FTB15	3.50				
	D063-F27-Z5	●	63	5	27	-	50	B	✓	NT-ST024	NT-FTB15	3.50				
	D066-F27-Z6	●	66	6	27	-	50	B	✓	NT-ST024	NT-FTB15	3.50				
	D080-F27-Z6	●	80	6	27	-	50	B	✓	NT-ST024	NT-FTB15	3.50				
	D080-F27-Z7	●	80	7	27	-	50	B	✓	NT-ST024	NT-FTB15	3.50				

● stock standard

INSERTS

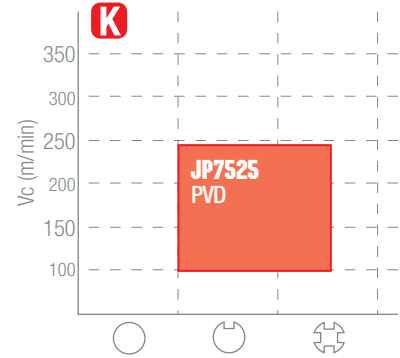
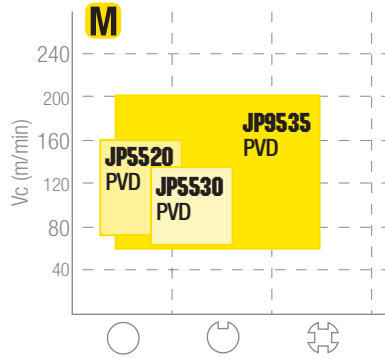
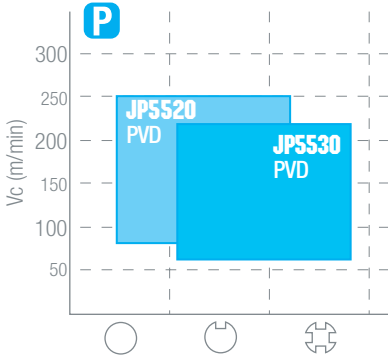
	DESCRIPTION	IC				HC							
		IC	T	r	Ød	JP5520	JP5530	JP9535	JP7525				
GP	SDMT 120512R-GP	12.70	5.56	1.2	4.40	●	●	● NEW	●				
TE	SDMT 120512R-TE	12.70	5.56	1.2	4.40	●	●						

● stock standard

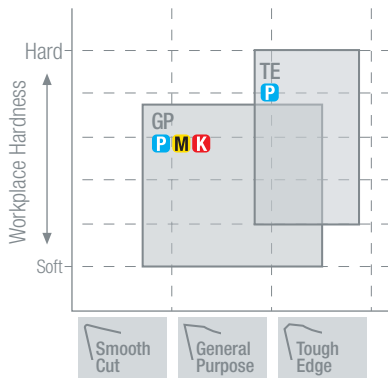
HC: coated carbide

JP: PVD coating

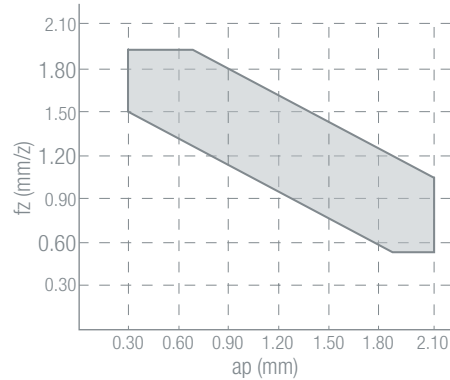
GRADES APPLICATION CHART



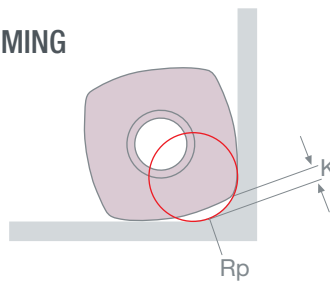
CHIPBREAKERS APPLICATION CHART



INSERTS APPLICATION CHART



IMPORTANT NOTICE FOR CNC PROGRAMMING



• Theoretical radius for CNC programming $R_p=4.0\text{mm}$.
• Uncut portion $K=0.85\text{mm}$

• Valore del raggio teorico per la programmazione CNC $R_p=4.0\text{mm}$.
• Area non lavorata $K=0.85\text{mm}$.

• Theoretischer Radius für CNC-Programmierung $R_p=4.0\text{mm}$.
• Nicht bearbeiteter Bereich $K=0.85\text{mm}$.

• Valeur du rayon théorique pour la programmation CNC $R_p=4.0\text{mm}$
• Zone non usinée $K=0.85\text{mm}$

• Valor del radio teórico para la programación CNC $R_p=4.0\text{mm}$.
• Área no procesada $K=0.85\text{mm}$.

• Теоретическое значение радиуса для программирования на ЧПУ $R_p=4.0\text{mm}$.
• Необработанная область $K=0.85\text{mm}$.

HF4PLUS SERIES

CUTTING SPEED (Vc m/min)

Gr.	MATERIAL		JP5520	JP5530	JP9535	JP7525
P1	Free cutting steel and structural steel	Rm < 500 N/mm ² (9SMn28 / 1.0715 / AVP)	200 ÷ 250	180 ÷ 230		
P2	Carbon steel and low alloy steel	Rm 500-700 N/mm ² (C40 / 1.0511)	160 ÷ 220	150 ÷ 210		
P3	Medium alloy steel and heat treated steel	Rm 600-800 N/mm ² (42CrMo4 / 1.7225)	140 ÷ 200	120 ÷ 180		
P4	High alloy steel	Rm 800-1000 N/mm ² (100Cr6 / 1.3505)	120 ÷ 160	100 ÷ 150		
P5	Tool steel	Rm 900-1200 N/mm ² (X210Cr12 / 1.2080 / K100)	100 ÷ 140	80 ÷ 130		
P6	High tensile strength steel	Rm 1200-1600 N/mm ² (X2NiCrMo18.9.5 / 1.6358 / W720)	80 ÷ 120	60 ÷ 110		
M1	Ferritic stainless steel	Rm 400-700 N/mm ² (X40Cr13 / 1.4034 / AISI420)	100 ÷ 160	90 ÷ 150	120 ÷ 220	
M2	Austenitic stainless steel (good machinability)	Rm 500-750 N/mm ² (X5CrNi18.10 / 1.4301 / AISI304)	80 ÷ 140	80 ÷ 130	120 ÷ 200	
M3	Austenitic stainless steel (medium machinability)	Rm 550-850 N/mm ² (X2CrNiMo18.12 / 1.4435 / AISI316L)	60 ÷ 120	60 ÷ 100	100 ÷ 180	
M4	Martensitic stainless steel	Rm 650-950 N/mm ² (X2CrNiMoN25.7.4 / 1.4410 / Super Duplex)			90 ÷ 150	
M5	PH stainless steel	Rm 800-1250 N/mm ² (X5CrNiNb16.4 / 1.4542 / 17-4PH)			80 ÷ 140	
K1	Grey cast iron	HB 150-250 (GG-25 / 0.6025)				150 ÷ 240
K2	Nodular cast iron	HB 150-350 (GGG-50 / 0.7050)				120 ÷ 200
K3	Austenitic cast iron	HB 120-260 (GGL-NiCr20.2 / 0.6660)				100 ÷ 150

GENERAL SUGGESTIONS

		Ø32	Ø35	Ø40	Ø42	Ø50	Ø52	Ø63	Ø66	Ø80
RAMPING	α max (maximum ramping angle)	4°	3.6°	3°	3°	2.7°	2.6°	1.5°	1.3°	1°
	fz (mm/z)	reduced by 25%								
HELICAL	Ømin-Ømax (range of Ø machinable)	42-60	48-66	58-76	62-80	78-96	82-100	104-122	110-128	138-156
	ap max (maximum depth for each revolution)	1 mm								
PEEK MILLING	fz (mm/z)	reduced by 50%								
	ap max (maximum drilling depth)	1 mm								
	L (min length to produce a flat surface after drilling)	10	13	18	20	28	30	41	44	58
PLUNGING	ae max	8 mm								
	fz (mm/z)	0.06÷0.15 mm/z								



4FACE PLUS SERIES

The all-around solution for face milling.

ISO

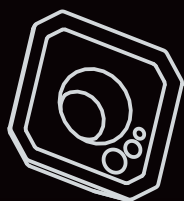
P

M

K

N

S

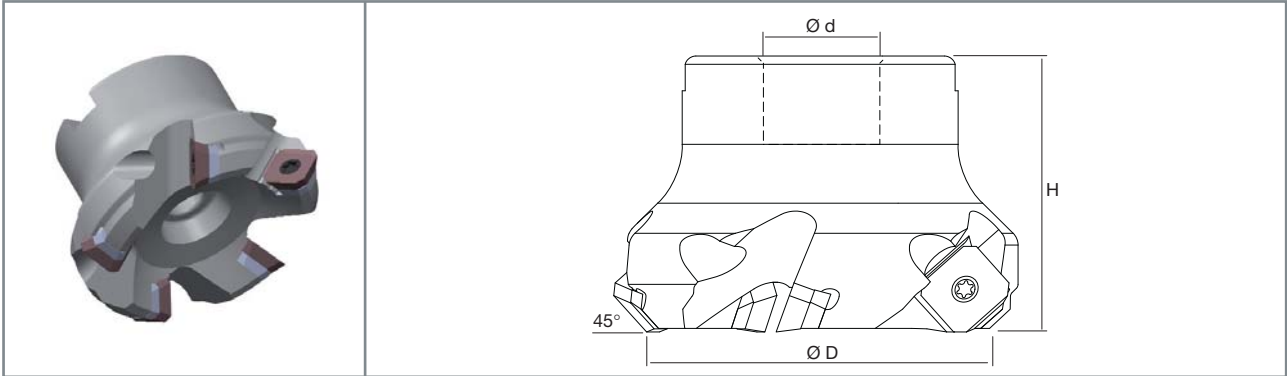


4 edges

nixkoTOOLS

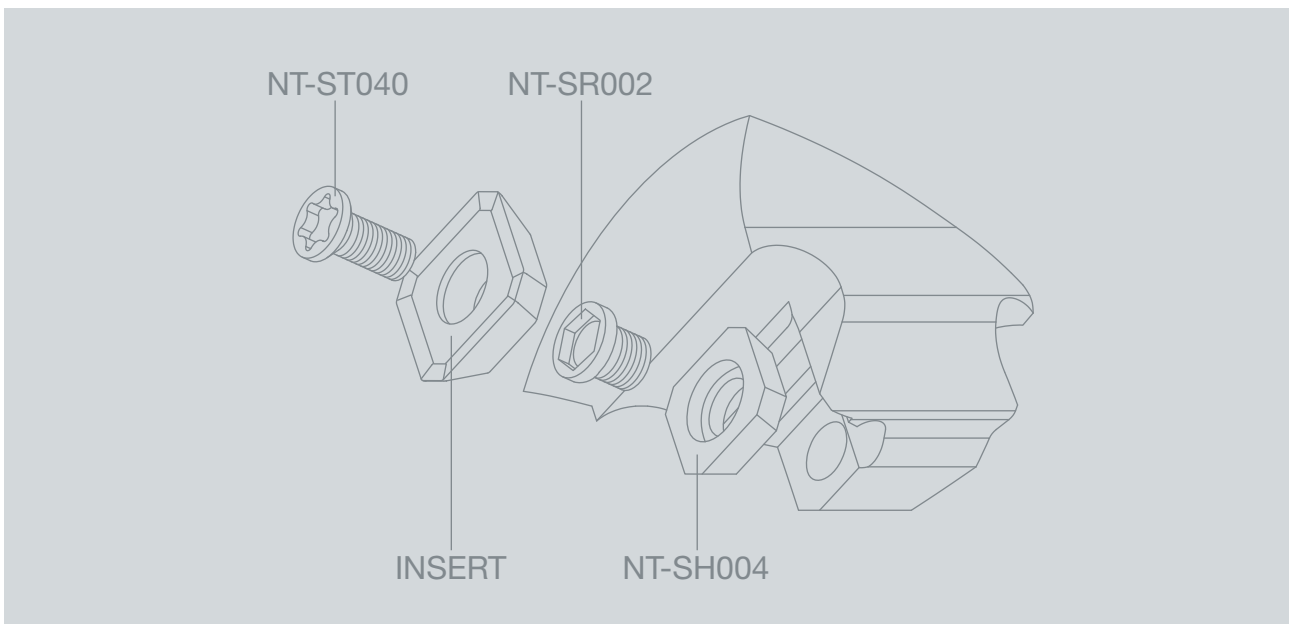
4FACEPLUS SERIES

HOLDERS



INSERTS	DESCRIPTION	STOCK	DIMENSIONS				← ← ← TORQUE Nm	← ← TORQUE Nm							
			ØD	Z	Ød	H									
SE□□13T3	NT-SE13	D050-F22-Z4	●	50	4	22	40	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D050-F22-Z5	●	50	5	22	40	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D063-F22-Z5	●	63	5	22	50	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D063-F22-Z6	●	63	6	22	50	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D080-F27-Z6	●	80	6	27	50	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D080-F27-Z8	●	80	8	27	50	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D100-F32-Z7	●	100	7	32	50	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D100-F32-Z10	●	100	10	32	50	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D125-F40-Z8	●	125	8	40	63	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D125-F40-Z12	●	125	12	40	63	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D160-F40-Z10	●	160	10	40	63	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D160-F40-Z16	○	160	16	40	63	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D200-F60-Z12	●	200	12	60	63	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5
		D200-F60-Z20	○	200	20	60	63	×	NT-SH004	NT-SR002	NT-WR035	5.0	NT-ST040	NT-FT15	3.5

● stock standard; ○ non stock standard



INSERTS

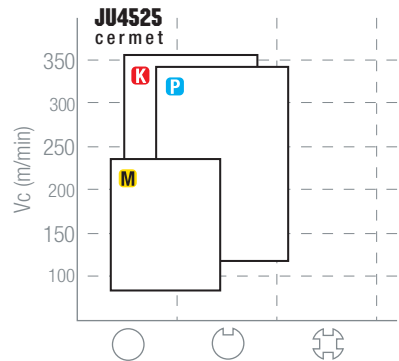
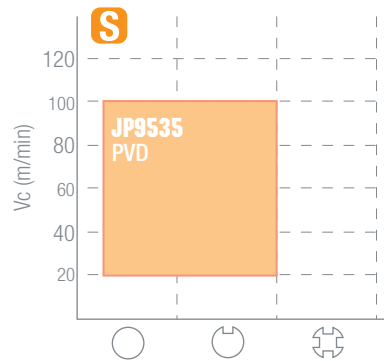
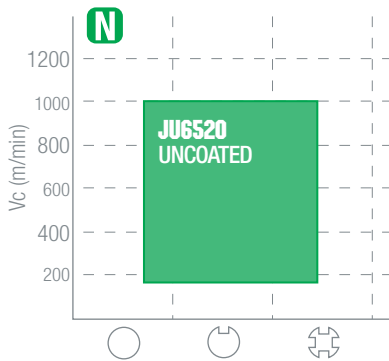
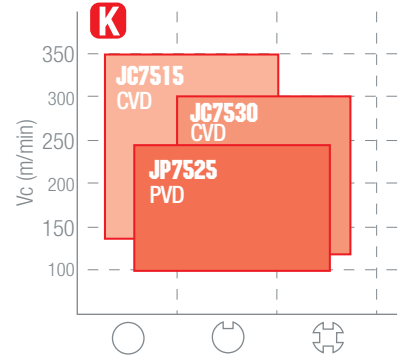
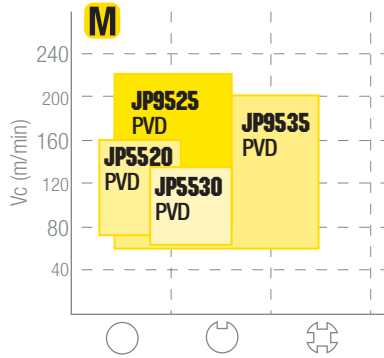
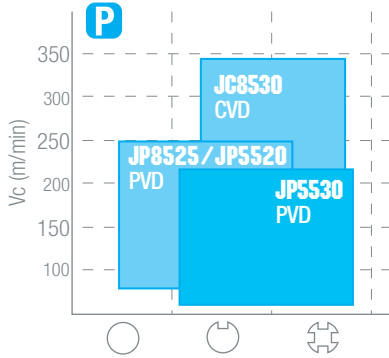
	DESCRIPTION					HC						HW	HT			
		IC	T	b	Ød	JP5520	JP5530	JP8525	JC8530	JP9525	JP9535	JC7515	JP7525	JC7530	JU6520	JU4525
SC	SEET 13T3AGEN-SC	13.40	3.97	1.70	4.40	●	●				● NEW					
GP	SEET 13T3AGEN-GP	13.40	3.97	1.20	4.40	●	●	●	●	●	● NEW					●
	SEMT 13T3AGEN-GP NEW	13.40	3.97	1.20	4.40	●										
TE	SEET 13T3AGSN-TE	13.40	3.97	1.20	4.40	●	●									
	SEMT 13T3AGSN-TE NEW	13.40	3.97	1.20	4.40	●										
GG	SEET 13T3AGSN-GG	13.40	3.97	1.30	4.40							●	●			
GH	SEET 13T3AGSN-GH	13.40	3.97	1.30	4.40							●				
(Flat)	SEEW 13T3AGSN	13.40	3.97	2.00	4.40									●		
AL	POLISHED SEET 13T3AGFN-AL	13.40	3.97	2.20	4.40									●		
WU WIPER	SEET 13T3-WU	13.40	3.97	7.50	4.40		●									

● stock standard

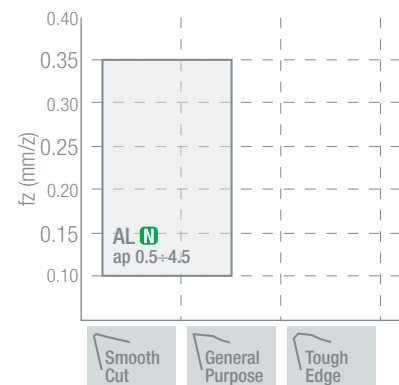
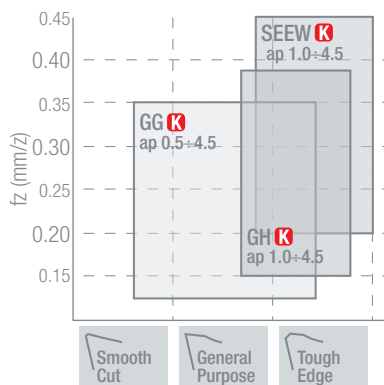
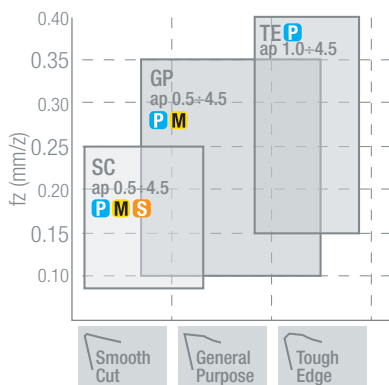
HC: coated carbide JC: CVD coating
 HT: Cermet JP: PVD coating
 HW: uncoated carbide JU: uncoated

4FACEPLUS SERIES

GRADES APPLICATION CHART

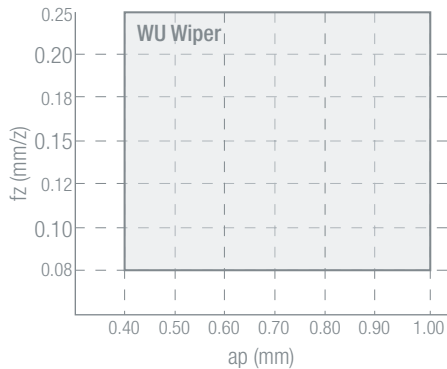


CHIPBREAKERS APPLICATION CHART

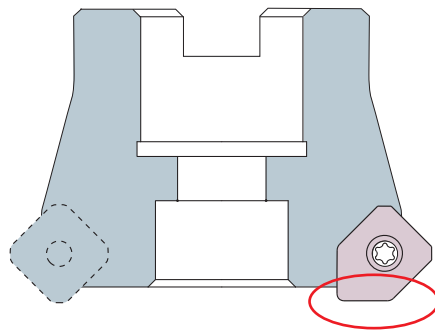


cermet JU4525 → fz-20%
Please reduce the feed rate by 20%

WIPER APPLICATION CHART



WIPER INSTALLATION



- The wiper insert must be mounted face towards the centre of the holder (see picture).
- WU style inserts feature only 1 cutting edge.
- Only 1 wiper insert per setup.



- Installare l'inserto wiper rivolto verso il centro della fresa (vedere figura).
- La geometria WU ha 1 solo tagliante utilizzabile.
- Installare un solo inserto wiper sul corpo fresa.



- Befestigen Sie die Wendeschneidplatte WIPER gegenüber der Mitte des Werkzeugs (siehe Abbildung).
- Die WU-Geometrie hat nur eine nutzbare Schneide.
- Befestigen Sie nur eine Wendeschneidplatte WIPER auf den Schneidkörper.



- Installer la plaquette wiper en face du centre de la fraise (voir photo).
- La géométrie WU a une seule arête utilisable.
- Installer une seule plaquette wiper sur le corps d'outil.



- Instalar la placa wiper frente al centro de la herramienta (ver Figura).
- La geometría WU tiene un sólo filo útil.
- Instalar una sola placa wiper en el cuerpo fresa.



- Устанавливайте пластину wiper в направлении к центру фрезы (см. рисунок).
- Пластины с геометрией WU обладают только одной режущей кромкой.
- Только одну пластину wiper устанавливайте на фрезу.

4FACEPLUS SERIES

CUTTING SPEED (Vc m/min)

Gr.	MATERIAL		
P1	Free cutting steel and structural steel	Rm < 500 N/mm ²	(9SMn28 / 1.0715 / AVP)
P2	Carbon steel and low alloy steel	Rm 500-700 N/mm ²	(C40 / 1.0511)
P3	Medium alloy steel and heat treated steel	Rm 600-800 N/mm ²	(42CrMo4 / 1.7225)
P4	High alloy steel	Rm 800-1000 N/mm ²	(100Cr6 / 1.3505)
P5	Tool steel	Rm 900-1200 N/mm ²	(X210Cr12 / 1.2080 / K100)
P6	High tensile strength steel	Rm 1200-1600 N/mm ²	(X2NiCrMo18.9.5 / 1.6358 / W720)
M1	Ferritic stainless steel	Rm 400-700 N/mm ²	(X40Cr13 / 1.4034 / AISI420)
M2	Austenitic stainless steel (good machinability)	Rm 500-750 N/mm ²	(X5CrNi18.10 / 1.4301 / AISI304)
M3	Austenitic stainless steel (medium machinability)	Rm 550-850 N/mm ²	(X2CrNiMo18.12 / 1.4435 / AISI316L)
M4	Martensitic stainless steel	Rm 650-950 N/mm ²	(X2CrNiMoN25.7.4 / 1.4410 / Super Duplex)
M5	PH stainless steel	Rm 800-1250 N/mm ²	(X5CrNiNb16.4 / 1.4542 / 17-4PH)
K1	Grey cast iron	HB 150-250	(GG-25 / 0.6025)
K2	Nodular cast iron	HB 150-350	(GGG-50 / 0.7050)
K3	Austenitic cast iron	HB 120-260	(GGL-NiCr20.2 / 0.6660)
K4	ADI cast iron	HB 250-500	(GJS-1000-5 / ADI 1000)
N1	Aluminium alloys < 12% Si		(AlMgSi0.5 / 3.3206)
N2	Aluminium alloys > 12% Si		(AlSi12 / 3.2582)
N3	Copper alloys		(E-Cu57 / 2.0060)
N4	Brass alloys and bronze alloys		(CuZn20Al2 / 2.0460)
S1	Heat resistant super alloys HRSA (good machinability)	HRC < 25	(NiCr17Mo17FeW / 2.4802 / Hastelloy)
S2	Heat resistant super alloys HRSA (medium machinability)	HRC 25-35	(NiCr20Ti / 2.4630 / Nimonic 80)
S3	Heat resistant super alloys HRSA (low machinability)	HRC 35-45	(NiCr19Fe19NbMo / 2.4668 / Inconel 718)
S4	Low alloy titanium		(Ti99.6 / 3.7055 / Titanium grade 3)
S5	High alloy titanium		(Ti5Al2.5Sn / 3.7115 / Titanium grade 6)

Gr.	JP5520	JP5530	JP8525	JC8530	JP9525	JP9535	JC7515	JP7525	JC7530	JU6520	JU4525
P1	200 ÷ 250	180 ÷ 230	200 ÷ 250	240 ÷ 320							250 ÷ 350
P2	160 ÷ 220	150 ÷ 210	160 ÷ 220	200 ÷ 280							220 ÷ 300
P3	140 ÷ 200	120 ÷ 180	140 ÷ 200	180 ÷ 240							200 ÷ 280
P4	120 ÷ 160	100 ÷ 150	120 ÷ 160	140 ÷ 200							160 ÷ 220
P5	100 ÷ 140	80 ÷ 130	100 ÷ 140	120 ÷ 180							
P6	80 ÷ 120	60 ÷ 110	80 ÷ 120	100 ÷ 160							
M1	100 ÷ 160	90 ÷ 150			130 ÷ 220	120 ÷ 220					140 ÷ 240
M2	80 ÷ 140	80 ÷ 130			110 ÷ 180	120 ÷ 200					120 ÷ 200
M3	60 ÷ 120	60 ÷ 100			90 ÷ 160	100 ÷ 180					100 ÷ 180
M4					80 ÷ 140	90 ÷ 150					
M5					70 ÷ 120	80 ÷ 140					
K1							200 ÷ 350	150 ÷ 240	160 ÷ 300		250 ÷ 380
K2							180 ÷ 280	120 ÷ 200	140 ÷ 240		200 ÷ 300
K3							140 ÷ 200	100 ÷ 150	120 ÷ 180		160 ÷ 220
K4							120 ÷ 180		100 ÷ 150		
N1										400 ÷ 1000	
N2										300 ÷ 600	
N3										300 ÷ 500	
N4										200 ÷ 400	
S1						30 ÷ 60					
S2						30 ÷ 50					
S3						20 ÷ 40					
S4						50 ÷ 100					
S5						40 ÷ 80					



OKTOPLUS SERIES

High performance on face milling.

ISO

P

M

K

N

S



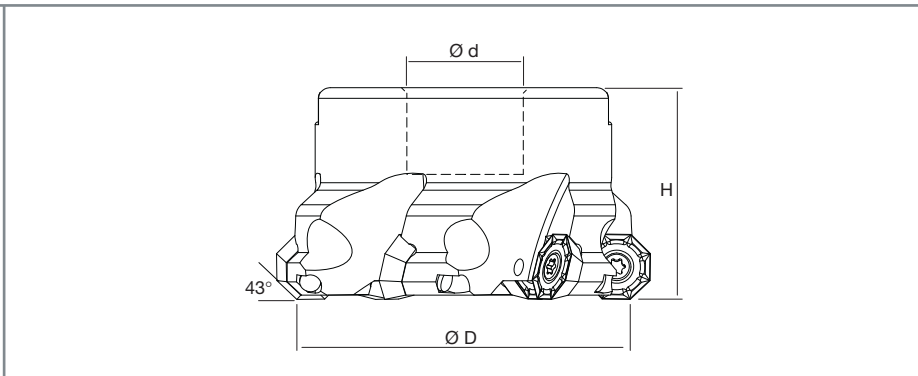
8 edges

nixkoTOOLS

OKTOPLUS SERIES

OF□□05T3

HOLDERS



INSERTS	DESCRIPTION	STOCK	DIMENSIONS				Coolant	Screw	Key	TORQUE Nm					
			ØD	Z	Ød	H									
OF□□05T3	NT-OF05H	D050-F22-Z5	●	50	5	22	40	✓	NT-ST024	NT-FTB15	3.50				
		D063-F22-Z6	●	63	6	22	40	✓	NT-ST024	NT-FTB15	3.50				
		D080-F27-Z7	★	80	7	27	50	✓	NT-ST024	NT-FTB15	3.50				
		D100-F32-Z8	★	100	8	32	50	✓	NT-ST024	NT-FTB15	3.50				

● stock standard; ★ upcoming introduction

We will continue to supply the equivalent milling cutters without coolant holes (description: NT-OF05) until availability of items marked with ★.

INSERTS

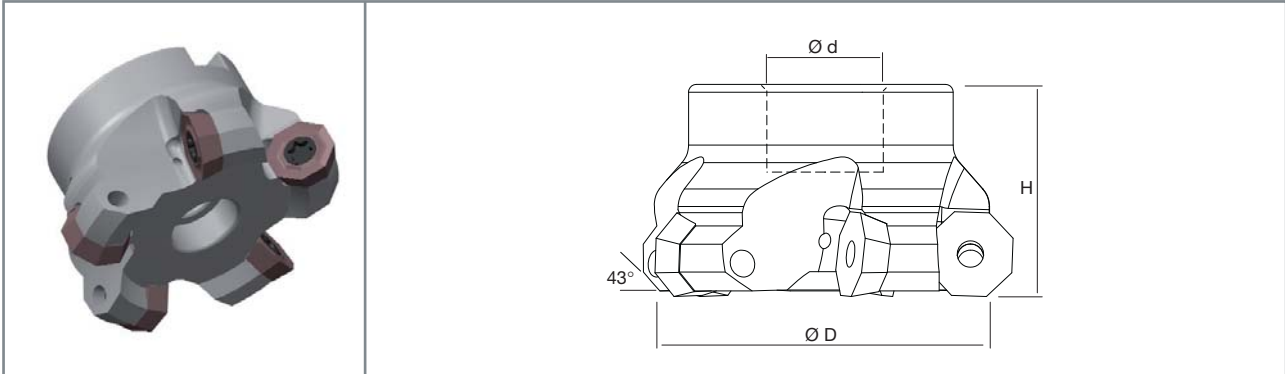
DESCRIPTION		DIMENSIONS					COATINGS				
		IC	T	r	b	Ød	JP8525	JC8530	JP9525	JC7530	JU6520
GP	OFKT 05T305-GP	12.70	3.97	0.5	1.10	4.40	●	●	●	●	
AL	POLISHED OFKT 05T305-AL	12.70	3.97	0.5	1.10	4.40				●	

● stock standard

HC: coated carbide
 HW: uncoated carbide
 JC: CVD coating
 JP: PVD coating
 JU: uncoated

HOLDERS

OD□□0605



INSERTS	DESCRIPTION	STOCK	DIMENSIONS				Lubrication	Screw	Key	TORQUE Nm				
			ØD	Z	Ød	H								
OD□□0605	NT-OD06H D050-F22-Z4	●	50	4	22	40	✓	NT-ST021	NT-FTB20	4.50				
	D063-F22-Z5	●	63	5	22	40	✓	NT-ST021	NT-FTB20	4.50				
	D080-F27-Z6	●	80	6	27	50	✓	NT-ST021	NT-FTB20	4.50				
	D100-F32-Z7	●	100	7	32	50	✓	NT-ST021	NT-FTB20	4.50				
	D125-F40-Z8	●	125	8	40	63	✓	NT-ST021	NT-FTB20	4.50				
	D160-F40-Z10	●	160	10	40	63	✓	NT-ST021	NT-FTB20	4.50				

● stock standard

INSERTS

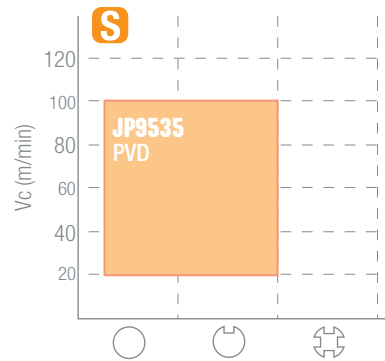
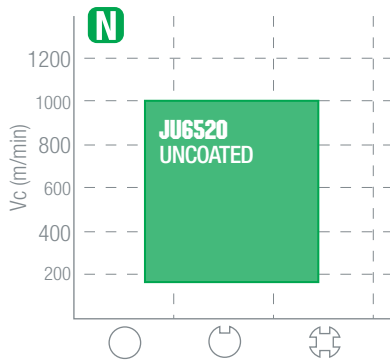
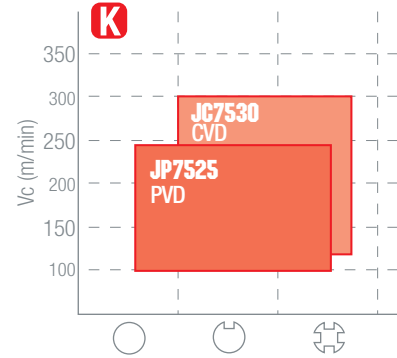
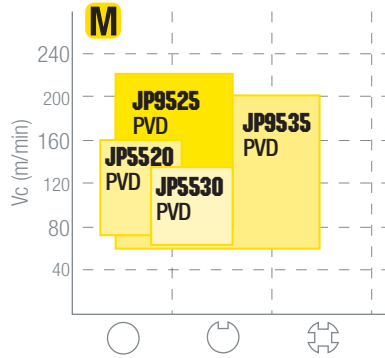
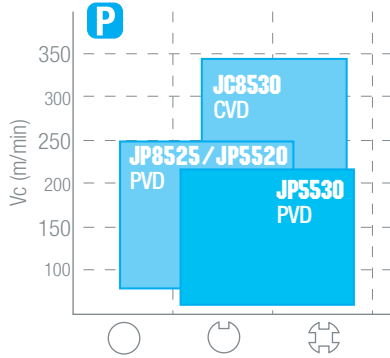
	DESCRIPTION	DIMENSIONS						COATING								
		IC	T	r	b	Ød	JP5520	JP5530	JP9535	JP7525	JU6520					
SC	ODKT 060508-SC	15.875	5.56	0.8	1.80	5.5	●	●	● NEW							
GP	ODKT 060508-GP	15.875	5.56	0.8	1.80	5.5	●	●	● NEW	●						
	ODMT 060508-GP NEW	15.875	5.56	0.8	1.80	5.5	●									
TE	ODKT 060508-TE	15.875	5.56	0.8	1.80	5.5	●	●								
	ODMT 060508-TE NEW	15.875	5.56	0.8	1.80	5.5	●									
AL	ODKT 060508-AL	15.875	5.56	0.8	1.80	5.5					●					
WU WIPER	ODKW 060508-WU	15.875	5.56	0.8	6.40	5.5	●	●								

● stock standard

HC: coated carbide
 HW: uncoated carbide
 JP: PVD coating
 JU: uncoated

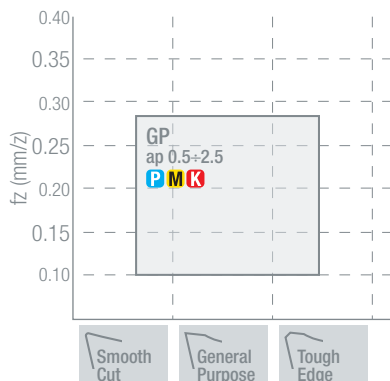
OKTOPLUS SERIES

GRADES APPLICATION CHART

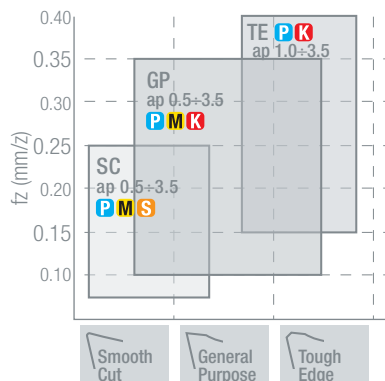


CHIPBREAKERS APPLICATION CHART

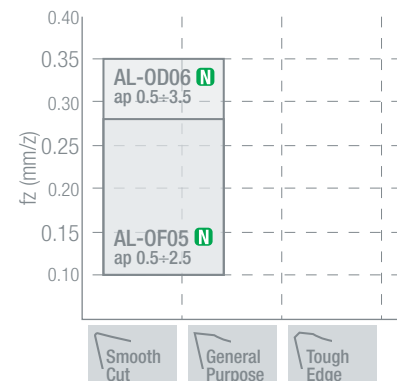
OFKT05



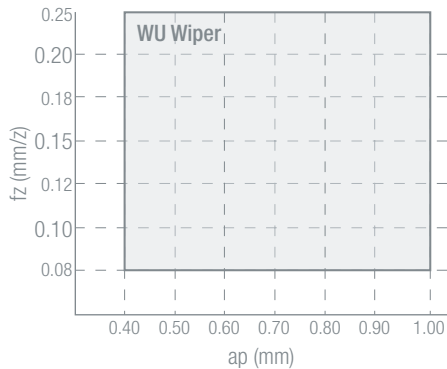
ODKT06 / ODMT06



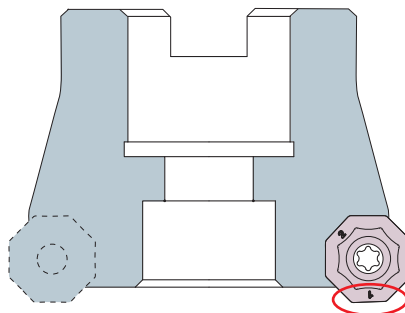
OFKT05 / ODKT06



WIPER APPLICATION CHART



WIPER INSTALLATION (ODKW060508-WU)



- Please follow the clamping procedure shown in the picture.
- The cutting edges of WU style inserts are marked with digits 1 and 2.
- Only 1 wiper insert per setup.



- Installare l'inserto come mostrato in figura.
- La geometria WU ha due taglienti marcati con il numero 1 e 2.
- Installare un solo inserto wiper sul corpo fresa.



- Installieren Sie die Wendeschneidplatte wie in der Abbildung gezeigt.
- Die Geometrie WU hat zwei Schneiden mit der Nummer 1 und 2 markiert.
- Befestigen Sie nur eine Wendeschneidplatte WIPER auf den Schneidkörper



- Installer la plaquette comme le montre la photo.
- La géométrie WU a deux arêtes de coupe, marquées avec le numéro 1 et 2.
- Installer une seule plaquette wiper sur le corps d'outil.



- Instalar la placa como ilustrado en la figura.
- La geometría WU tiene dos filos marcados con el número 1 y 2.
- Instalar una sola placa wiper en el cuerpo de la fresa.



- Устанавливайте пластину как указано на рисунке.
- Геометрия WU обладает двумя режущими кромками обозначенные цифрами 1 и 2.
- Только одну пластину wiper устанавливайте на фрезу.

OKTOPLUS SERIES

CUTTING SPEED (Vc m/min)

Gr.	MATERIAL		
P1	Free cutting steel and structural steel	Rm < 500 N/mm ²	(9SMn28 / 1.0715 / AVP)
P2	Carbon steel and low alloy steel	Rm 500-700 N/mm ²	(C40 / 1.0511)
P3	Medium alloy steel and heat treated steel	Rm 600-800 N/mm ²	(42CrMo4 / 1.7225)
P4	High alloy steel	Rm 800-1000 N/mm ²	(100Cr6 / 1.3505)
P5	Tool steel	Rm 900-1200 N/mm ²	(X210Cr12 / 1.2080 / K100)
P6	High tensile strength steel	Rm 1200-1600 N/mm ²	(X2NiCrMo18.9.5 / 1.6358 / W720)
M1	Ferritic stainless steel	Rm 400-700 N/mm ²	(X40Cr13 / 1.4034 / AISI420)
M2	Austenitic stainless steel (good machinability)	Rm 500-750 N/mm ²	(X5CrNi18.10 / 1.4301 / AISI304)
M3	Austenitic stainless steel (medium machinability)	Rm 550-850 N/mm ²	(X2CrNiMo18.12 / 1.4435 / AISI316L)
M4	Martensitic stainless steel	Rm 650-950 N/mm ²	(X2CrNiMoN25.7.4 / 1.4410 / Super Duplex)
M5	PH stainless steel	Rm 800-1250 N/mm ²	(X5CrNiNb16.4 / 1.4542 / 17-4PH)
K1	Grey cast iron	HB 150-250	(GG-25 / 0.6025)
K2	Nodular cast iron	HB 150-350	(GGG-50 / 0.7050)
K3	Austenitic cast iron	HB 120-260	(GGL-NiCr20.2 / 0.6660)
K4	ADI cast iron	HB 250-500	(GJS-1000-5 / ADI 1000)
N1	Aluminium alloys < 12% Si		(AlMgSi0.5 / 3.3206)
N2	Aluminium alloys > 12% Si		(AlSi12 / 3.2582)
N3	Copper alloys		(E-Cu57 / 2.0060)
N4	Brass alloys and bronze alloys		(CuZn20Al2 / 2.0460)
S1	Heat resistant super alloys HRSA (good machinability)	HRC < 25	(NiCr17Mo17FeW / 2.4802 / Hastelloy)
S2	Heat resistant super alloys HRSA (medium machinability)	HRC 25-35	(NiCr20Ti / 2.4630 / Nimonic 80)
S3	Heat resistant super alloys HRSA (low machinability)	HRC 35-45	(NiCr19Fe19NbMo / 2.4668 / Inconel 718)
S4	Low alloy titanium		(Ti99.6 / 3.7055 / Titanium grade 3)
S5	High alloy titanium		(Ti5Al2.5Sn / 3.7115 / Titanium grade 6)

Gr.	JP5520	JP5530	JP8525	JC8530	JP9525	JP9535	JP7525	JC7530	JU6520
P1	200 ÷ 250	180 ÷ 230	200 ÷ 250	240 ÷ 320					
P2	160 ÷ 220	150 ÷ 210	160 ÷ 220	200 ÷ 280					
P3	140 ÷ 200	120 ÷ 180	140 ÷ 200	180 ÷ 240					
P4	120 ÷ 160	100 ÷ 150	120 ÷ 160	140 ÷ 200					
P5	100 ÷ 140	80 ÷ 130	100 ÷ 140	120 ÷ 180					
P6	80 ÷ 120	60 ÷ 110	80 ÷ 120	100 ÷ 160					
M1	100 ÷ 160	90 ÷ 150			130 ÷ 220	120 ÷ 220			
M2	80 ÷ 140	80 ÷ 130			110 ÷ 180	120 ÷ 200			
M3	60 ÷ 120	60 ÷ 100			90 ÷ 160	100 ÷ 180			
M4					80 ÷ 140	90 ÷ 150			
M5					70 ÷ 120	80 ÷ 140			
K1							150 ÷ 240	160 ÷ 300	
K2							120 ÷ 200	140 ÷ 240	
K3							100 ÷ 150	120 ÷ 180	
K4								100 ÷ 150	
N1									400 ÷ 1000
N2									300 ÷ 600
N3									300 ÷ 500
N4									200 ÷ 400
S1						30 ÷ 60			
S2						30 ÷ 50			
S3						20 ÷ 40			
S4						50 ÷ 100			
S5						40 ÷ 80			

ROUND PLUS SERIES

The all-around solution for copying.

ISO

P

M

K

S



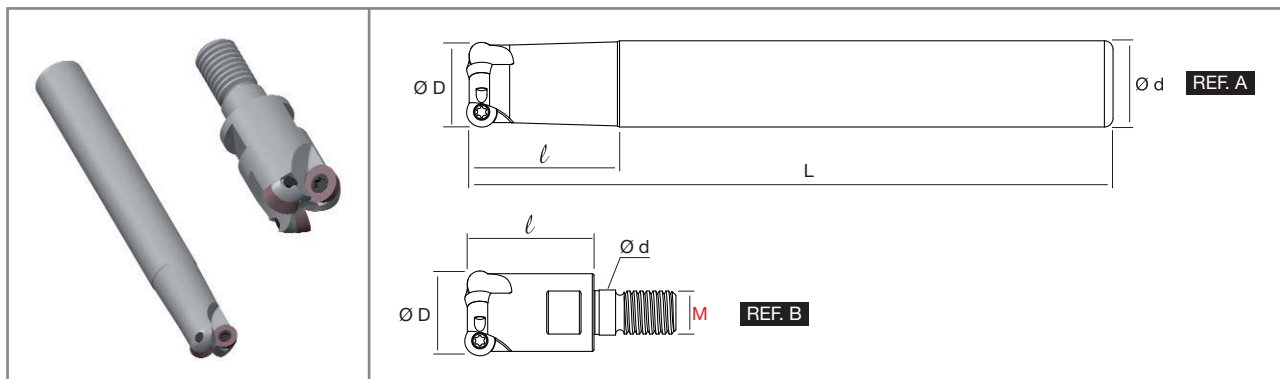
- R2.5 $\emptyset 9\div 17$
- R3.5 $\emptyset 16\div 35$
- R5.0 $\emptyset 20\div 52$
- R6.0 $\emptyset 42\div 80$
- R8.0 $\emptyset 63\div 125$

nixkoTOOLS

ROUNDPLUS SERIES

RD□□0501 - RD□□0702

HOLDERS



INSERTS	DESCRIPTION	STOCK	DIMENSIONS					REF	REF. A	REF. B	TORQUE Nm						
			ØD	Z	Ød	L	l										
RD□□0501	NT-RD05H	D009-S08-Z2-L100	★	9	2	8	100	12	A	✓	NT-ST026	NT-FTB06	0.50				
		D010-S10-Z2-L100	●	10	2	10	100	18	A	✓	NT-ST026	NT-FTB06	0.50				
		D011-S10-Z2-L100	★	11	2	10	100	15	A	✓	NT-ST009	NT-FTB06	0.50				
		D012-M06-Z2	★	12	2	6.5	-	18	B	✓	NT-ST009	NT-FTB06	0.50				
		D012-M06-Z3	★	12	3	6.5	-	18	B	✓	NT-ST009	NT-FTB06	0.50				
		D012-S12-Z3-L100	★	12	3	12	100	22	A	✓	NT-ST009	NT-FTB06	0.50				
		D013-M06-Z2	★	13	2	6.5	-	18	B	✓	NT-ST009	NT-FTB06	0.50				
		D013-M06-Z3	★	13	3	6.5	-	18	B	✓	NT-ST009	NT-FTB06	0.50				
		D013-S12-Z3-L100	★	13	3	12	100	18	A	✓	NT-ST009	NT-FTB06	0.50				
		D016-M08-Z4	★	16	4	8.5	-	23	B	✓	NT-ST009	NT-FTB06	0.50				
		D016-S16-Z4-L150	★	16	4	16	150	30	A	✓	NT-ST009	NT-FTB06	0.50				
		D017-M08-Z4	★	17	4	8.5	-	23	B	✓	NT-ST009	NT-FTB06	0.50				
		D017-S16-Z4-L150	★	17	4	16	150	20	A	✓	NT-ST009	NT-FTB06	0.50				
		RD□□0702	NT-RD07H	D016-M08-Z2	★	16	2	8.5	-	23	B	✓	NT-ST011	NT-FTB09	1.20		
D016-M08-Z3	★			16	3	8.5	-	23	B	✓	NT-ST011	NT-FTB09	1.20				
D016-S16-Z2-L150	●			16	2	16	150	25	A	✓	NT-ST011	NT-FTB09	1.20				
D017-M08-Z2	★			17	2	8.5	-	23	B	✓	NT-ST011	NT-FTB09	1.20				
D017-M08-Z3	★			17	3	8.5	-	23	B	✓	NT-ST011	NT-FTB09	1.20				
D017-S16-Z2-L150	●			17	2	16	150	20	A	✓	NT-ST011	NT-FTB09	1.20				
D020-M10-Z3	★			20	3	10.5	-	30	B	✓	NT-ST011	NT-FTB09	1.20				
D020-S20-Z3-L150	★			20	3	20	150	35	A	✓	NT-ST011	NT-FTB09	1.20				
D021-M10-Z2	★			21	2	10.5	-	30	B	✓	NT-ST011	NT-FTB09	1.20				
D021-M10-Z3	★			21	3	10.5	-	30	B	✓	NT-ST011	NT-FTB09	1.20				
D021-S20-Z3-L150	★			21	3	20	150	25	A	✓	NT-ST011	NT-FTB09	1.20				
D025-M12-Z4	★			25	4	12.5	-	35	B	✓	NT-ST011	NT-FTB09	1.20				
D025-M12-Z5	★			25	5	12.5	-	35	B	✓	NT-ST011	NT-FTB09	1.20				
D025-S25-Z5-L150	★			25	5	25	150	40	A	✓	NT-ST011	NT-FTB09	1.20				
D026-M12-Z4	★			26	4	12.5	-	35	B	✓	NT-ST011	NT-FTB09	1.20				
D026-M12-Z5	★			26	5	12.5	-	35	B	✓	NT-ST011	NT-FTB09	1.20				
D026-S25-Z5-L150	★			26	5	25	150	25	A	✓	NT-ST011	NT-FTB09	1.20				
D035-M16-Z5	★			35	5	16.5	-	43	B	✓	NT-ST011	NT-FTB09	1.20				
D035-M16-Z6	★	35	6	16.5	-	43	B	✓	NT-ST011	NT-FTB09	1.20						
D035-S32-Z6-L150	★	35	6	32	150	30	A	✓	NT-ST011	NT-FTB09	1.20						

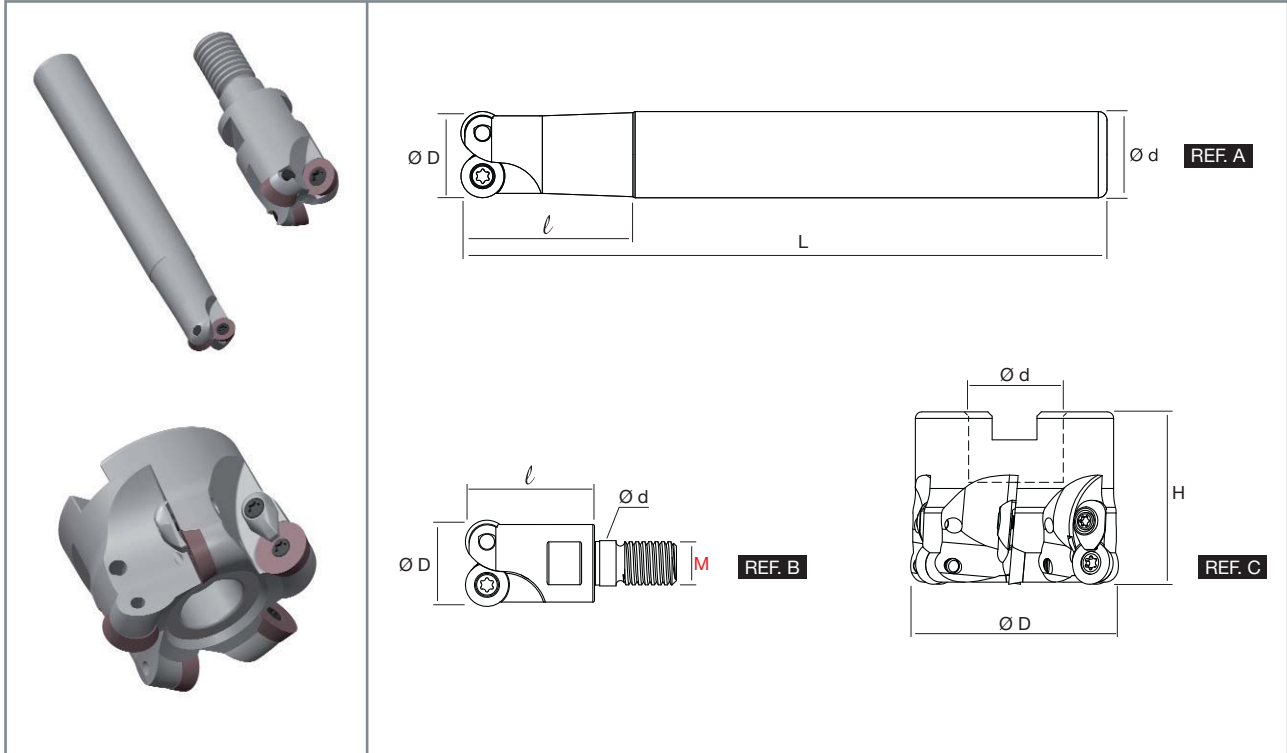
● stock standard; ★ upcoming introduction



We will continue to supply the equivalent milling cutters without coolant holes (description: NT-RD05 and NT-RD07) until availability of items marked with ★.

HOLDERS

RD□□1003



INSERTS	DESCRIPTION	STOCK	DIMENSIONS					REF	🔹	← TORQUE Nm				← TORQUE Nm			
			ØD	Z	Ød	L	l			🔸	🔸	🔸	🔸	🔸	🔸		
RD□□1003	NT-RD10H	D020-M10-Z2	●	20	2	10.5	-	30	B	✓	-	-	-	-	NT-ST012	NT-FTB15	3.50
		D020-S20-Z2-L150	●	20	2	20	150	40	A	✓	-	-	-	-	NT-ST012	NT-FTB15	3.50
		D021-M10-Z2	★	21	2	10.5	-	30	B	✓	-	-	-	-	NT-ST012	NT-FTB15	3.50
		D021-S20-Z2-L150	●	21	2	20	150	25	A	✓	-	-	-	-	NT-ST012	NT-FTB15	3.50
		D025-M12-Z3	●	25	3	12.5	-	35	B	✓	-	-	-	-	NT-ST012	NT-FTB15	3.50
		D025-S25-Z3-L150	●	25	3	25	150	40	A	✓	-	-	-	-	NT-ST012	NT-FTB15	3.50
		D026-M12-Z3	★	26	3	12.5	-	35	B	✓	-	-	-	-	NT-ST012	NT-FTB15	3.50
		D026-S25-Z3-L150	★	26	3	25	150	25	A	✓	-	-	-	-	NT-ST012	NT-FTB15	3.50
		D030-M12-Z3	★	30	3	12.5	-	35	B	✓	-	-	-	-	NT-ST013	NT-FTB15	3.50
		D030-S25-Z3-L150	★	30	3	25	150	25	A	✓	-	-	-	-	NT-ST013	NT-FTB15	3.50
		D032-M16-Z3	★	32	3	16.5	-	43	B	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST013	NT-FTB15	3.50
		D032-S32-Z3-L150	●	32	3	32	150	40	A	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST013	NT-FTB15	3.50
		D035-M16-Z3	●	35	3	16.5	-	43	B	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST013	NT-FTB15	3.50
		D035-M16-Z4	●	35	4	16.5	-	43	B	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST013	NT-FTB15	3.50
		D035-S32-Z4-L150	★	35	4	32	150	35	A	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST013	NT-FTB15	3.50
		D040-M16-Z4	●	40	4	16.5	-	43	B	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST013	NT-FTB15	3.50
		D042-F16-Z5	●	42	5	16	-	H=40	C	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST013	NT-FTB15	3.50
		D052-F22-Z6	●	52	6	22	-	H=40	C	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST013	NT-FTB15	3.50

● stock standard; ★ upcoming introduction

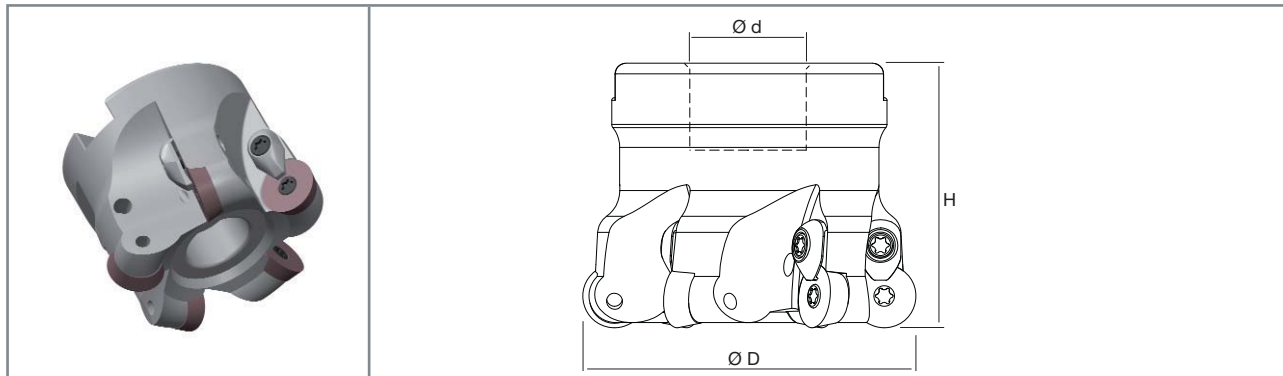







We will continue to supply the equivalent milling cutters without coolant holes (description: NT-RD10) until availability of items marked with ★.

ROUNDPLUS SERIES

HOLDERS

RD□□1204 - RD□□1604




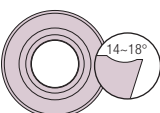
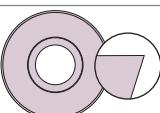
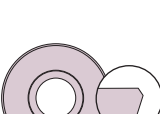
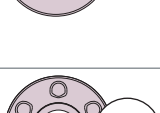
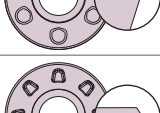
INSERTS	DESCRIPTION	STOCK	DIMENSIONS				   TORQUE Nm	  TORQUE Nm									
			ØD	Z	Ød	H											
RD□□1204	NT-RD12H	D042-F16-Z4	●	42	4	16	50	✓	NT-CS014	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50		
		D050-F22-Z4	★	50	4	22	50	✓	NT-CS014	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50		
		D050-F22-Z5	●	50	5	22	50	✓	NT-CS014	NT-ST013	NT-FTB15	3.50	NT-ST019	NT-FTB15	3.50		
		D052-F22-Z4	●	52	4	22	50	✓	NT-CS014	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50		
		D052-F22-Z5	●	52	5	22	50	✓	NT-CS014	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50		
		D063-F22-Z5	●	63	5	22	50	✓	NT-CS014	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50		
		D063-F22-Z6	●	63	6	22	50	✓	NT-CS014	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50		
		D066-F22-Z6	★	66	6	22	50	✓	NT-CS014	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50		
		D080-F27-Z6	★	80	6	27	50	✓	NT-CS014	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50		
		D080-F27-Z7	●	80	7	27	50	✓	NT-CS014	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50		
		RD□□1604	NT-RD16H	D063-F22-Z5	●	63	5	22	50	✓	NT-CS021	NT-ST021	NT-FTB20	4.50	NT-ST023	NT-FTB20	4.50
				D066-F22-Z5	★	66	5	22	50	✓	NT-CS021	NT-ST021	NT-FTB20	4.50	NT-ST023	NT-FTB20	4.50
D066-F27-Z5	●			66	5	27	50	✓	NT-CS021	NT-ST021	NT-FTB20	4.50	NT-ST023	NT-FTB20	4.50		
D080-F27-Z5	●			80	5	27	50	✓	NT-CS021	NT-ST021	NT-FTB20	4.50	NT-ST023	NT-FTB20	4.50		
D080-F27-Z6	●			80	6	27	50	✓	NT-CS021	NT-ST021	NT-FTB20	4.50	NT-ST023	NT-FTB20	4.50		
D100-F32-Z6	★			100	6	32	50	✓	NT-CS021	NT-ST021	NT-FTB20	4.50	NT-ST023	NT-FTB20	4.50		
D100-F32-Z7	●			100	7	32	50	✓	NT-CS021	NT-ST021	NT-FTB20	4.50	NT-ST023	NT-FTB20	4.50		
D125-F40-Z8	●			125	8	40	63	✓	NT-CS021	NT-ST021	NT-FTB20	4.50	NT-ST023	NT-FTB20	4.50		

● stock standard; ★ upcoming introduction



We will continue to supply the equivalent milling cutters without coolant holes (description: NT-RD12 and NT-RD16) until availability of items marked with ★.

INSERTS RD

	DESCRIPTION	IC				HC				HT							
		IC	T	r	Ød	JP5520	JP5530	JP9535	JP7525	JU4525							
SC		RDET 1003M0-SC	10	3.18	5.0	3.80	●	●									
		10T3M0-SC	10	3.97	5.0	4.40	○	●									
		1204M0-SC	12	4.76	6.0	4.40	●	●									
		1604M0-SC	16	4.76	8.0	5.00	●	●									
GP		RDET 1003M0-GP	10	3.18	5.0	3.80	●	●	● NEW								
		10T3M0-GP	10	3.97	5.0	4.40	●	●									
		1204M0-GP	12	4.76	6.0	4.40	●	●	● NEW								
		1604M0-GP	16	4.76	8.0	5.00	●	●	● NEW								
		RDMT 1204M0-GP	12	4.76	6.0	4.40	●	●									
TES		RDEW 0501M0-TES	5	1.51	2.5	2.20	●	●		●							
		0702M0-TES	7	2.38	3.5	2.80	●				●						
TE		RDEW 0702M0-TE	7	2.38	3.5	2.80	●	●		●							
		0803M0-TE	8	3.18	4.0	2.94	○										
		1003M0-TE	10	3.18	5.0	3.80	●	●		●							
		10T3M0-TE	10	3.97	5.0	4.40	●	●									
		1204M0-TE	12	4.76	6.0	4.40	●	●		●							
		1604M0-TE	16	4.76	8.0	5.00	●	●		●							
		RDMW 1604M0-TE	16	4.76	8.0	5.00	●	●									
TE (06)		RDEW 1204M0-TE-D6	12	4.76	6.0	4.40	●	●									
		1605M0-TE-D6	16	5.56	8.0	5.50	■										
		RDMW 1204M0-TE-D6	12	4.76	6.0	4.40	●										
TE (08)		RDEW 12T3M0-TE-D8	12	3.97	6.0	4.40	●	●									
		1204M0-TE-D8	12	4.76	6.0	4.40	●	●									
		RDMW 1204M0-TE-D8	12	4.76	6.0	4.40	●	●									
		1605M0-TE-D8	16	5.56	8.0	5.50	○	●									

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

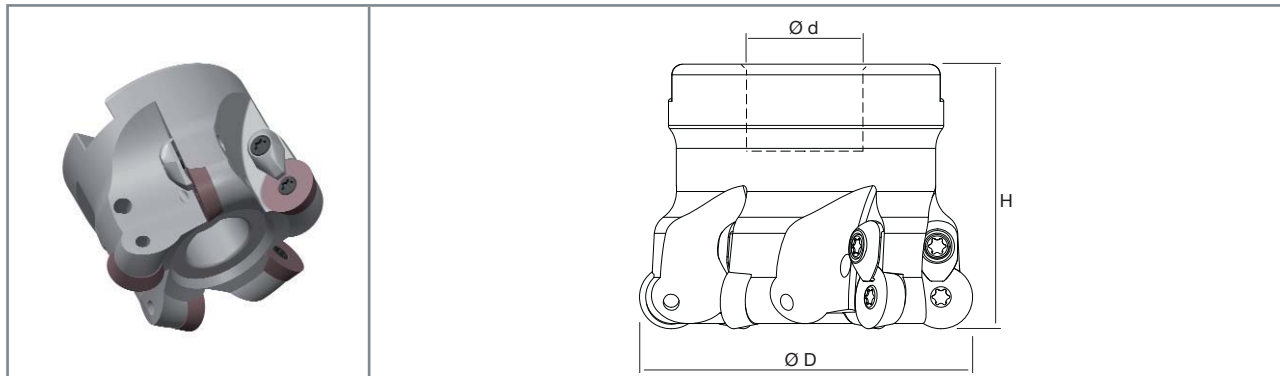
HC: coated carbide
HT: cermet

JP: PVD coating
JU: uncoated

ROUNDPLUS SERIES

RP□□1204

HOLDERS



INSERTS	DESCRIPTION	STOCK	DIMENSIONS				TORQUE Nm	TORQUE Nm						
			ØD	Z	Ød	H								
RP□□1204	NT-RP12H D042-F16-Z4	●	42	4	16	50	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50
	D050-F22-Z5	●	50	5	22	50	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50
	D052-F22-Z5	●	52	5	22	50	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50
	D063-F22-Z6	●	63	6	22	50	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50
	D066-F22-Z6	●	66	6	22	50	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50
	D080-F27-Z7	●	80	7	27	50	✓	NT-CS013	NT-ST013	NT-FTB15	3.50	NT-ST017	NT-FTB15	3.50

● stock standard

INSERTS RP

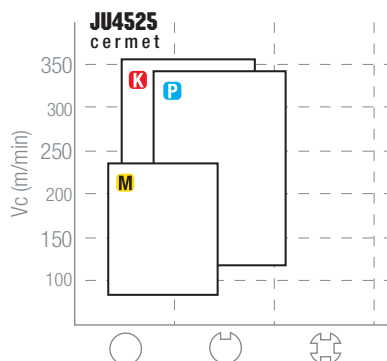
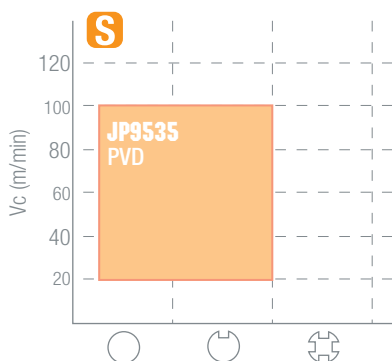
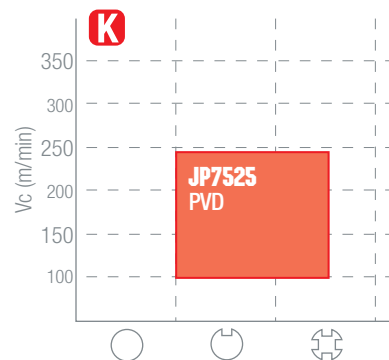
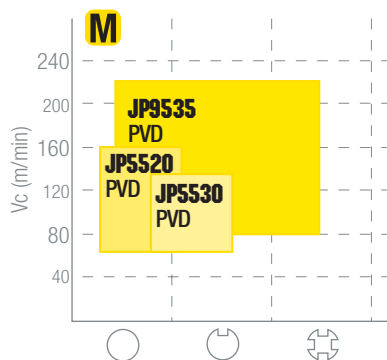
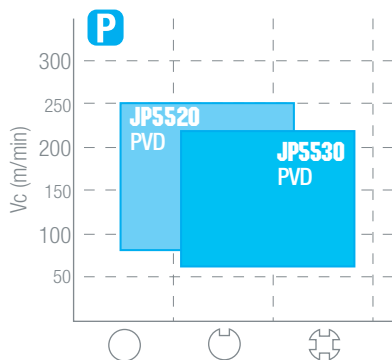
DESCRIPTION	IC				HC		
	IC	T	r	Ød	JP5520	JP5530	JP9535
RPET 1003M0-SC 1204M0-SC	10	3.18	5.0	4.40	○	●	
	12	4.76	6.0	4.40	●	●	
RPET 1204M0-GP RPMT 1204M0-GP	12	4.76	6.0	4.40	●	●	● NEW
	12	4.76	6.0	4.40	●	●	
RPEW 1003M0-TE 1204M0-TE RPMW1003M0-TE 1204M0-TE	10	3.18	5.0	4.40	○	○	
	12	4.76	6.0	4.40	●	●	
	10	3.18	5.0	4.40	○	○	
	12	4.76	6.0	4.40	●	●	

● stock standard; ○ non-stock standard

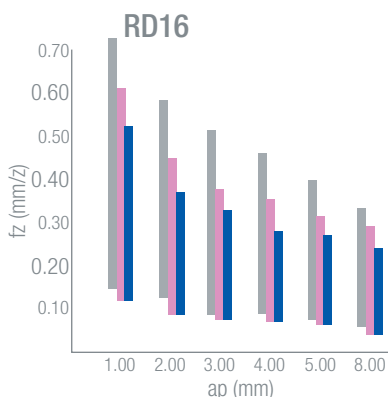
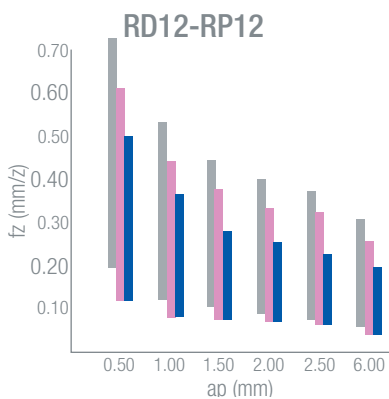
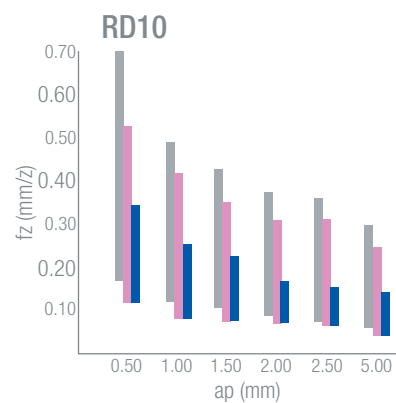
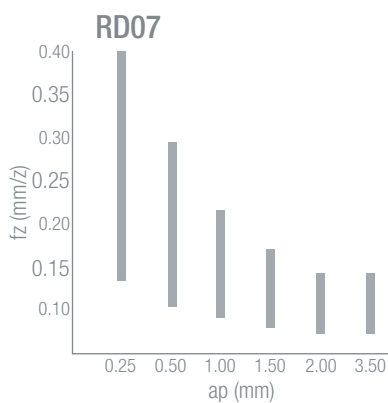
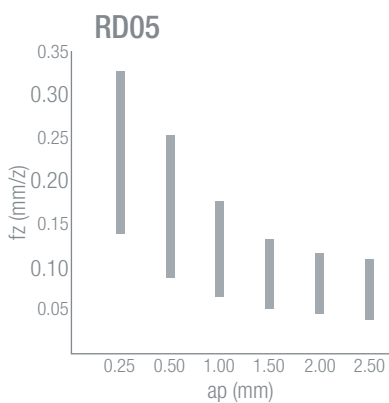
HC: coated carbide

JP: PVD coating

GRADES APPLICATION CHART



INSERTS APPLICATION CHART



! cermet JU4525 → fz-20%
Please reduce the feed rate by 20%

■ SC ■ GP ■ TE/TES

ROUNDPLUS SERIES

CUTTING SPEED (Vc m/min)

Gr.	MATERIAL		
P1	Free cutting steel and structural steel	Rm < 500 N/mm ²	(9SMn28 / 1.0715 / AVP)
P2	Carbon steel and low alloy steel	Rm 500-700 N/mm ²	(C40 / 1.0511)
P3	Medium alloy steel and heat treated steel	Rm 600-800 N/mm ²	(42CrMo4 / 1.7225)
P4	High alloy steel	Rm 800-1000 N/mm ²	(100Cr6 / 1.3505)
P5	Tool steel	Rm 900-1200 N/mm ²	(X210Cr12 / 1.2080 / K100)
P6	High tensile strength steel	Rm 1200-1600 N/mm ²	(X2NiCrMo18.9.5 / 1.6358 / W720)
M1	Ferritic stainless steel	Rm 400-700 N/mm ²	(X40Cr13 / 1.4034 / AISI420)
M2	Austenitic stainless steel (good machinability)	Rm 500-750 N/mm ²	(X5CrNi18.10 / 1.4301 / AISI304)
M3	Austenitic stainless steel (medium machinability)	Rm 550-850 N/mm ²	(X2CrNiMo18.12 / 1.4435 / AISI316L)
M4	Martensitic stainless steel	Rm 650-950 N/mm ²	(X2CrNiMoN25.7.4 / 1.4410 / Super Duplex)
M5	PH stainless steel	Rm 800-1250 N/mm ²	(X5CrNiNb16.4 / 1.4542 / 17-4PH)
K1	Grey cast iron	HB 150-250	(GG-25 / 0.6025)
K2	Nodular cast iron	HB 150-350	(GGG-50 / 0.7050)
K3	Austenitic cast iron	HB 120-260	(GGL-NiCr20.2 / 0.6660)
K4	ADI cast iron	HB 250-500	(GJS-1000-5 / ADI 1000)
S1	Heat resistant super alloys HRSA (good machinability)	HRC < 25	(NiCr17Mo17FeW / 2.4802 / Hastelloy)
S2	Heat resistant super alloys HRSA (medium machinability)	HRC 25-35	(NiCr20Ti / 2.4630 / Nimonic 80)
S3	Heat resistant super alloys HRSA (low machinability)	HRC 35-45	(NiCr19Fe19NbMo / 2.4668 / Inconel 718)
S4	Low alloy titanium		(Ti99.6 / 3.7055 / Titanium grade 3)
S5	High alloy titanium		(Ti5Al2.5Sn / 3.7115 / Titanium grade 6)

Gr.	JP5520	JP5530	JP9535	JP7525	JU4525
P1	200 ÷ 250	180 ÷ 230			250 ÷ 350
P2	160 ÷ 220	150 ÷ 210			220 ÷ 300
P3	140 ÷ 200	120 ÷ 180			200 ÷ 280
P4	120 ÷ 160	100 ÷ 150			160 ÷ 220
P5	100 ÷ 140	80 ÷ 130			
P6	80 ÷ 120	60 ÷ 110			
M1	100 ÷ 160	90 ÷ 150	120 ÷ 220		140 ÷ 240
M2	80 ÷ 140	80 ÷ 130	120 ÷ 200		120 ÷ 200
M3	60 ÷ 120	60 ÷ 100	100 ÷ 180		100 ÷ 180
M4			90 ÷ 150		
M5			80 ÷ 140		
K1				150 ÷ 240	250 ÷ 380
K2				120 ÷ 200	200 ÷ 300
K3				100 ÷ 150	160 ÷ 220
K4					
S1			30 ÷ 60		
S2			30 ÷ 50		
S3			20 ÷ 40		
S4			50 ÷ 100		
S5			40 ÷ 80		

ADVANCED MILLING SERIES

The highest technology for milling.

ISO

K

S

H

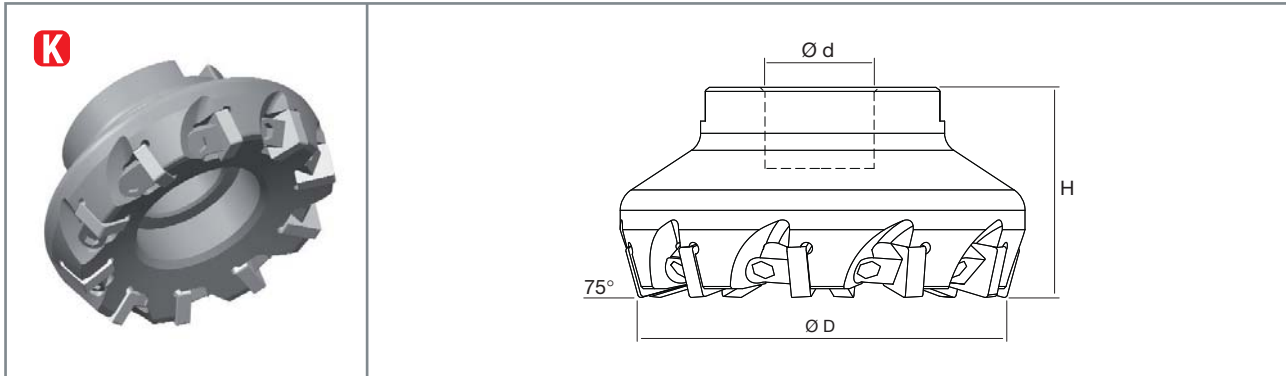
- silicon nitride
- mixed ceramic
- reinforced ceramic
- solid PCBN



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ADVANCED MILLING SERIES

75° HOLDERS for double-sided square inserts



INSERTS	DESCRIPTION	STOCK	DIMENSIONS				Water	Clamp	Screw	Torque	TORQUE Nm
			ØD	Z	Ød	H					
SN□□1204	NT-SN12-75° D050-F22-Z5	●	50	5	22	40	×	NT-WD070	NT-SC060	NT-WR030	7.0
	D063-F22-Z6	●	63	6	22	40	×	NT-WD070	NT-SC060	NT-WR030	7.0
	D080-F27-Z8	●	80	8	27	50	×	NT-WD070	NT-SC060	NT-WR030	7.0
	D100-F32-Z10	●	100	10	32	50	×	NT-WD070	NT-SC060	NT-WR030	7.0
	D125-F40-Z12	●	125	12	40	63	×	NT-WD070	NT-SC060	NT-WR030	7.0

● stock standard

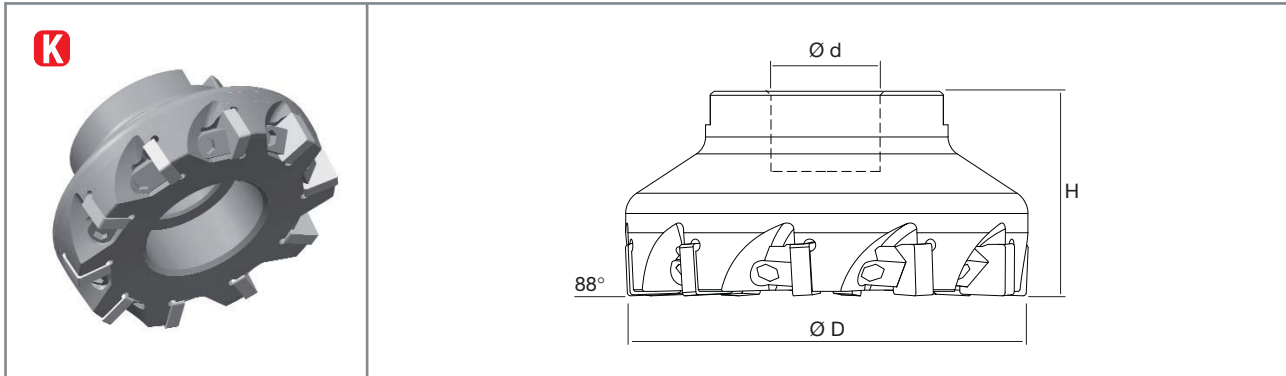
APPLICABLE INSERTS

DESCRIPTION	IC				CM	CN			BH		
	IC	T	r	b		MAC200	NSN400	NSN450	NBS5050	NBS9000	NBS9050
GP	SNEN 120412-GP	12.70	4.76	1.2	-				○	●	
	SNGN 120408-GP	12.70	4.76	0.8	-	○	●			●	○
	120412-GP	12.70	4.76	1.2	-	○	●	●		●	●
	120416-GP	12.70	4.76	1.6	-	○	○	○		○	○
	SNMN 120416-GP	12.70	4.76	1.6	-		●				
EN-GP	SNCN 1204EN-GP	12.70	4.76	-	1.3	★	●				
	SNEN 1204EN-GP	12.70	4.76	-	1.3				★		
GS	CHIPBREAKER SNGX 120412-GS	12.70	4.76	1.2	-		●				

● stock standard; ○ non stock standard; ★ upcoming introduction

BH: PCBN with high CBN content
CM: mixed ceramic Al₂O₃+TiCN
CN: silicon nitride S₃N₄

88° HOLDERS for double-sided square inserts



INSERTS	DESCRIPTION	STOCK	DIMENSIONS				✖	🔹	🔧	🔩	TORQUE Nm			
			ØD	Z	Ød	H								
SN□□1204	NT-SN12-88° D063-F22-Z6	●	63	6	22	40	✖	NT-WD070	NT-SC060	NT-WR030	7.0			
	D080-F27-Z8	●	80	8	27	50	✖	NT-WD070	NT-SC060	NT-WR030	7.0			
	D100-F32-Z10	●	100	10	32	50	✖	NT-WD070	NT-SC060	NT-WR030	7.0			
	D125-F40-Z12	●	125	12	40	63	✖	NT-WD070	NT-SC060	NT-WR030	7.0			

● stock standard

APPLICABLE INSERTS

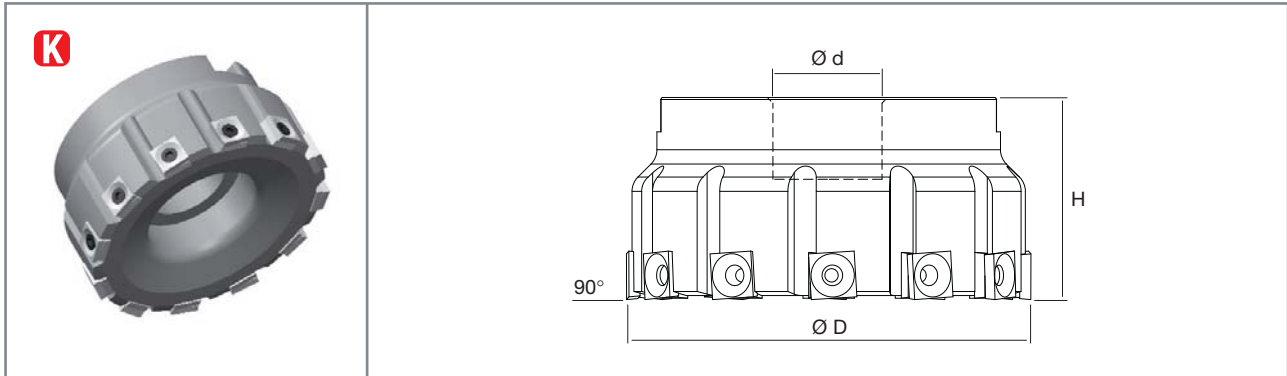
DESCRIPTION	IC				r	b	CM		CN		BH				
	IC	T	r	b			MAC200	NSN400	NSN450	NBS5050	NBS9000	NBS9050			
GP		SNEN 120412-GP	12.70	4.76	1.2	-				○	●				
		SNGN 120408-GP	12.70	4.76	0.8	-	○	●			●	○			
		120412-GP	12.70	4.76	1.2	-	○	●	●		●	●			
		120416-GP	12.70	4.76	1.6	-	○	○	○		○	○			
		SNMN 120416-GP	12.70	4.76	1.6	-		●							
HN-GP		SNCN 1204HN-GP	12.70	4.76	-	1.8	★	●							
		SNEN 1204HN-GP	12.70	4.76	-	1.8				★					
GS		SNGX 120412-GS	12.70	4.76	1.2	-		●							

● stock standard; ○ non stock standard; ★ upcoming introduction

BH: PCBN with high CBN content
 CM: mixed ceramic Al₂O₃+TiCN
 CN: silicon nitride S₃N₄

ADVANCED MILLING SERIES

90° HOLDERS for tangential inserts (8 edges)



INSERTS	DESCRIPTION	STOCK	DIMENSIONS				🔹	🔩	🔧	TORQUE Nm				
			ØD	Z	Ød	H								
SP□□1205	NT-SP12-TAN D050-F22-Z5	●	50	5	22	50	×	NT-ST027	NT-FT15	3.5				
	D063-F22-Z7	●	63	7	22	50	×	NT-ST027	NT-FT15	3.5				
	D080-F27-Z8	●	80	8	27	50	×	NT-ST027	NT-FT15	3.5				
	D100-F32-Z12	●	100	12	32	50	×	NT-ST027	NT-FT15	3.5				
	D125-F40-Z15	●	125	15	40	50	×	NT-ST027	NT-FT15	3.5				

● stock standard

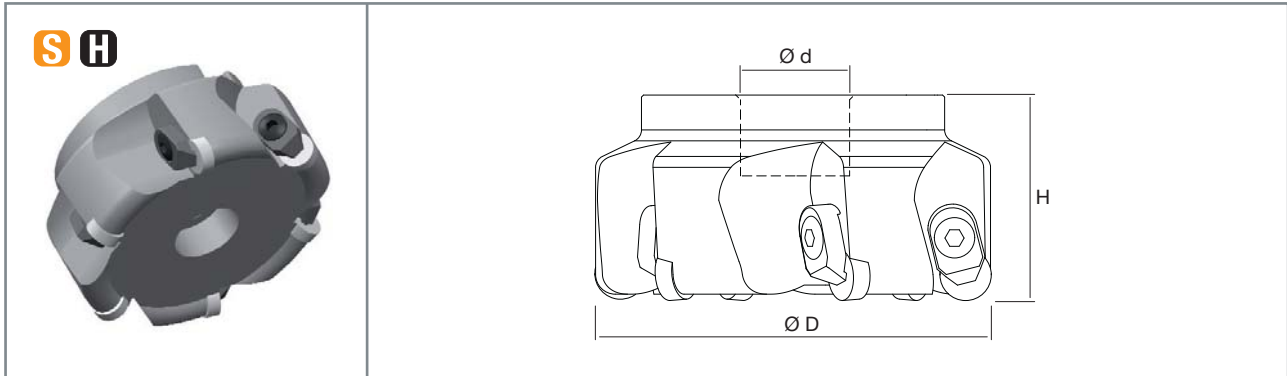
APPLICABLE INSERTS

DESCRIPTION					CN								
	IC	IC1	T	Ød	NSN350	NSN400							
 SPHX 1205PCTR-GP	11.67	11.33	5.50	5.10	○	●							

● stock standard

CN: silicon nitride S₃N₄

HOLDERS for round double-sided inserts



INSERTS	DESCRIPTION	STOCK	DIMENSIONS				C	S	T	W	TORQUE Nm				
			ØD	Z	Ød	H									
RN□□1204	NT-RN12	D050-F22-Z4	●	50	4	22	50	×	NT-CS028	NT-ST028	NT-SG028	NT-WR030	7.0		
		D063-F22-Z4	●	63	4	22	50	×	NT-CS028	NT-ST028	NT-SG028	NT-WR030	7.0		
		D080-F27-Z5	●	80	5	27	50	×	NT-CS028	NT-ST028	NT-SG028	NT-WR030	7.0		
		D100-F32-Z6	●	100	6	32	50	×	NT-CS028	NT-ST028	NT-SG028	NT-WR030	7.0		
RN□□1207	NT-RN12X	D050-F22-Z4	★	50	4	22	50	×	NT-CS028	NT-ST028	NT-SG028	NT-WR030	7.0		
		D063-F22-Z4	★	63	4	22	50	×	NT-CS028	NT-ST028	NT-SG028	NT-WR030	7.0		
		D080-F27-Z5	★	80	5	27	50	×	NT-CS028	NT-ST028	NT-SG028	NT-WR030	7.0		
		D100-F32-Z6	★	100	6	32	50	×	NT-CS028	NT-ST028	NT-SG028	NT-WR030	7.0		

● stock standard; ★ upcoming introduction

APPLICABLE INSERTS

DESCRIPTION	IC T				CM	CN		CR		BH					
	IC	T	r	b	NAC200	NSA600	NSA650	NWR700	NWR750	NBS9000	NBS9050				
	GP														
RNGN 120400-GP	12.70	4.76	6.35	-	●	■	■	●	●	●	●				
RNGN 120700-GP	12.70	4.76	6.35	-	●	■	■	●	●						


● stock standard; ■ stock exhaustion

BH: PCBN with high CBN content
 CM: mixed ceramic Al₂O₃+TiCN
 CN: silicon nitride S₃N₄
 CR: reinforced ceramic Al₂O₃+SiC

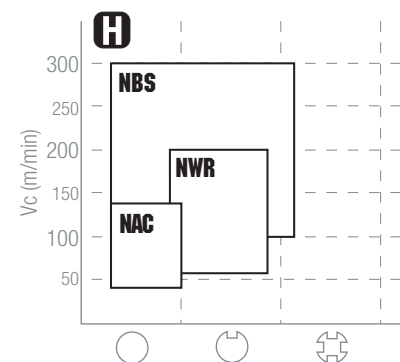
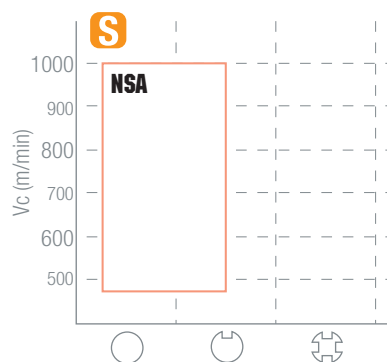
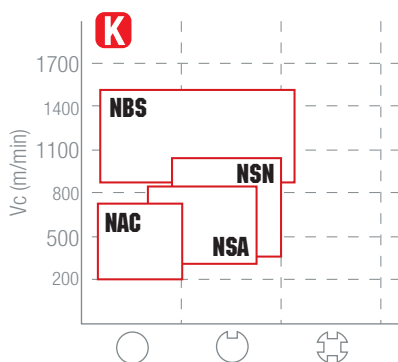
ADVANCED MILLING SERIES

PARAMETERS

Gr.	MATERIAL		
K1	Grey cast iron	HB 150-250	(GG-25 / 0.6025)
K2	Nodular cast iron	HB 150-350	(GGG-50 / 0.7050)
S1	Heat resistant super alloys (good machinability)	HRC < 25	(NiCr22Mo9Nb / 2.4856 / Inconel 625)
S2	Heat resistant super alloys (medium machinability)	HRC 25-35	(NiCr20Ti / 2.4630 / Nimonic 75)
S3	Heat resistant super alloys (low machinability)	HRC 35-45	(NiCr19Fe19Nb5Mo3 / 2.4668 / Inconel 718)
H1	Hardened general steel	HRC 50-56	(42CrMo4 / 1.7225)
H2	Hardened bearing steel	HRC 54-62	(100Cr6 / 1.3505)
H3	Hardened tool steel	HRC 60-65	(X100CrMoV5.1 / 1.2363)

Gr.	Grade		Vc m/min	ap (mm)	fz (mm/z)	NT-SM12-75°	NT-SM12-88°	NT-SP12-TAN	NT-RM12
K1	NAC series	DRY	200 ÷ 700	0.1 ÷ 0.5	0.08 ÷ 0.15	✓	✓		
	NSN series	DRY	600 ÷ 1000	1.0 ÷ 4.0	0.10 ÷ 0.25	✓	✓	✓	
	NBS series	DRY	800 ÷ 1500	1.0 ÷ 3.0	0.10 ÷ 0.30	✓	✓		
K2	NSN series	DRY	400 ÷ 700	1.0 ÷ 2.0	0.08 ÷ 0.20	✓	✓		
	NSA series	DRY	400 ÷ 700	1.0 ÷ 2.0	0.08 ÷ 0.20	✓	✓		
S1	NSA series	DRY	700 ÷ 1000	0.5 ÷ 2.0	0.10 ÷ 0.15				✓
S2	NSA series	DRY	500 ÷ 800	0.5 ÷ 2.0	0.08 ÷ 0.12				✓
S3	NSA series	DRY	400 ÷ 600	0.5 ÷ 2.0	0.05 ÷ 0.10				✓
H1	NAC series	DRY	80 ÷ 140	0.5 ÷ 1.0	0.05 ÷ 0.09				✓
	NWR series	DRY	120 ÷ 200	0.5 ÷ 1.0	0.07 ÷ 0.12				✓
	NBS series	DRY	200 ÷ 300	0.5 ÷ 1.0	0.07 ÷ 0.15				✓
H2	NAC series	DRY	60 ÷ 120	0.5 ÷ 1.0	0.04 ÷ 0.08				✓
	NWR series	DRY	100 ÷ 160	0.5 ÷ 1.0	0.06 ÷ 0.10				✓
	NBS series	DRY	150 ÷ 250	0.5 ÷ 1.0	0.06 ÷ 0.12				✓
H3	NAC series	DRY	40 ÷ 100	0.5 ÷ 1.0	0.04 ÷ 0.07				✓
	NWR series	DRY	60 ÷ 150	0.5 ÷ 1.0	0.05 ÷ 0.09				✓
	NBS series	DRY	100 ÷ 200	0.5 ÷ 1.0	0.05 ÷ 0.10				✓

GRADES APPLICATION CHART



SEET12 SERIES

ISO inserts for face milling.

ISO

P

M

K

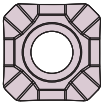
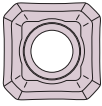

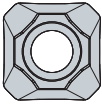
N



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SEET12 SERIES

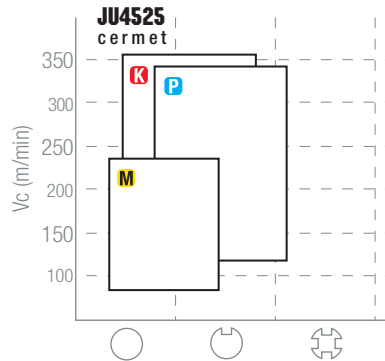
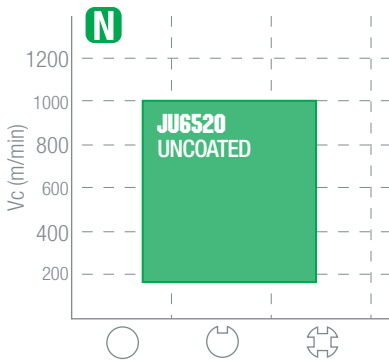
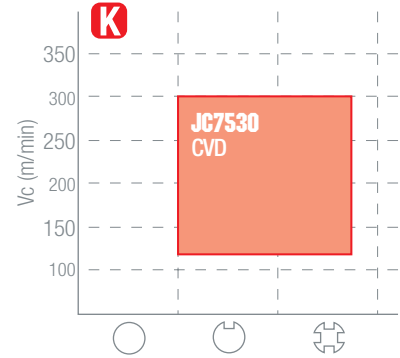
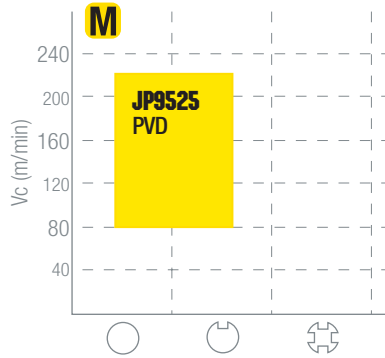
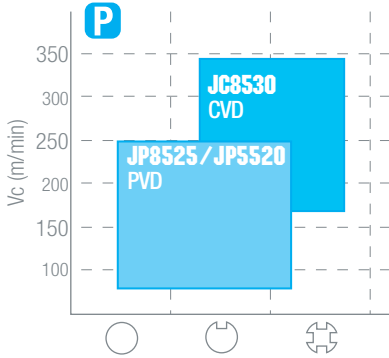
INSERTS

DESCRIPTION						HC				HW	HT				
		IC	T	b	Ød	JP5520	JC7530	JP8525	JC8530	JP9525	JU6520	JU4525			
SC		SEET 1204AFEN-SC	12.70	4.76	2.50	5.50	●					●			
GP		SEET 1204AFSN-GP	12.70	4.76	1.80	5.50			●	●	■				
(Flat)		SEEW 1204AFSN	12.70	4.76	1.80	5.50		●							
AL	 POLISHED	SEET 1204AFFN-AL	12.70	4.76	2.50	5.50					●				

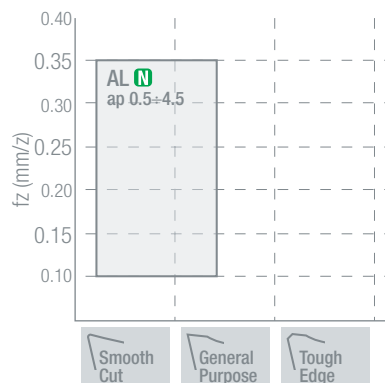
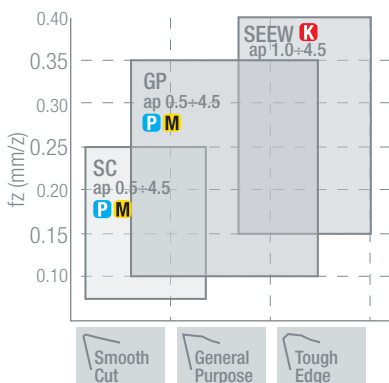
● stock standard; ■ stock exhaustion


HC: coated carbide
 HT: Cermet
 HW: uncoated carbide
 JC: CVD coating
 JP: PVD coating
 JU: uncoated

GRADES APPLICATION CHART



CHIPBREAKERS APPLICATION CHART



 JU4525 cermet → fz-20%
Please reduce the feed rate by 20%

SEET12 SERIES

CUTTING SPEED (Vc m/min)

Gr.	MATERIAL		
P1	Free cutting steel and structural steel	Rm < 500 N/mm ²	(9SMn28 / 1.0715 / AVP)
P2	Carbon steel and low alloy steel	Rm 500-700 N/mm ²	(C40 / 1.0511)
P3	Medium alloy steel and heat treated steel	Rm 600-800 N/mm ²	(42CrMo4 / 1.7225)
P4	High alloy steel	Rm 800-1000 N/mm ²	(100Cr6 / 1.3505)
P5	Tool steel	Rm 900-1200 N/mm ²	(X210Cr12 / 1.2080 / K100)
P6	High tensile strength steel	Rm 1200-1600 N/mm ²	(X2NiCrMo18.9.5 / 1.6358 / W720)
M1	Ferritic stainless steel	Rm 400-700 N/mm ²	(X40Cr13 / 1.4034 / AISI420)
M2	Austenitic stainless steel (good machinability)	Rm 500-750 N/mm ²	(X5CrNi18.10 / 1.4301 / AISI304)
M3	Austenitic stainless steel (medium machinability)	Rm 550-850 N/mm ²	(X2CrNiMo18.12 / 1.4435 / AISI316L)
M4	Martensitic stainless steel	Rm 650-950 N/mm ²	(X2CrNiMoN25.7.4 / 1.4410 / Super Duplex)
M5	PH stainless steel	Rm 800-1250 N/mm ²	(X5CrNiNb16.4 / 1.4542 / 17-4PH)
K1	Grey cast iron	HB 150-250	(GG-25 / 0.6025)
K2	Nodular cast iron	HB 150-350	(GGG-50 / 0.7050)
K3	Austenitic cast iron	HB 120-260	(GGL-NiCr20.2 / 0.6660)
K4	ADI cast iron	HB 250-500	(GJS-1000-5 / ADI 1000)
N1	Aluminium alloys < 12% Si		(AlMgSi0.5 / 3.3206)
N2	Aluminium alloys > 12% Si		(AlSi12 / 3.2582)
N3	Copper alloys		(E-Cu57 / 2.0060)
N4	Brass alloys and bronze alloys		(CuZn20Al2 / 2.0460)

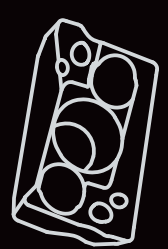
Gr.	JP5520	JP8525	JC8530	JP9525	JC7530	JUG520	JU4525
P1	200 ÷ 250	200 ÷ 250	240 ÷ 320				250 ÷ 350
P2	160 ÷ 220	160 ÷ 220	200 ÷ 280				220 ÷ 300
P3	140 ÷ 200	140 ÷ 200	180 ÷ 240				200 ÷ 280
P4	120 ÷ 160	120 ÷ 160	140 ÷ 200				160 ÷ 220
P5	100 ÷ 140	100 ÷ 140	120 ÷ 180				
P6	80 ÷ 120	80 ÷ 120	100 ÷ 160				
M1	100 ÷ 160			130 ÷ 220			140 ÷ 240
M2	80 ÷ 140			110 ÷ 180			120 ÷ 200
M3	60 ÷ 120			90 ÷ 160			100 ÷ 180
M4				80 ÷ 140			
M5				70 ÷ 120			
K1					160 ÷ 300		250 ÷ 380
K2					140 ÷ 240		200 ÷ 300
K3					120 ÷ 180		160 ÷ 220
K4					100 ÷ 150		
N1						400 ÷ 1000	
N2						300 ÷ 600	
N3						300 ÷ 500	
N4						200 ÷ 400	



APKT SERIES

ISO inserts for shouldering.

ISO **P** **M** **K** **N**

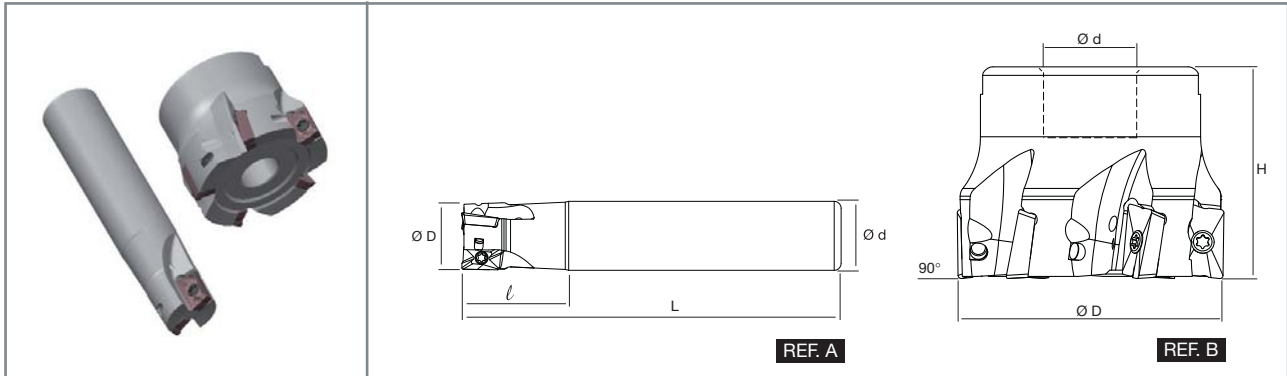


2 edges

nixkoTOOLS

APKT SERIES

HOLDERS



INSERT	DESCRIPTION	STOCK	DIMENSIONS							REF				TORQUE Nm				
			ØD	Z	Ød	L	l	H										
AP□□1003	NT-APK10H D016-S16-Z2	●	16	2	16	100	28	-	A	✓	NT-ST011	NT-FTB09	1.2					
	D020-S20-Z3	●	20	3	20	110	30	-	A	✓	NT-ST011	NT-FTB09	1.2					
	D025-S25-Z3	●	25	3	25	120	30	-	A	✓	NT-ST011	NT-FTB09	1.2					
	D032-S32-Z4	●	32	4	32	130	40	-	A	✓	NT-ST011	NT-FTB09	1.2					
	D040-F16-Z5	●	40	5	16	-	-	40	B	✓	NT-ST011	NT-FTB09	1.2					
	D050-F22-Z5	●	50	5	22	-	-	50	B	✓	NT-ST011	NT-FTB09	1.2					
	D050-F22-Z7	●	50	7	22	-	-	50	B	✓	NT-ST011	NT-FTB09	1.2					
AP□□1604	NT-APK16H D025-S25-Z2	●	25	2	25	120	40	-	A	✓	NT-ST019	NT-FTB15	3.5					
	D032-S32-Z3	●	32	3	32	130	45	-	A	✓	NT-ST019	NT-FTB15	3.5					
	D040-F16-Z4	●	40	4	16	-	-	40	B	✓	NT-ST019	NT-FTB15	3.5					
	D050-F22-Z4	●	50	4	22	-	-	50	B	✓	NT-ST019	NT-FTB15	3.5					
	D050-F22-Z5	●	50	5	22	-	-	50	B	✓	NT-ST019	NT-FTB15	3.5					
	D063-F22-Z5	●	63	5	22	-	-	50	B	✓	NT-ST019	NT-FTB15	3.5					
	D063-F22-Z6	●	63	6	22	-	-	50	B	✓	NT-ST019	NT-FTB15	3.5					
	D080-F27-Z6	●	80	6	27	-	-	50	B	✓	NT-ST019	NT-FTB15	3.5					

● stock standard

INSERTS

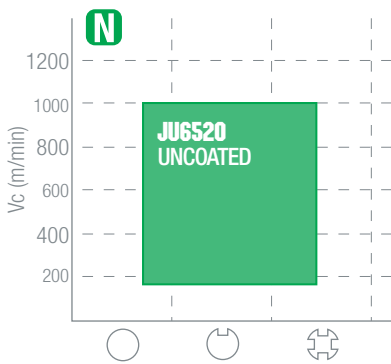
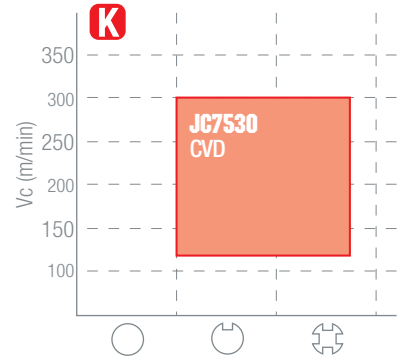
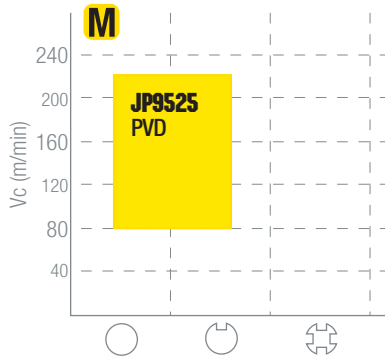
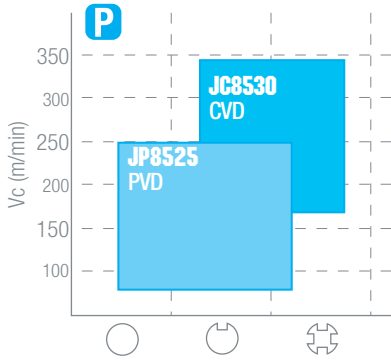
DESCRIPTION								HC					HW				
		IC	T	r	b	Ød	JP8525	JC8530	JP9525	JC7530	JU6520						
GP	APKT 1003PDSR-GP	6.70	3.18	0.4	0.90	2.80	●	●	●	●							
	1604PDSR-GP	9.525	4.76	0.8	1.30	4.40	●	●	●	●							
TE	APKT 1003PDSR-TE	6.70	3.18	0.4	0.90	2.80	●	●	■	●							
	1604PDSR-TE	9.525	4.76	0.8	1.30	4.40	●	●	■	●							
AL	POLISHED APKT 1003PDFR-AL	6.70	3.18	0.4	1.60	2.80					●						
	1604PDFR-AL	9.525	4.76	0.8	1.90	4.40					●						

● stock standard; ■ stock exhaustion

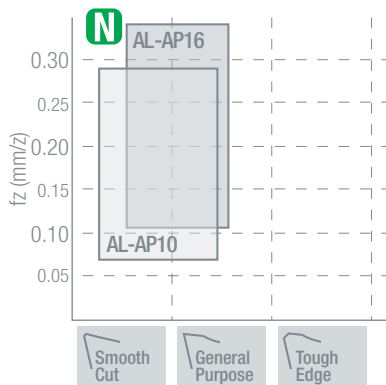
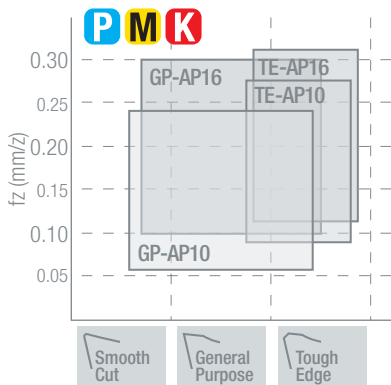
HC: coated carbide
HW: uncoated carbide

JC: CVD coating
JP: PVD coating
JU: uncoated

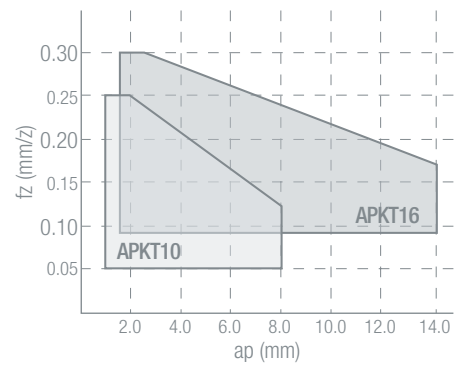
GRADES APPLICATION CHART



CHIPBREAKERS APPLICATION CHART



INSERT APPLICATION CHART



CUTTING SPEED (Vc m/min)

Gr.	MATERIAL		
P1	Free cutting steel and structural steel	Rm < 500 N/mm ²	(9SMn28 / 1.0715 / AVP)
P2	Carbon steel and low alloy steel	Rm 500-700 N/mm ²	(C40 / 1.0511)
P3	Medium alloy steel and heat treated steel	Rm 600-800 N/mm ²	(42CrMo4 / 1.7225)
P4	High alloy steel	Rm 800-1000 N/mm ²	(100Cr6 / 1.3505)
P5	Tool steel	Rm 900-1200 N/mm ²	(X210Cr12 / 1.2080 / K100)
P6	High tensile strength steel	Rm 1200-1600 N/mm ²	(X2NiCrMo18.9.5 / 1.6358 / W720)
M1	Ferritic stainless steel	Rm 400-700 N/mm ²	(X40Cr13 / 1.4034 / AISI420)
M2	Austenitic stainless steel (good machinability)	Rm 500-750 N/mm ²	(X5CrNi18.10 / 1.4301 / AISI304)
M3	Austenitic stainless steel (medium machinability)	Rm 550-850 N/mm ²	(X2CrNiMo18.12 / 1.4435 / AISI316L)
M4	Martensitic stainless steel	Rm 650-950 N/mm ²	(X2CrNiMoN25.7.4 / 1.4410 / Super Duplex)
M5	PH stainless steel	Rm 800-1250 N/mm ²	(X5CrNiNb16.4 / 1.4542 / 17-4PH)
K1	Grey cast iron	HB 150-250	(GG-25 / 0.6025)
K2	Nodular cast iron	HB 150-350	(GGG-50 / 0.7050)
K3	Austenitic cast iron	HB 120-260	(GGL-NiCr20.2 / 0.6660)
K4	ADI cast iron	HB 250-500	(GJS-1000-5 / ADI 1000)
N1	Aluminium alloys < 12% Si		(AlMgSi0.5 / 3.3206)
N2	Aluminium alloys > 12% Si		(AlSi12 / 3.2582)
N3	Copper alloys		(E-Cu57 / 2.0060)
N4	Brass alloys and bronze alloys		(CuZn20Al2 / 2.0460)

Gr.	JP8525	JC8530	JP9525	JC7530	JU6520
P1	200 ÷ 250	260 ÷ 330			
P2	170 ÷ 210	220 ÷ 280			
P3	140 ÷ 170	180 ÷ 220			
P4	110 ÷ 140	140 ÷ 180			
P5	70 ÷ 100	100 ÷ 120			
P6	60 ÷ 80	80 ÷ 100			
M1			130 ÷ 220		
M2			110 ÷ 180		
M3			90 ÷ 150		
M4			80 ÷ 140		
M5			70 ÷ 120		
K1				160 ÷ 280	
K2				140 ÷ 240	
K3				120 ÷ 160	
K4				80 ÷ 140	
N1					400 ÷ 1000
N2					300 ÷ 600
N3					300 ÷ 500
N4					200 ÷ 400

NT-ARB ADAPTER

Adapter for modular milling cutters.

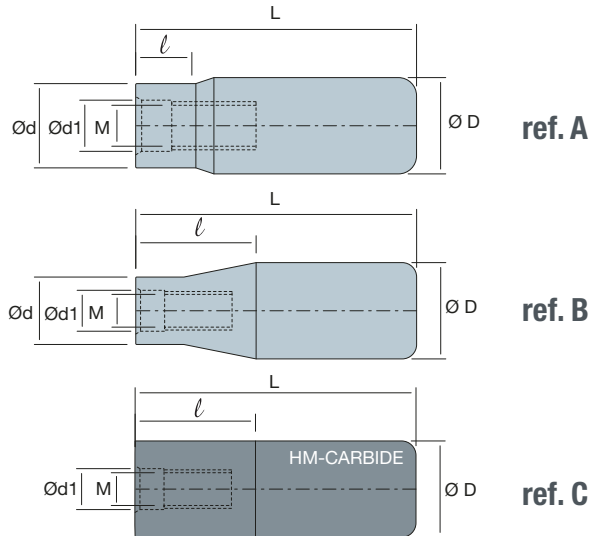


nikkoTOOLS

NT-ARB ADAPTER

NT-ARB

ARBOR
for modular cutters



DESCRIPTION	STOCK	DIMENSIONS							Ref.						
		ØD	M	Ød	Ød ₁	L	ℓ								
NT-ARB D12-M06-120	●	12	6	11	6.5	120	10	A							
D16-M06-150T	●	16	6	11	6.5	150	32	B							
D16-M06-200T	●	16	6	11	6.5	200	32	B							
NT-ARB D16-M08-150	●	16	8	14	8.5	150	10	A							
D16-M08-200	●	16	8	14	8.5	200	10	A							
D20-M08-200T	●	20	8	14	8.5	200	50	B							
D20-M08-250T	●	20	8	14	8.5	250	50	B							
NT-ARB D20-M10-150	●	20	10	18	10.5	150	12	A							
D20-M10-250	●	20	10	18	10.5	250	12	A							
D25-M10-200T	●	25	10	18	10.5	200	60	B							
D25-M10-250T	●	25	10	18	10.5	250	60	B							
NT-ARB D25-M12-200	●	25	12	23	12.5	200	15	A							
D25-M12-300	●	25	12	23	12.5	300	15	A							
D32-M12-250T	●	32	12	23	12.5	250	70	B							
D32-M12-350T	●	32	12	23	12.5	350	70	B							
NT-ARB D32-M16-200	●	32	16	29	17	200	18	A							
D32-M16-350	●	32	16	29	17	350	18	A							
NT-ARB-HM D12-M06-100	●	12	6	-	6.5	100	-	C							
D12-M06-150	●	12	6	-	6.5	150	-	C							
D12-M06-200	●	12	6	-	6.5	200	-	C							
NT-ARB-HM D16-M08-100	●	16	8	-	8.5	100	-	C							
D16-M08-150	●	16	8	-	8.5	150	-	C							
D16-M08-200	●	16	8	-	8.5	200	-	C							
NT-ARB-HM D20-M10-100	●	20	10	-	10.5	100	-	C							
D20-M10-150	●	20	10	-	10.5	150	-	C							
D20-M10-200	●	20	10	-	10.5	200	-	C							
D20-M10-300	●	20	10	-	10.5	300	-	C							
NT-ARB-HM D25-M12-100	●	25	12	-	12.5	100	-	C							
D25-M12-150	●	25	12	-	12.5	150	-	C							
D25-M12-200	●	25	12	-	12.5	200	-	C							
D25-M12-300	●	25	12	-	12.5	300	-	C							

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