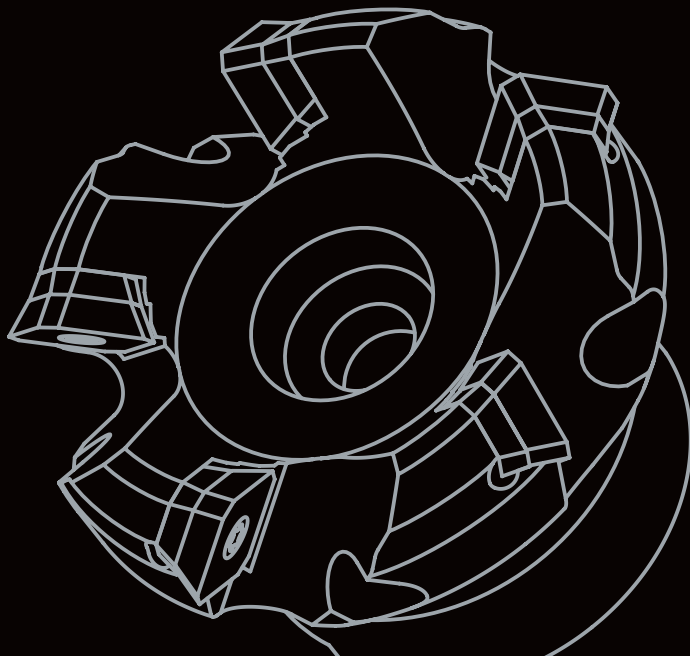


CATALOGUE 2014



PIK TOOLS





STOCK CLASSIFICATION

- , ● Standard stock items, usually available in warehouse.
- , ○ Non standard stock items, please ask for availability and minimum order quantity if applicable.
- Stock exhaustion.
- ★ Future introduction.

○, ● Not included in the previous catalogue.

STANDARD PACKAGING

- holders, PCBN, diamond 1 piece
- carbide, ceramic 10 pieces

Due to continuous evolution of cutting materials and introduction of new products, stock situation reported in the present catalogue may vary without notice.



CLASSIFICAZIONE STOCK

- , ● Materiale stock standard, normalmente disponibile a magazzino.
- , ○ Materiale NON stock standard, richiedere disponibilità ed eventuale quantitativo minimo.
- Esaurimento stock.
- ★ Articolo di futura introduzione.

○, ● Non incluso nel catalogo precedente.

CONFEZIONAMENTO STANDARD

- holders, PCBN, diamond 1 pezzo
- carbide, ceramic 10 pezzi

Grazie alla continua introduzione di nuovi prodotti ed all'evoluzione dei materiali da taglio, la situazione stock menzionata nel presente catalogo può variare senza preavviso.



KLASSIFIZIERUNG DER VERFÜGBARKEIT

- , ● Stock standard, normalerweise Verfügbar - Lagerware.
- , ○ NICHT Stock standard, KEINE Lagerware. Verfügbarkeit und Mindestmenge muss angefragt werden.
- Vorraterschöpfung.
- ★ Artikel, der in Zukunft eingeführt wird.

○, ● Nicht im vorherigen Katalog vorhanden.

STANDARD VERPACKUNGSEINHEIT

- holders, PCBN, diamond 1 Stk
- carbide, ceramic 10 Stk

Wegen der ständigen Entwicklung neuer Produkte und Schneidstoffe, kann die angegebene Verfügbarkeit der Produkte in jedem Moment ohne Voranmeldung geändert werden.



CLASSIFICATION STOCK

- , ● Matériel stock standard, normalement disponible en stock.
- , ○ Matériel stock non standard, demander disponibilité au magasin et éventuellement quantitatif minimum.
- Épuisement du stock.
- ★ Article prochainement introduit.

○, ● Pas présent dans l'ancien catalogue.

CONDITIONEMENT STANDARD

- holders, PCBN, diamond 1 pièce
- carbide, ceramic 10 pièce

Grace à l'introduction continue de nouveaux produits et à l'évolution des outils de coupe, la situation des stocks mentionnés dans ce catalogue peut être modifiée sans préavis.



CLASIFICACIÓN DE STOCK

- , ● Artículos stock standard, usualmente disponibles en almacén.
- , ○ Artículos NON stock standard, ponerse en contacto con nosotros para verificar disponibilidad y eventual cantidad mínima.
- Agotamiento de stock.
- ★ Artículo disponible en futuro.

○, ● Artículo non disponible anteriormente.

CAJA STANDARD

- holders, PCBN, diamond 1 unidad
- carbide, ceramic 10 unidad

En consecuencia de la continua introducción de nuevos productos y de la evolución de los materiales de corte, la clasificación de stock indicada en el presente catálogo puede cambiar sin previo aviso.



КЛАССИФИКАЦИЯ НАЛИЧИЯ НА СКЛАДЕ

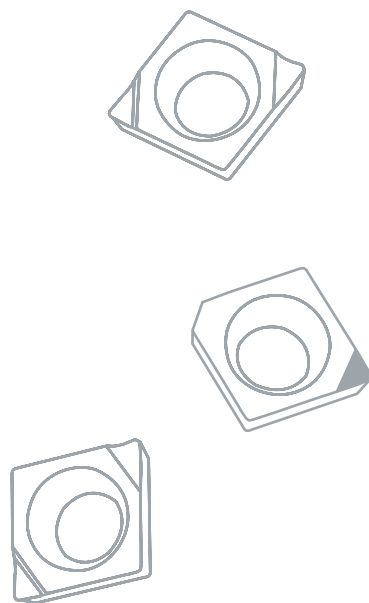
- , ● Стандартный склад, обычно в наличии на складе.
- , ○ Нестандартный склад, наличие на складе не гарантируется.
- складские остатки.
- ★ Продукция на фазе внедрения

○, ● Отсутствует в предыдущем каталоге.

СТАНДАРТНАЯ УПАКОВКА

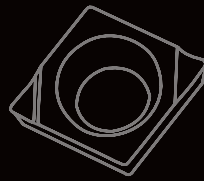
- holders, PCBN, diamond 1 ШТУКА
- carbide, ceramic 10 ШТУК

Благодаря постоянному внедрению новой продукции и разработке новых материалов, продукция упомянутая в данном каталоге, а также наличие на её складе, может изменяться без предварительного уведомления.



MICROBORING /

carbide /203
PCBN /209
diamond /217
holders /223



MICROBORING / carbide



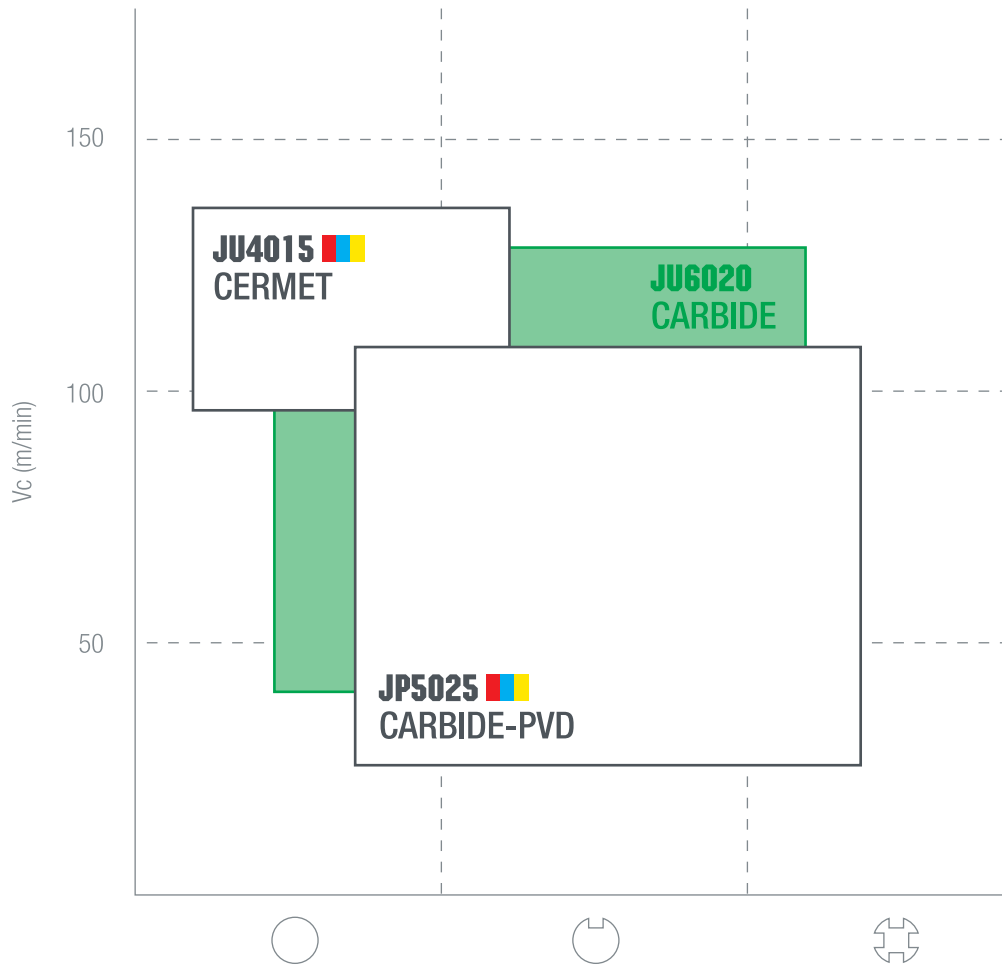
GRADES

- TURNING
- MICROMEGA
- MICROBORING
- THREADING
- GROOVING
- MILLING
- DRILLING
- SPARE PARTS
- INDEX

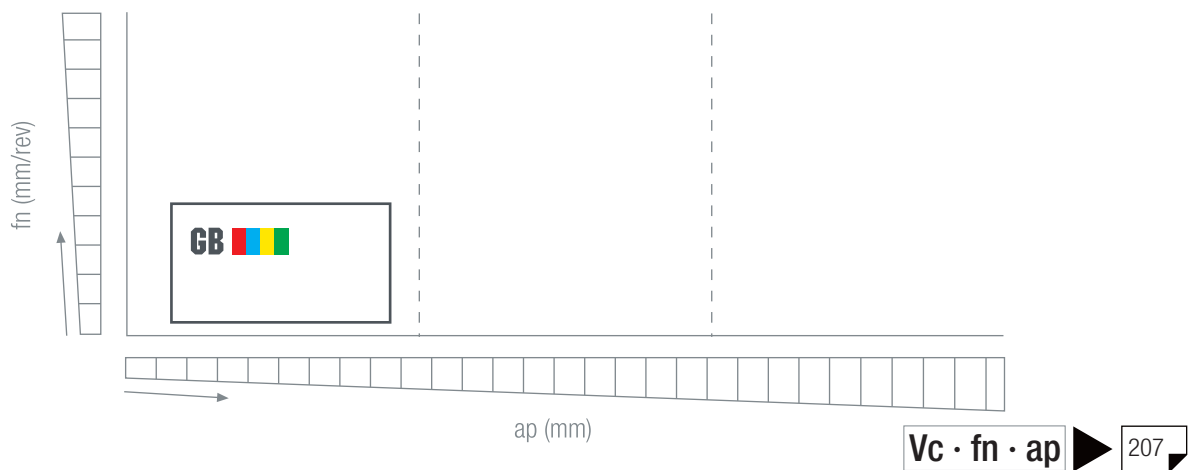
ISO DIN 513	K					P					M					N				
	K01	K10	K20	K30	K40	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	N01	N10	N20	N30	N40
CARBIDE CVD																				
CARBIDE PVD																				
CARBIDE UNCOATED																				JU6020
CERMET UNCOATED																				

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

GRADES



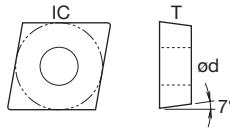
CHIPBREAKERS



- TURNING
- MICROMEGA
- MICROBORING**
- THREADING
- GROOVING
- MILLING
- DRILLING
- SPARE PARTS
- INDEX

POSITIVE 7°
with hole

CC



MICRO CC

IC 3,50

T 1,40

Ød 1,90



TURNING

MICROMEGA

MICROBORING

THREADING

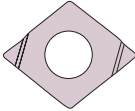
GROOVING

MILLING

DRILLING

SPARE PARTS

INDEX

DESCRIPTION	IC	CARBIDE-CVD					CARBIDE-PVD		CARBIDE	CERMET						
		JC7010	JC8015	JC8025	JC9025	JP9030	JP5015	JP5025	JUG020	JU4015						
 <p>MICRO CC.R01-GBL 0.1</p> <p>CC.R02-GBL 0.2</p> <p>CC.R04-GBL 0.4</p>	GB							●								
								●	●	○						
								●	●	○						
<p>⚠</p> <p>OLD name NEW name</p> <p>NC5130 JP5025</p>																

●, ○ = NEW ITEM

Vc · fn · ap

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CUTTING PARAMETERS

K	KG	GREY CAST IRON
		GHISA GRIGIA
		GRAUGUSS
		FONTE GRISE
		FUNDICIÓN GRIS
		ЧУГУН
K	KN	NODULAR CAST IRON
		GHISA SFEROIDALE
		SPHÄROGUSS
		FONTE NODULAIRE
		FUNDICIÓN NODULAR
		ЧУГУН С ШАРОВИДНЫМ ГРАФИТОМ
P	PL	LOW CARBON AND FREE CUTTING STEEL
		ACCIAI A BASSO TENORE DI CARBONIO ED AUTOMATICI
		KOHLENSTOFFARME STÄHLE
		ACIERS BAS CARBONE ET POUR DÉCOLLETAGE
		ACEROS DE BAJO CARBONO
		НИЗКОУГЛЕРОДИСТАЯ И АВТОМАТНАЯ СТАЛЬ
P	PM	MEDIUM CARBON STEEL
		ACCIAI A MEDIO TENORE DI CARBONIO
		MITTELGEKOHLTE FLUSSTÄHLE
		ACIERS MOYEN CARBONE
		ACEROS DE MEDIO CARBONO
		СРЕДНЕУГЛЕРОДИСТАЯ СТАЛЬ
P	PH	HIGH CARBON STEEL
		ACCIAI AD ELEVATO TENORE DI CARBONIO
		KOHLENSTOFFREICHE STÄHLE
		ACIERS HAUT CARBONE
		ACEROS DE ALTO CARBONO
		ВЫСОКОУГЛЕРОДИСТАЯ СТАЛЬ
P	PA	ALLOY STEEL
		ACCIAI LEGATI
		LEGIERTE STÄHLE
		ACIERS ALLIÉS
		ACEROS ALEADOS
		СРЕДНЕЛЕГИРОВАННАЯ СТАЛЬ

M	MM	MARTENSITIC AND FERRITIC STAINLESS STEEL
		ACCIAI INOSSIDABILI MARTENSITICI E FERRITICI
		MARTENSITISCHE UND FERRITISCHE ROSTFREIE STÄHLE
		ACIERS INOXYDABLES MARTENSITIQUES ET FERRITIQUES
		ACEROS INOXIDABLES AUSTENITICOS Y FERRITICOS
		МАРТЕНСИТНЫЕ И ФЕРРИТНЫЕ НЕРЖАВЕЮЩИЕ СТАЛИ
M	MA	AUSTENITIC STAINLESS STEEL
		ACCIAI INOSSIDABILI AUSTENITICI
		AUSTENITISCHE ROSTFREIE STÄHLE
		ACIERS INOXYDABLES AUSTENITIQUES
		ACEROS INOXIDABLES AUSTENITICOS
		АУСТЕНИТНЫЕ НЕРЖАВЕЮЩИЕ СТАЛИ
N	NA	ALUMINIUM ALLOYS
		LEGHE DI ALLUMINIO
		ALUMINIUMLEGIERUNGEN
		ALLIAGES D'ALUMINIUM
		ALEACIONES DE ALUMINIO
		СПЛАВЫ АЛЮМИНИЯ
N	NH	ALUMINIUM ALLOYS AGED AND HARDENED
		LEGHE DI ALLUMINIO TRATTATE ED INVECCHiate
		GEALTERTE UND BEHANDELTE ALUMINIUMLEGIERUNGEN
		ALLIAGES D'ALUMINIUM TRAITÉS ET VIEILLIES
		ALEACIONES DE ALUMINIO TRATADAS Y ENVEJACIDAS
		СПЛАВЫ АЛЮМИНИЯ ОБРАБОТАННЫЕ И СОСТАРЕННЫЕ
N	NB	BRASS
		OTTONE
		MESSING
		LAITON
		LATÓN
		ЛАТУНЬ
N	NC	BRONZE AND ELECTROLYTIC COPPER
		BRONZO E RAME Elettrolitico
		ELEKTROLYTISCHES KUPFER UND BRONZE
		BRONZE ET CUIVRE ÉLECTROLYTIQUE
		BRONCE Y COBRE ELECTROLÍTICO
		БРОНЗА И ЭЛЕКТРОЛИТИЧЕСКАЯ МЕДЬ

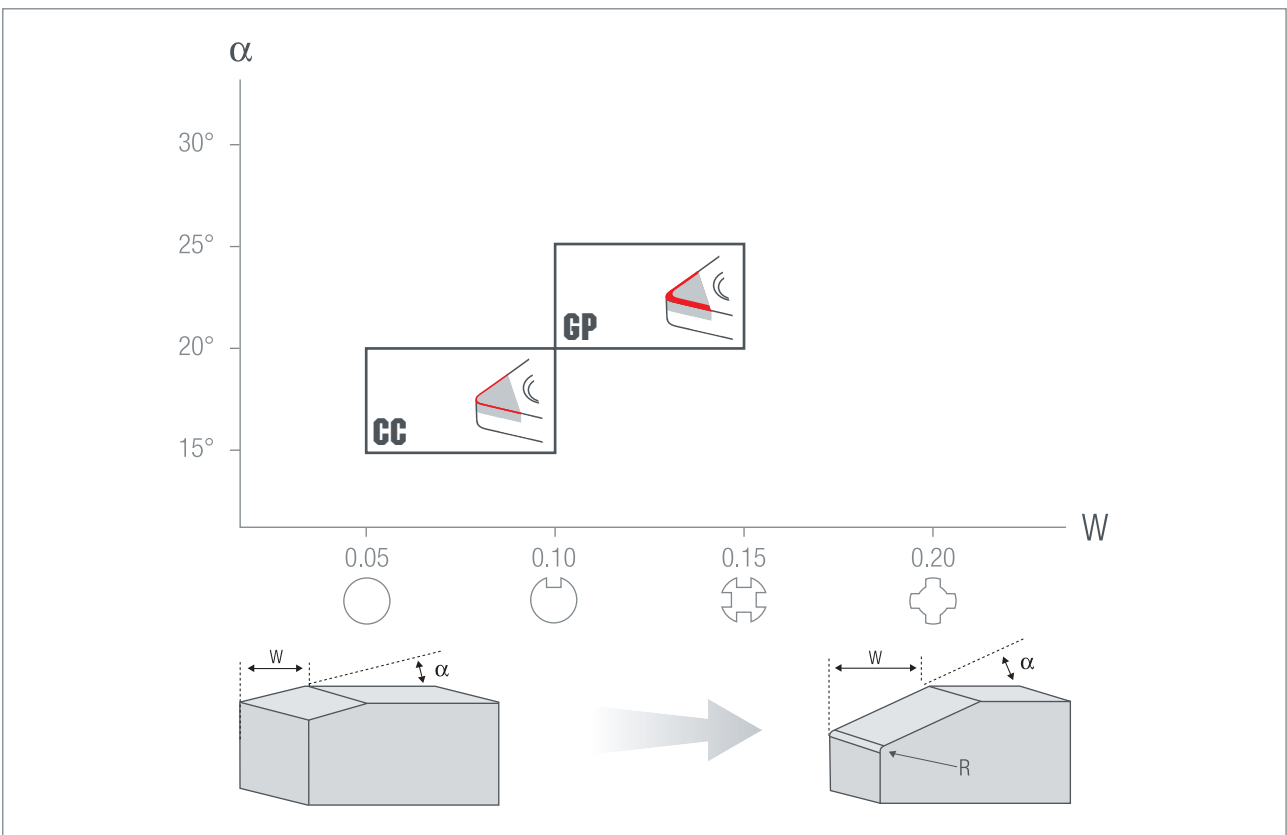
MATERIAL	HM PVD	CERMET	CARBIDE	GB		
	JP5025	JU4015	JU6020			
	Vc (m/min)			ap (mm)	fn (mm/rev)	
K	KG	80~150	160~300	100~200	0.05~0.30	0.03~0.13
	KN	60~120	120~240	80~150	0.05~0.30	0.03~0.13
P	PL	80~150	160~300		0.05~0.30	0.03~0.13
	PM	60~120	120~240		0.05~0.30	0.03~0.13
	PH	50~100	100~200		0.05~0.30	0.03~0.13
	PA	40~100	80~200		0.05~0.30	0.03~0.13
M	MM	50~100	100~200		0.05~0.30	0.02~0.12
	MA	40~100	80~200		0.05~0.30	0.02~0.12
N	NA			200~300	0.05~0.50	0.03~0.15
	NH			150~250	0.05~0.50	0.03~0.15
	NB			100~200	0.05~0.50	0.03~0.15
	NC			100~200	0.05~0.50	0.03~0.15

TURNING
MICROBORA
MICROBORING
THREADING
GROOVING
MILLING
DRILLING
SPARE PARTS
INDEX

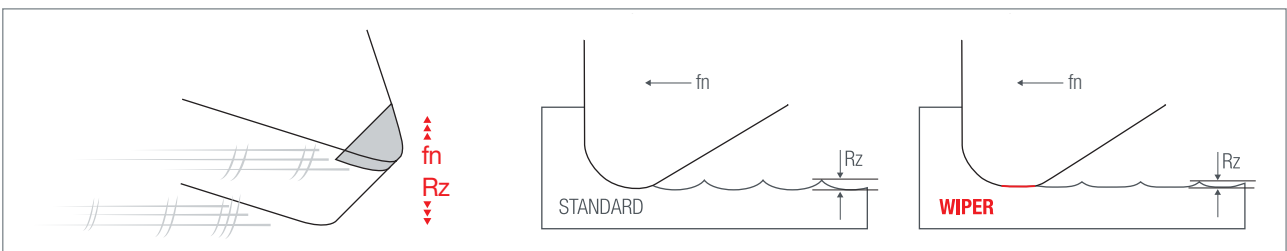
INSERT STYLE



EDGE PREPARATION



WIPER



TURNING

MICROMEGA

MICROBORING

THREADING

GROOVING

MILLING

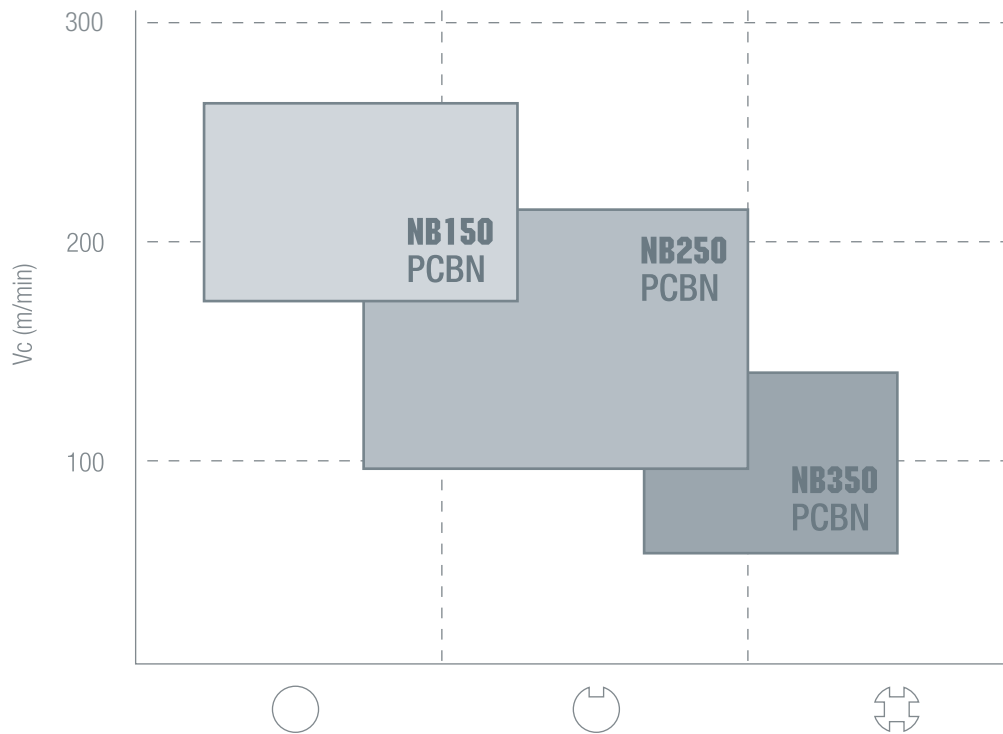
DRILLING

SPARE PARTS

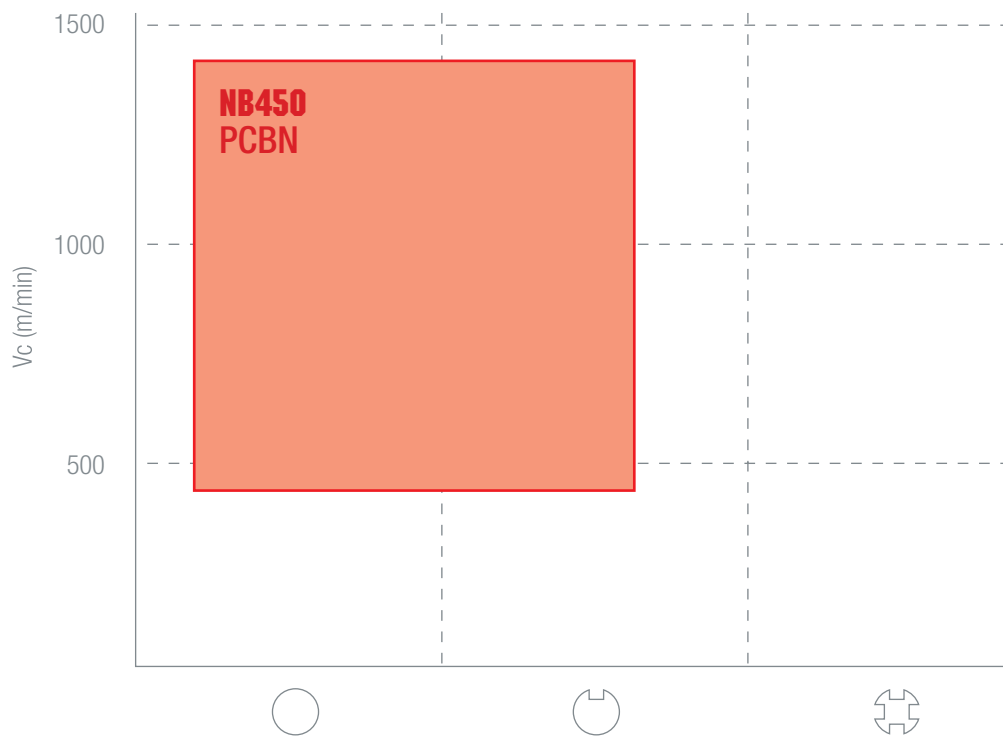
INDEX

- TURNING
- MICROMEGA
- MICROBORING**
- THREADING
- GROOVING
- MILLING
- DRILLING
- SPARE PARTS
- INDEX

RANGE ISO H PCBN-Carbide reinforced



RANGE ISO K PCBN-Carbide reinforced



POSITIVE 7° with hole

CC

NEW

MICRO	CC
IC	3,50
T	1,40
Ød	1,90

HOLDERS 225

DESCRIPTION		IC	l	PCBN-Carbide reinforced									
				NB150	NB250	NB350	NB450U						
CC		MICRO	CC.R01-1E-CC	1.5									
			CC.R02-1E-CC	1.5	★								
			CC.R04-1E-CC	1.5	★								
GP		MICRO	CC.R01-1E-GP	1.5									
			CC.R02-1E-GP	1.5	★	●	●	●*					
			CC.R04-1E-GP	1.5	★	●	●	●*					
WH WIPER		MICRO	CC.R02-1E-WH	1.5	★								
			CC.R04-1E-WH	1.5	★								
		*NB450U = uncoated											

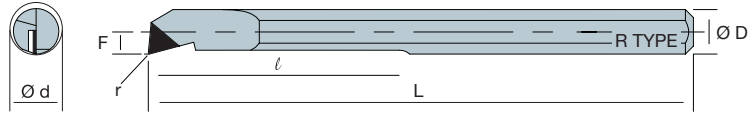
●, ○ = NEW ITEM

Vc · fn · ap ▶

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- TURNING
- MICROMEGA
- MICROBORING
- THREADING
- GROOVING
- MILLING
- DRILLING
- SPARE PARTS
- INDEX

MINI-B



POSITIVE EDGE



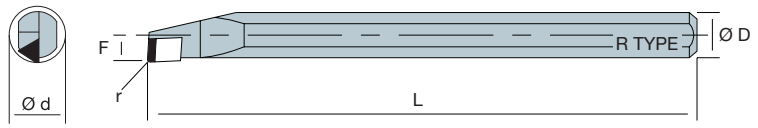
DESCRIPTION	DIMENSIONS							PCBN											
	ØD	Ød	r	L	F	l	R	L											
	NT-MINI-B	D3.0-L50-S2.8 ^{R/L}	2.8	3	0.05	50	1.4	20	■*										
		D3.0-L50-S3.0 ^{R/L}	3	3	0.10	50	1.5	20											
		D4.0-L60-S3.8 ^{R/L}	3.8	4	0.05	60	1.9	30	■*										
		D4.0-L60-S4.0 ^{R/L}	4	4	0.10	60	2.0	30											
		D5.0-L70-S4.8 ^{R/L}	4.8	5	0.05	70	2.4	40	■*										
		D5.0-L70-S5.0 ^{R/L}	5	5	0.10	70	2.5	40											
		D6.0-L70-S5.8 ^{R/L}	5.8	6	0.05	70	2.9	45	■*										
		D6.0-L70-S6.0 ^{R/L}	6	6	0.10	70	3.0	45											
		D7.0-L80-S6.8 ^{R/L}	6.8	7	0.05	80	3.4	50	■*										
	D7.0-L80-S7.0 ^{R/L}	7	7	0.10	80	3.5	50												
*NB150U = uncoated																			

Vc · fn · ap

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MINI-BH

STRONG EDGE

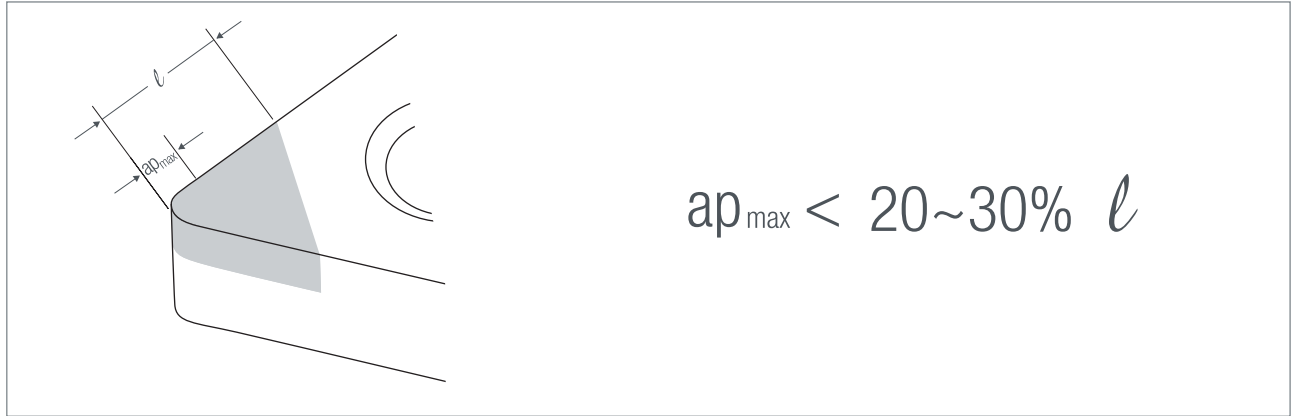


DESCRIPTION	DIMENSIONS							PCBN										
	ØD	Ød	r	L	F	ℓ	R	L										
<p>NT-MINI-BH D3.5-L60-S3.0 R/L</p> <p>D4.5-L60-S4.0 R/L</p> <p>D5.5-L80-S5.0 R/L</p> <p>D6.5-L80-S6.0 R/L</p> <p>D7.5-L100-S7.0 R/L</p> <p>D8.5-L100-S8.0 R/L</p>	3	3.5	0.20	60	1.85	-	●*											
	4	4.5	0.20	60	2.35	-	●*											
	5	5.5	0.20	80	2.85	-	●*											
	6	6.5	0.20	80	3.35	-	●*											
	7	7.5	0.20	100	3.85	-	○*											
	8	8.5	0.20	100	4.35	-	○*											
*NB250U = uncoated																		

- TURNING
- MICROMEGA
- MICROBORING
- THREADING
- GROOVING
- MILLING
- DRILLING
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CUTTING PARAMETERS

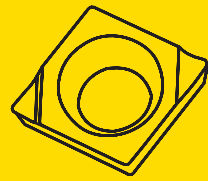


H	HH	HARDENED STEEL
		ACCIAIO TEMPRATO
H	HC	GEHÄRTETER STAHL
		ACIER TREMPÉ
		ACERO TEMPLADO
		ЗАКАЛЁННАЯ СТАЛЬ
		CASEHARDENED STEEL
		ACCIAIO CEMENTATO
		EINGESETZTER STAHL
		ACIER CEMENTÉ
ACERO CEMENTADO		
ЦЕМЕНТИРОВАННАЯ СТАЛЬ		

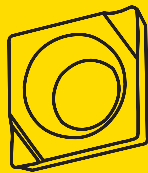
H	HB	BEARING STEEL
		ACCIAIO PER CUSCINETTI
H	HM	STAHL FÜR LAGER
		ACIER POUR ROULEMENTS
		ACERO PARA RODAMIENTOS
		СТАЛЬ ДЛЯ ПОДШИПНИКОВ
		HARD METAL (Co≥17%)
		METALLO DURO (Co≥17%)
		VHM (Co≥17%)
		CARBURE (Co≥17%)
METAL DURO (Co≥17%)		
ТВЁРДЫЙ СПЛАВ (Co≥17%)		

MATERIAL	ap (mm)	fn (mm/rev)	CUTTING CONDITIONS	PCBN-Carbide reinforced				
				NB150	NB250	NB350	NB450U	
H	HH	0.05~0.20	0.03~0.10	○ ◊ ◊	120~250	★ 100~200	100~180	
						80~180	★ 80~160	80~180
	HC	0.05~0.20	0.03~0.10	○ ◊ ◊		★ 100~180	100~160	
						80~160	★ 80~140	80~160
	HB	0.05~0.20	0.03~0.10	○ ◊ ◊	120~200	★ 100~180	100~160	
						80~150	★ 80~120	80~150
	HM	0.05~0.15	0.03~0.08	○ ◊				★ 10~40

★ = 1st choice / 1^a scelta / 1.Wahl / 1^{er} choix / 1^{ra} elección / 1-й выбор

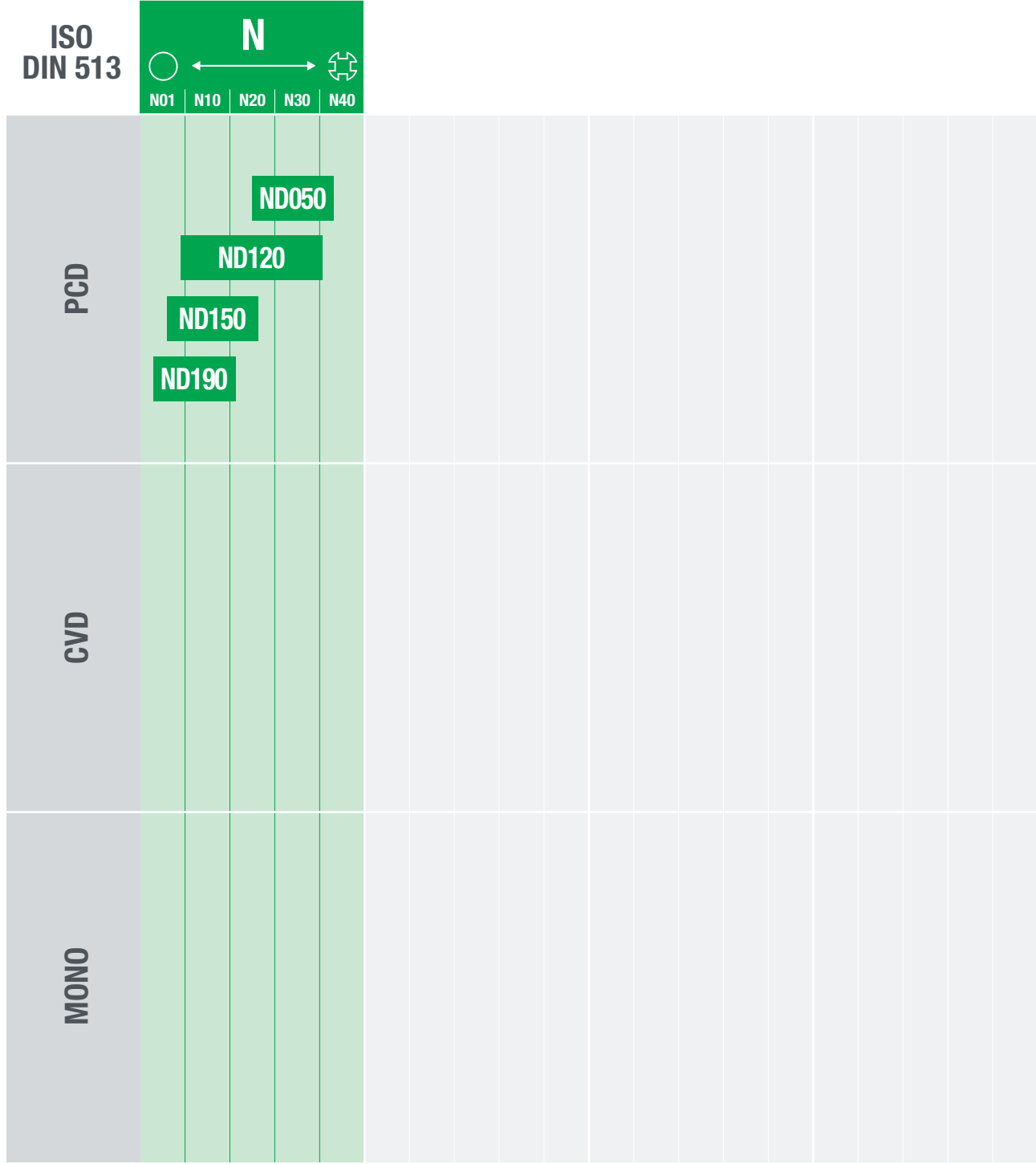


MICROBORING / diamond

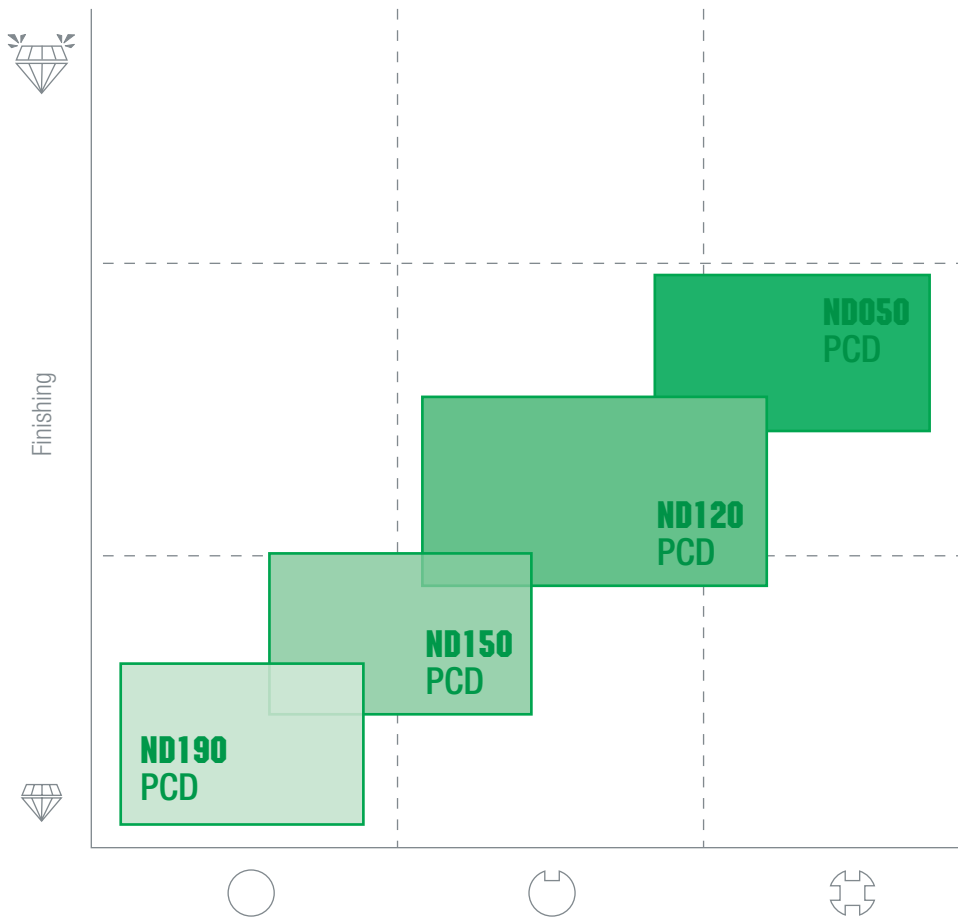


GRADES

- TURNING
- MICROMEGA
- MICROBORING**
- THREADING
- GROOVING
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- DRILLING
- SPARE PARTS
- INDEX



RANGE ISO **N** DIAMOND



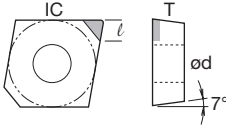
- TURNING
- MICROMEGA
- MICROBORING**
- THREADING
- GROOVING
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- TURNING
- MICROMEGA
- MICROBORING**
- THREADING
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- DRILLING
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POSITIVE 7° with hole NEW

CC □ □



MICRO	CC □ □
IC	3,50
T	1,40
Ød	1,90
	225

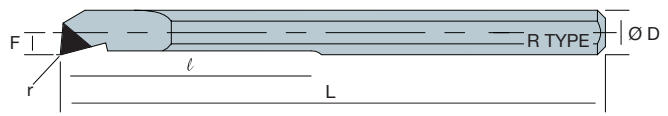
STANDARD	DESCRIPTION	IC	T	PCD										
				ND050	ND120	ND150	ND190							
	MICRO CC.R01	1.5												
	CC.R02	1.5	●	●		●								
	CC.R04	1.5	●	●			●							

●, ○ = NEW ITEM

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MINI-B

POSITIVE EDGE



DESCRIPTION	DIMENSIONS							PCD										
	ØD	Ød	r	L	F	l	R	L										
	NT-MINI-B D3.0-L50-S2.8 ^{R/L}	2.8	3	0.05	50	1.4	20	■										
	D3.0-L50-S3.0 ^{R/L}	3	3	0.10	50	1.5	20											
	D4.0-L60-S3.8 ^{R/L}	3.8	4	0.05	60	1.9	30	■										
	D4.0-L60-S4.0 ^{R/L}	4	4	0.10	60	2.0	30											
	D5.0-L70-S4.8 ^{R/L}	4.8	5	0.05	70	2.4	40	■										
	D5.0-L70-S5.0 ^{R/L}	5	5	0.10	70	2.5	40											
	D6.0-L70-S5.8 ^{R/L}	5.8	6	0.05	70	2.9	45	■										
	D6.0-L70-S6.0 ^{R/L}	6	6	0.10	70	3.0	45											
	D7.0-L80-S6.8 ^{R/L}	6.8	7	0.05	80	3.4	50	■										
D7.0-L80-S7.0 ^{R/L}	7	7	0.10	80	3.5	50												

Vc · fn · ap 222

- TURNING
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CUTTING PARAMETERS

TURNING

MICROMEGA

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N	NA	<ul style="list-style-type: none"> ALUMINUM ALLOYS LEGHE DI ALLUMINIO ALUMINIUMLEGIERUNGEN ALLIAGES D'ALUMINIUM ALEACIONES DE ALUMINIO СПЛАВЫ АЛЮМИНИЯ
	NS	<ul style="list-style-type: none"> ALUMINUM ALLOYS (Si >15%) LEGHE DI ALLUMINIO (Si >15%) ALUMINIUMLEGIERUNGEN (Si >15%) ALLIAGES D'ALUMINIUM (Si >15%) ALEACIONES DE ALUMINIO (Si >15%) СПЛАВЫ АЛЮМИНИЯ (Si >15%)
	NH	<ul style="list-style-type: none"> ALUMINUM ALLOYS AGED AND HARDENED LEGHE DI ALLUMINIO TRATTATE ED INVECCHiate GEALTERTE UND BEHANDELTE ALUMINIUMLEGIERUNGEN ALLIAGES D'ALUMINIUM TRAITÉES ET VIEILLIES ALEACIONES DE ALUMINIO TRATADAS Y ENVEJACIDAS СПЛАВЫ АЛЮМИНИЯ ОБРАБОТАННЫЕ И СОСТАРЕННЫЕ
	NB	<ul style="list-style-type: none"> BRASS OTTONE MESSING LAITON LATÓN ЛАТУНЬ

N	NC	<ul style="list-style-type: none"> BRONZE AND ELECTOLYTIC COPPER BRONZO E RAME ELETTRolitICO ELEKTROLYTISCHES KUPFER UND BRONZE BRONZE ET CUIVRE ÉLECTROLYTIQUE BRONZE Y COBRE ELECTROLÍTICO БРОНЗА И ЭЛЕКТРОЛИТИЧЕСКАЯ МЕДЬ
	NG	<ul style="list-style-type: none"> GRAPHITE GRAFITE GRAPHIT GRAPHITE GRAFITO ГРАФИТ
	HM	<ul style="list-style-type: none"> HARD METAL (Co≤16%) METALLO DURO (Co≤16%) VHM (Co≤16%) CARBURE (Co≤16%) METAL DURO (Co≤16%) ТВЕРДЫЙ СПЛАВ (Co≤16%)
	ST	<ul style="list-style-type: none"> TITANIUM ALLOYS LEGHE DI TITANIO TITAN LEGIERUNGEN ALLIAGES DE TITANE ALEACIONES DE TITANIO СПЛАВЫ ТИТАНА

MATERIAL	ap (mm)	fn (mm/rev)	CUTTING CONDITIONS	PCD				
				ND050	ND120	ND150	ND190	
N	NA	0.03~0.20	0.05~0.10	○ □	○	★	600~2500	
	NS	0.03~0.20	0.05~0.10	○ □	○		500~1800	★
	NH	0.03~0.20	0.05~0.10	○ □	○		400~1000	★
	NB	0.03~0.20	0.05~0.10	○ □	○	★	400~1200	400~1200
	NC	0.03~0.20	0.05~0.10	○ □	○	★	300~800	300~800
	NG	0.03~0.20	0.05~0.10	○ □	○	★	300~800	300~800
H	HM	0.03~0.20	0.05~0.10	○	○		10~40	★
S	ST	0.03~0.20	0.05~0.10	○ □	○	★	100~200	100~200

★ = 1st choice / 1^a scelta / 1.Wahl / 1^{er} choix / 1^o elección / 1-й выбор

A MICRO CC

NEW

POSITIVE 7° with hole **CC** □ □

CC □ □	DESCRIPTION	STOCK	DIMENSIONS					SLEEVE	INTERNAL				
			ØD	Ød	L	F	l						
MICRO CC	NT-A12H-MICRO-CC RH	●	12	5	100	2.5	8	NT-ST002	NT-FT06				
	NT-A16H-MICRO-CC RH	●	16	5	100	2.5	12	NT-ST002	NT-FT06				

C MICRO CC

POSITIVE 7° with hole **CC** □ □

CC □ □	DESCRIPTION	STOCK	DIMENSIONS					SLEEVE	INTERNAL				
			ØD	Ød	L	F	α						
MICRO CC	NT-C04G-MICRO-CC RH	●	4	5	90	2.5	15°	NT-ST002	NT-FT06				
	NT-C05H-MICRO-CC RH	●	5	6	100	3	13°	NT-ST002	NT-FT06				

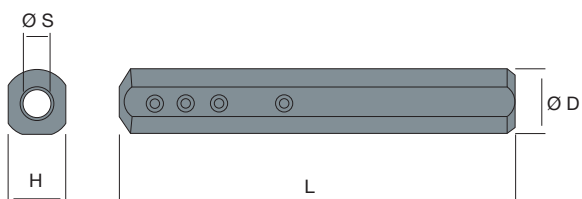
carbide ▶ 206
PCBN ▶ 213
diamond ▶ 220

●, ○ = NEW ITEM

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NT-SLV

SLEEVE
for boring bars



	DESCRIPTION	STOCK	DIMENSIONS										
			ØS	ØD	L	H							
MICRO CC	NT-SLV S3.0	●	3	16	100	14	NT-ST095	NT-WR020					
	NT-SLV S4.0	●	4	16	100	14	NT-ST095	NT-WR020					
	NT-SLV S5.0	●	5	16	100	14	NT-ST095	NT-WR020					
	NT-SLV S6.0	●	6	16	100	14	NT-ST095	NT-WR020					
	NT-SLV S7.0			7	16	100	14	NT-ST095	NT-WR020				
	NT-SLV S8.0			8	16	100	14	NT-ST095	NT-WR020				

carbide

206

PCBN

213

diamond

220