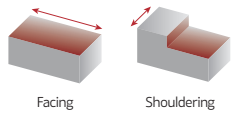


# High performance cutting with PCD | PCBN inserts



**HARDMILL**  
72090

HARDMILL  
NEW  
PCD | PCBN



XNHW 1205  
PZFR-020120



XNHW 120508  
PZTR-000080



XNHW 120508  
PZTR-015045



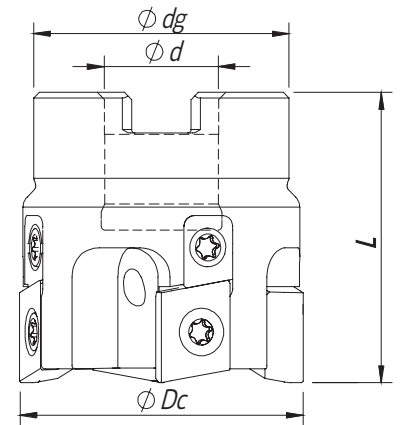
SINCE 1916

# HARDMILL 72090



## Arbor Mounting

$K_r=90^\circ$  |  $\gamma_p=0^\circ$



Order code Código	Reference Referência Referencia		Dimensions   Dimensões   Dimensiones (mm)				Kg	Specifications		Insert Pastilha Inserto	Stock
			ØDc	Ød	Ødg	L		Arbor Type	N max (mm)		
181129700	040A72090-04-016040	4	40	16	36	40	0,32	A	32 000	XNHW 1205...	
181129800	050A72090-04-022040	4	50	22	46	40	0,38	A	32 000	XNHW 1205...	
181129900	050A72090-05-022040	5	50	22	46	40	0,37	A	32 000	XNHW 1205...	
181130000	063A72090-04-022040	4	63	22	49	40	0,65	A	29 000	XNHW 1205...	
181130100	063A72090-07-022040	7	63	22	49	40	0,62	A	29 000	XNHW 1205...	
181130200	080A72090-05-027050	5	80	27	60	50	1,25	A	26 000	XNHW 1205...	
181130300	080A72090-09-027050	9	80	27	60	50	1,17	A	26 000	XNHW 1205...	
181130400	100A72090-06-032050	6	100	32	70	50	1,93	A	24 000	XNHW 1205...	
181130500	100A72090-12-032050	12	100	32	70	50	1,80	A	24 000	XNHW 1205...	
181130600	125A72090-08-040063	8	125	40	72	63	2,88	A	22 000	XNHW 1205...	
181130700	125A72090-14-040063	14	125	40	72	63	2,60	A	22 000	XNHW 1205...	
181135500	160A72090-10-040063	10	160	40	72	63	3,30	A	18 000	XNHW 1205...	
181135600	160A72090-16-040063	16	160	40	118	63	5,45	A	18 000	XNHW 1205...	

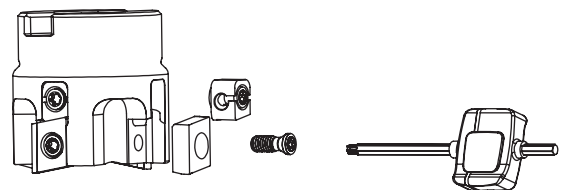
Stock item | Produto de stock | Itens de stock

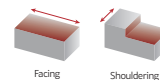
Available under request (see page A-8) | Disponível sobre consulta (consulte a página A-8) | Disponible bajo consulta (mire pagina A-8)

## SPARE PARTS | Complementos | Repuestos

Cutter ØDc	Order separately				
	Insert Screw	Key (Torx)	Key (Torx - Nm)	Torque Value	Wedge
A72090 - 40-160	 P0401100	 XT15	 DT1530	 3,00	 SETDEV AS 04 00

Note: The toolholder is supplied with the XT/PT key. To order the DT key please check the page A-241.  
Check the procedures for the clamping screws on the page A-241.





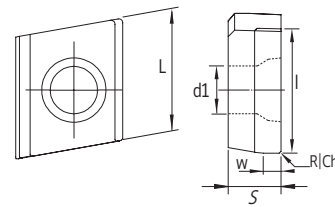
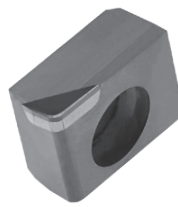
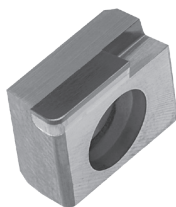
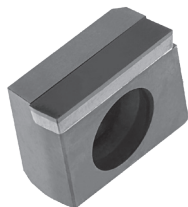
# XNHW 1205... | Inserts | Pastilhas | Plaquetas

XNHW 1205 PZFR-020120

XNHW 120508 PZTR-000080

XNHW 120508 PZTR-015045

XNHW



(1) Geometry code	(2) Grade code ISO Reference	N		Dimensions Dimensões Dimensiones (mm)					
		PCD		L	S	l	d1	r	W
		I3 PDP403	D6 PDP410						
1112564	XNHW 120504 PZFR-015045	○	○	12,25	5,40	4,50	4,80	0,40	1,50
1112565	XNHW 120504 PZFR-000080	○	○	12,25	5,40	8,00	4,80	0,40	-
1112566	XNHW 120508 PZFR-015045	⊗	○	12,25	5,40	4,50	4,80	0,80	1,50
1112551	XNHW 120508 PZTR-015045	⊗	○	12,25	5,40	4,50	4,80	0,80	1,50
1112552	XNHW 120508 PZTR-000080	⊗	○	12,25	5,40	8,00	4,80	0,80	-
1112553	XNHW 1205 PZFR-020120	⊗	○	12,25	5,40	12,00	4,80	-	2,00
1112567	XNHW 1205 PZFR-030045	○	○	12,25	5,40	4,50	4,80	-	3,00
1112568	XNHW 1205 PZTR-030045	○	○	12,25	5,40	4,50	4,80	-	3,00

⊗ First choice | Primeira opção | 1ª opción

⊗ Stock item | Produto de stock | Itens de stock

○ Available under request (see page A-9) | Disponível sobre consulta (consulte a página A-9) | Disponible bajo consulta (mire página A-9)

Insert order code = (1) Geometry Code + (2) Grade Code

## RECOMMENDED CUTTING CONDITIONS | Condições de corte recomendadas | Condiciones de corte recomendables

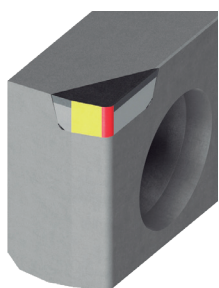
ISO	Material		HB (Brinell)	Vc (m/min)	Feed fz (mm/t)
	Work piece material	Type of treatment / alloy		PDP403	XNHW 12...
N	Aluminium wrought alloys		80	300 - 4000	0,05 - 0,40
			90	300 - 1500	
	Aluminium cast alloys	< 12% Si	130	300 - 5000	
		< 12% Si	90	300 - 3000	
		> 12% Si	100	300 - 1000	
	Non-metallic materials	brass, red bronze	100	100 - 700	
		bronze	-	100 - 1500	
		lead-free copper and electrolytic copper	-	300 - 3000	
		thermosetting plastics	-	80 - 300	
	Non-metallic materials	fibre-reinforced plastics	200-320	80 - 300	
hard rubber			80 - 300		

# HARDMILL 72090

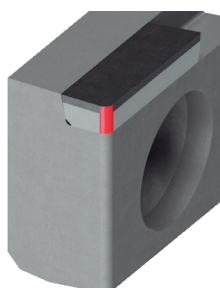
## INSERTS CODIFICATION SYSTEM | Sistema de codificação de pastilhas | Sistema de codificación de insertos

ISO CODE	Insert size	Insert thickness	Insert radius	Cutting edge position angle	Cutting edge relief angle	Cutting edge conditions	Cut direction	Wiper edge length	Máx. Ap	
XNHW	12	05	04	P	Z	F	R	-	015	030

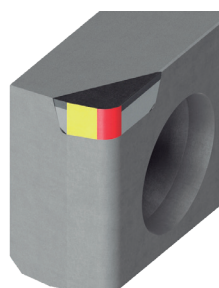
## PCD RANGE | Gama de produtos PCD | Rango de productos PCD



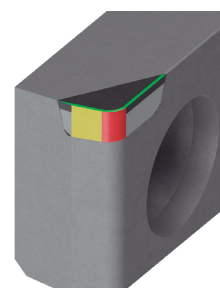
XNHW 120504 PZFR-0150045



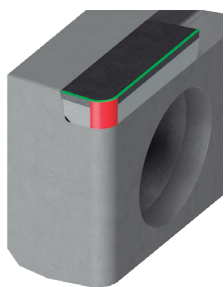
XNHW 120504 PZFR-000080



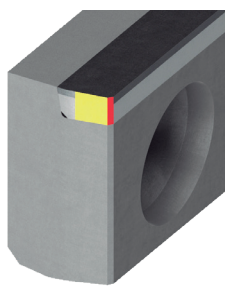
XNHW 120508 PZFR-015045



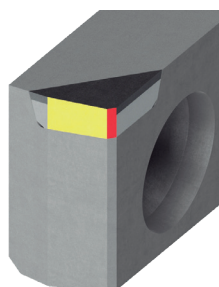
XNHW 120508 PZTR-015045



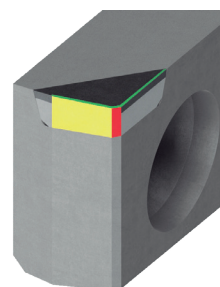
XNHW 120508 PZTR-000080



XNHW 1205 PZFR-020120




XNHW 1205 PZFR-030045



XNHW 1205 PZTR-030045

 Cutting edge Type (radius, chamfer)

 Wiper cutting edge

 Edge Preparation (F, T)

(21)

FYNMKT\_27\_ED000\_REV05