

49590

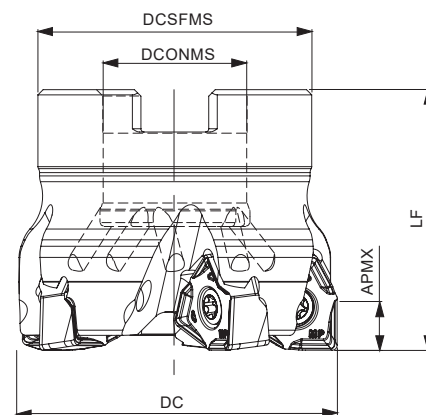
HEXAPLUS

Double-sided shoulder milling for higher productivity

MILLING

Facing | Shouldering





Arbor Mounting
KAPR=90° | GAMP=-6°

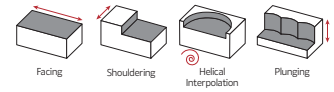
Order code Código	Reference Referência Referencia	CICT	Dimensions Dimensões Dimensiones (mm)				WT	Specifications		Insert Pastilha Inserto	Stock
			DC	DCONMS	DCSFMS	LF		Arbor Type	APMX (mm)		
181174900	040A49590-03-06-016040	3	40	16	32	40	0,150	A	7,5	WNXT 0806...	⊗
181175000	040A49590-04-06-016040	4	40	16	32	40	0,130	A	7,5	WNXT 0806...	○
181173400	050A49590-04-06-022040	4	50	22	42	40	0,390	A	7,5	WNXT 0806...	⊗
181165600	050A49590-05-06-022040	5	50	22	42	40	0,380	A	7,5	WNXT 0806...	⊗
181173500	063A49590-05-06-022040	5	63	22	52	40	0,500	A	7,5	WNXT 0806...	⊗
181173600	063A49590-06-06-022040	6	63	22	52	40	0,490	A	7,5	WNXT 0806...	⊗
181173700	080A49590-07-06-027050	7	80	27	60	50	1,180	B	7,5	WNXT 0806...	⊗
181173800	080A49590-09-06-027050	9	80	27	60	50	1,160	B	7,5	WNXT 0806...	○
181173900	100A49590-08-06-032050	8	100	32	80	50	1,620	B	7,5	WNXT 0806...	⊗
181174000	100A49590-11-06-032050	11	100	32	80	50	1,550	B	7,5	WNXT 0806...	○
181174100	125A49590-11-06-040063	11	125	40	90	63	2,820	B	7,5	WNXT 0806...	⊗
181174200	125A49590-14-06-040063	14	125	40	90	63	2,760	B	7,5	WNXT 0806...	○
181204200	160A49590-12-06-040063	12	160	40	90	63	3,800	B	7,5	WNXT 0806...	⊗

⊗ Stock item | Produto de stock | Itens de stock

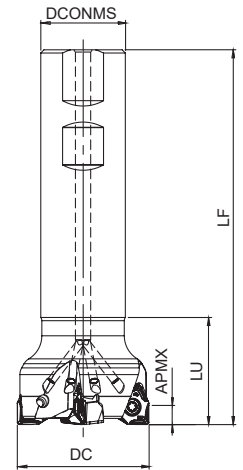
○ Available under request | Disponível sobre consulta | Disponible bajo consulta

HEXAPLUS 49590

WNXT 08



Weldon Shank
KAPR=90° | GAMP=-6°



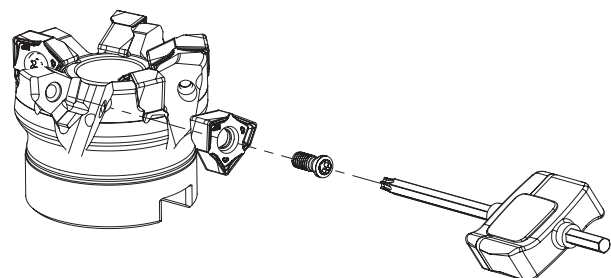
Order code Código	Reference Referência Referencia	CICT	Dimensions Dimensões Dimensiones (mm)				WT	Specifications	Insert Pastilha Inserto	Stock
			DC	DCONMS	LF	LU		APMX (mm)		
181174300	032W49590-02-06-032125	2	32	32	125	40	0,650	7,5	WNXT 0806...	☉
181174500	040W49590-03-06-032130	3	40	32	130	40	0,700	7,5	WNXT 0806...	☉
181174600	040W49590-04-06-032130	4	40	32	130	40	0,650	7,5	WNXT 0806...	○
181174700	050W49590-04-06-032140	4	50	32	140	45	0,860	7,5	WNXT 0806...	○
181174800	050W49590-05-06-032140	5	50	32	140	45	0,810	7,5	WNXT 0806...	○

☉ Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta | Disponible bajo consulta

SPARE PARTS Acessórios | Repuestos

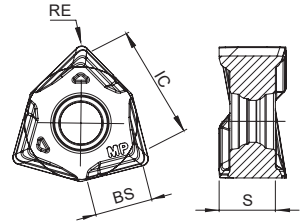
Cutter DC	Insert Screw	Key (Torx)	Order separately		Order separately		
			Key (Torx - Nm)	Torque Value	Screw	DIN 6368 Wrench	Retaining Screw
W49590 - 32 - 50	P0401200	XT15	DT1530	3,0	-	-	-
A49590 - 40	P0401200	XT15	DT1530	3,0	-	-	290087600
A49590 - 50 - 63	P0401200	XT15	DT1530	3,0	-	-	-
A49590 - 80	P0401200	XT15	DT1530	3,0	J0123510	SD6368-12	-
A49590 - 100	P0401200	PT15	DT1530	3,0	J0164110	SD6368-16	-
A49590 - 125 - 160	P0401200	PT15	DT1530	3,0	J0204610	SD6368-20	-



WNXT 0806... Inserts | Pastilhas | Plaquetas



WNXT



WNXT

Geometry code	ISO Reference	P		K		Dimensions Dimensões Dimensiones (mm)			
		PVD		PVD		IC	S	RE	BS
		T1	P4	T1	P4				
1113000	WNXT 080608 PNSR-MP	PHP920	PHP930	PHP920	PHP930	12,70	6,30	0,80	4,10

First choice | Primeira opção | 1ª opción

Stock item | Produto de stock | Itens de stock

Available under request | Disponível sobre consulta
Disponível bajo consulta

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

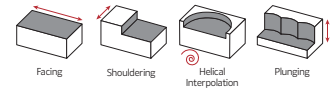
GRADES SELECTION GUIDE Guia para selecção de graus | Tabla para selección de calidades

ISO	PSM	Material	HB (Brinell)	Grades	
				← Wear Resistance	Toughness →
				PHP920	PHP930
P	1	Unalloyed Steel	125-220		
	2	Low-Alloyed Steel	220-280		
	3	High-Alloyed Steel	280-380		
K	7	Malleable Cast Iron	130-230		
	8	Grey Cast Iron	180-245		
	9	Nodular Cast iron	160-250		

Good Conditions

Average Conditions

Difficult Conditions

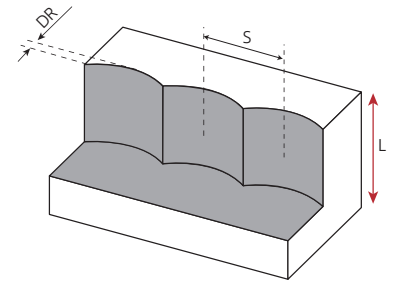


RECOMMENDED CUTTING CONDITIONS Condições de corte recomendadas | Condiciones de corte recomendables

ISO	PSM	Material	HB (Brinell)	Vc (m/min)		Feed fz (mm/t)		
				← Wear Resistance			Toughness →	
				PHP920	PHP930		WNXT 0806	
P	1	Unalloyed Steel	125-220	180-250	160-230	0,08 - 0,25		
	2	Low-Alloyed Steel	220-280	160-230	140-210	0,08 - 0,25		
	3	High-Alloyed Steel	280-380	140-220	120-200	0,08 - 0,20		
K	7	Malleable Cast Iron	130-230	130-230	150-250	0,08 - 0,25		
	8	Grey Cast Iron	180-245	180-245	140-230	0,08 - 0,25		
	9	Nodular Cast iron	160-250	120-210	100-200	0,08 - 0,20		

PLUNGING Mergulho | Plunge

L ≤ 3DC	L > 3DC	S max.
fz (mm/t)		
0,10-0,30	0,08-0,25	$S_{max} = \sqrt{DC \cdot Dr - Dr^2}$



S max and DR corresponding cutting diameter DC (mm)								
DR (mm)	DC (mm)							
	32	40	50	63	80	100	125	160
1	5,6	6,2	7,0	7,9	8,9	9,9	11,1	12,6
2	7,7	8,7	9,8	11,0	12,5	14,0	15,7	17,8
3	9,3	10,5	11,9	13,4	15,2	17,1	19,1	21,7
4	10,6	12,0	13,6	15,4	17,4	19,6	22,0	25,0

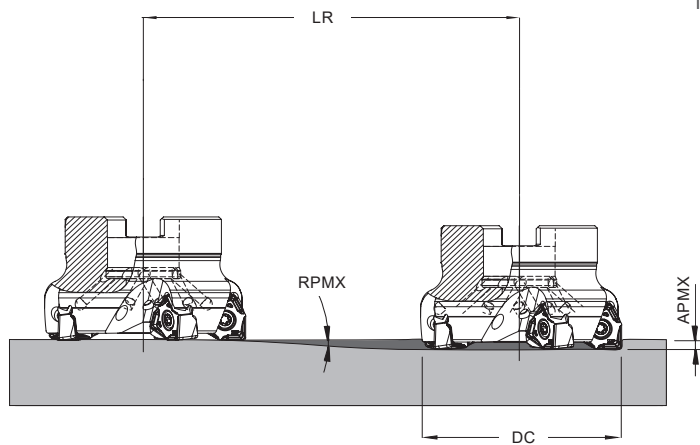
PROGRAMMING DATA Dados para programação | Datos para la programación

Insert	Programming Data		
	Insert radius (mm)	Wiper edge (mm)	APMX (mm)
WNXT 080308 PNSR-MM	0,8	4,1	7,5

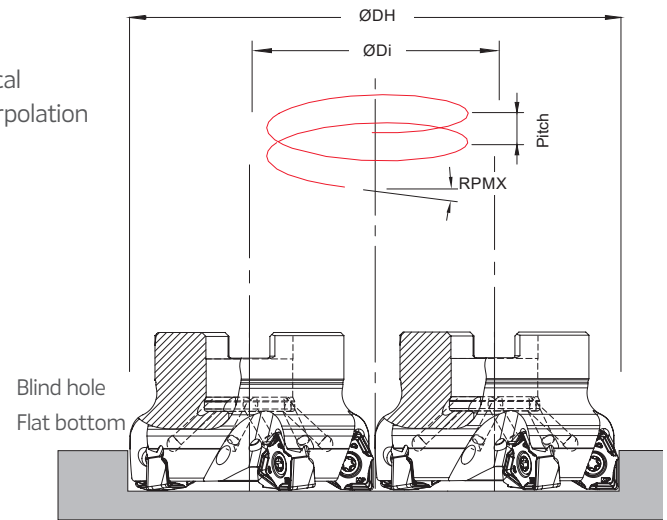
RAMPING AND HELICAL INTERPOLATION

Descida em rampa e interpolação helicoidal | Bajada en rampa e interpolación circular

Ramping



Helical Interpolation

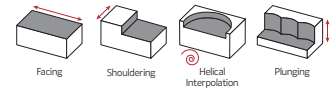


DC	Ramping			Helical Interpolation		
	RPMX	APMX	Min LR	ØDHmin	ØDHmax	Max Pitch/Rev.
32	0,45	7,5	954,9	54,2	-	0,54
40	0,30	7,5	1432,4	70,2	-	0,49
50	0,20	7,5	2148,6	90,2	-	0,44
63	0,14	7,5	3069,4	116,2	-	0,40
80	0,10	7,5	4297,2	150,2	-	0,38
100	0,07	7,5	6138,8	190,2	-	0,34
125	0,05	7,5	8594,4	240,2	-	0,31
160	0,04	7,5	10743,0	310,2	-	0,32
				-	318,4	0,34

Note: During helical interpolation do not exceed APMX.

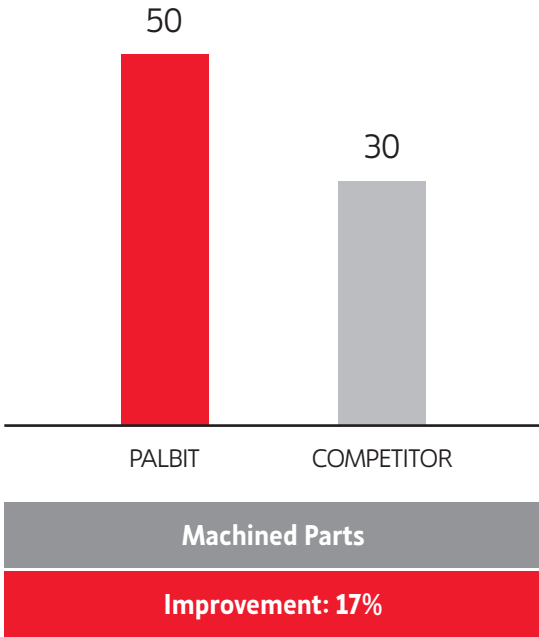
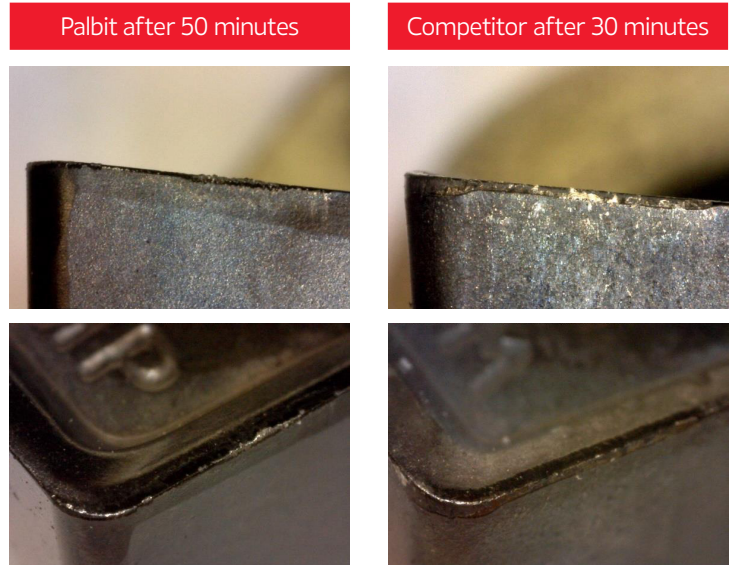
(*) Down cutting is recommended, tool pass rotation should be counter-clockwise.

(*) In case of ramping and helical interpolation, apply 70% or less feed (fz) from recommended cutting conditions table.

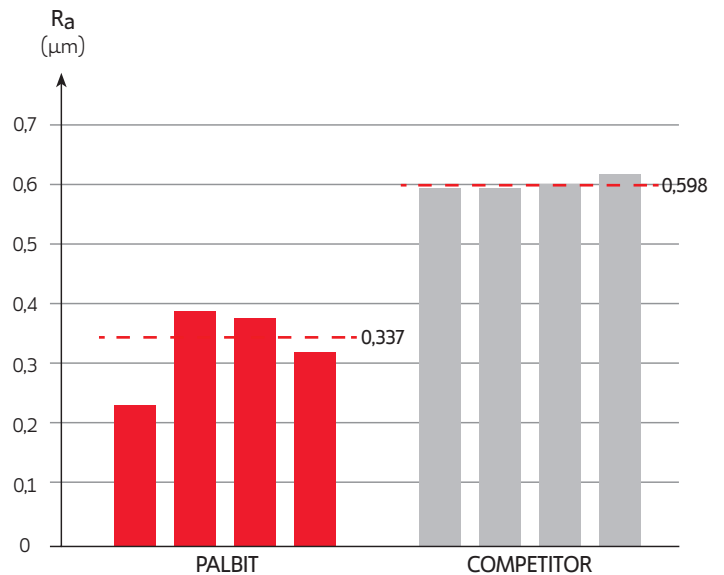
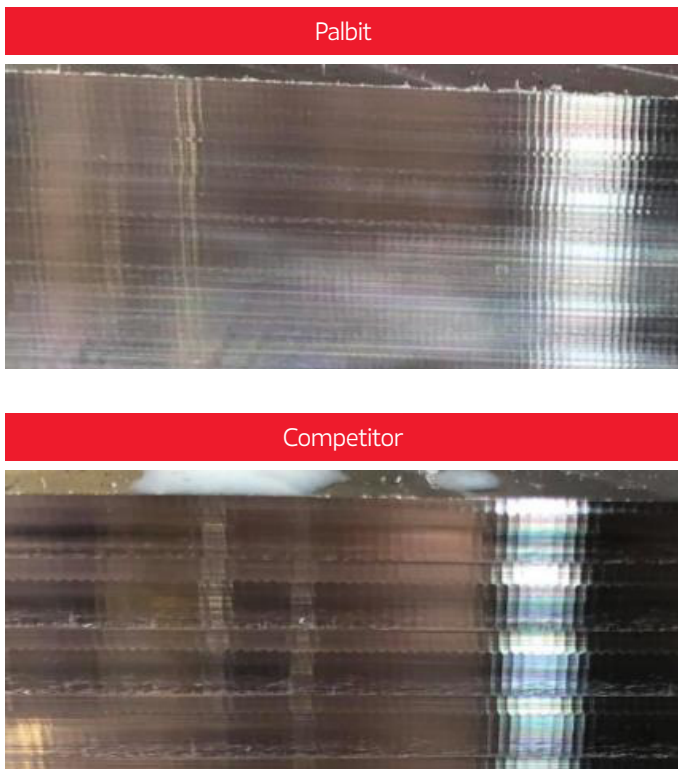


TEST REPORT Relatório de Teste | Informe de Prueba

Operation	Shoulder milling
Toolholder	050A49590-05-06-022040
Insert	WNXT 080608 PNSR-MP
Grade	PHP920



Workpiece Material: 40CrMnNiMo7 (1.2738) - (34 - 36 HRC)	
Cutting speed: V_c	200 m/min
Feed per tooth: f_z	0,15 mm/t
Depth of cut: a_p	4,0 mm
Stepover : a_e	10 mm (20%)
Operation	Shoulder milling
Coolant	Air



49590

HEXAPLUS

Double-sided shoulder milling for higher productivity



Check the QrCode for more information



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