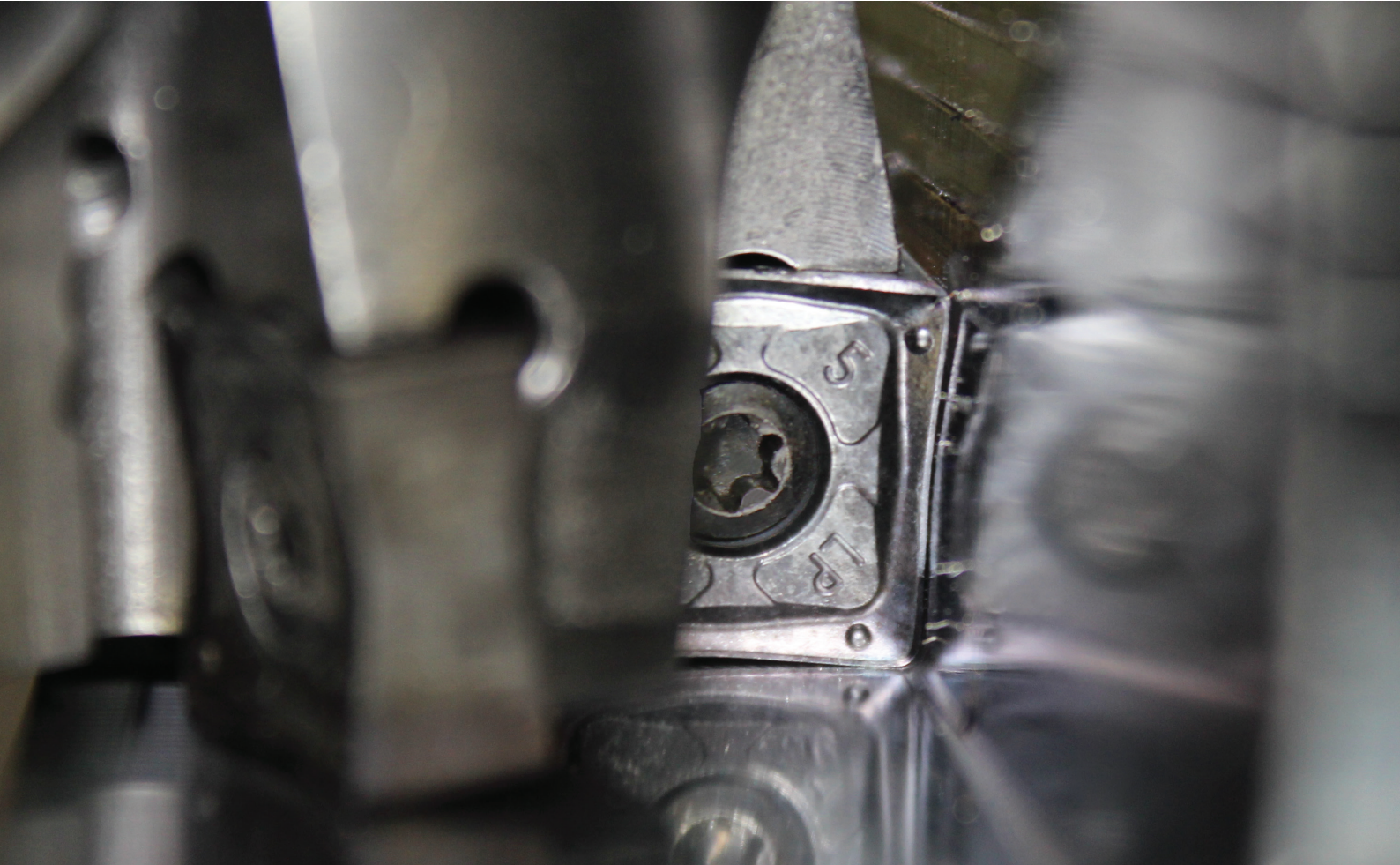




PLUS

28088 | SNHU 1206..

Solution for face milling with 88° lead angle



Cutters

- Excellent cutting performance & exceptionally economical.
- Low power requirement & smooth cutting possible due to positive helical angle.
- Excellent solution for roughing when it's not necessary the 90° halls.

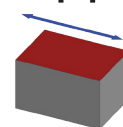
Inserts

- High positive cutting rake geometry for light and smooth cut.
- Up to 10,5 mm depth of cut.
- Dimple chip breaker to lower cutting forces and temperature.
- Inserts with 1,2 mm flat wiper for good quality surface finishing.

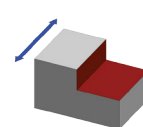
Specifications

- Geometry: 88° milling operations.
- Cutter diameters:
 - Arbor Mounting (A): Ø50 till Ø160.
- Workpiece materials: Steel & cast iron.

Applications

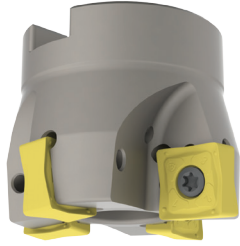


Facing



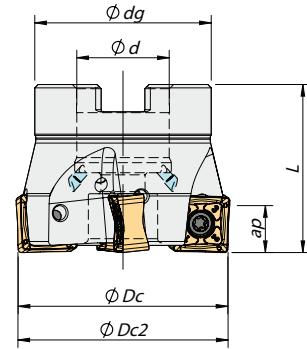
Shouldering

28088 Cutters



$K_r = 88^\circ$
 $\gamma_p = -6^\circ$

Arbor Mounting



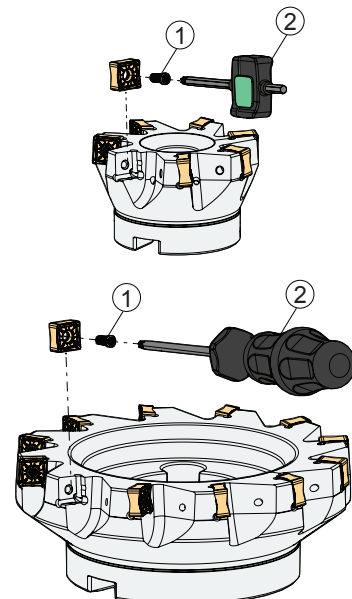
Order Code	Reference		Dimensions (mm)						Specifications		Stock
			ϕDc	$\phi Dc2$	ϕd	ϕDg	L		Style	a_p (mm)	
181084300	050A28088-05-06-022040	5	50	50,9	22	42	40	0,4	A	11,0	
181091600	063A28088-06-06-022040	6	63	63,9	22	48	40	0,5	A		
181091700	080A28088-07-06-027050	7	80	80,9	27	60	50	1,0	A		
181091800	080A28088-09-06-027050	9	80	80,9	27	60	50	0,9	A		
181091900	100A28088-08-06-032050	8	100	100,9	32	73	50	1,6	B		
181092000	100A28088-11-06-032050	11	100	100,9	32	73	50	1,5	B		
181092100	125A28088-10-06-040063	10	125	125,9	40	90	63	3,1	B		
181092200	125A28088-14-06-040063	14	125	125,9	40	90	63	3,0	B		
181092300	160A28088-12-06-U040063*	12	160	160,9	40	110	63	3,7	C		
181092700	160A28088-18-06-U040063*	18	160	160,9	40	110	63	3,5	C		
181092800	200A28088-14-06-U060063*	14	200	200,9	60	172	63	6,3	C		
181092900	200A28088-22-06-U060063*	22	200	200,9	60	172	63	6,1	C		

Stock itens / Itens de stock Available under request / Disponibilidade sob consulta / Disponible bajo consulta

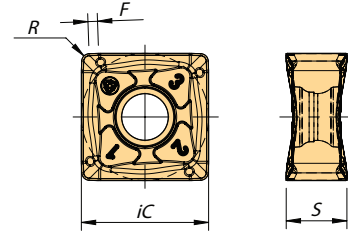
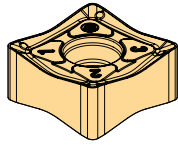
* Cutters without internal coolant supply

Screws & Keys

Item	1		2		Order Separately	
	Cutter ϕDc	Insert Screw	Key (Torx)	Torque Value	Screw	DIN 6368
A28088 – 63 - 80	P0401200	XT15	3,0	-	-	-
A28088 – 100	P0401200	PT15	3,0	J0164110	SD6368-16	
A28088 – 125	P0401200	PT15	3,0	J0204610	SD6368-20	
A28088 – 160 - 200	P0401200	PT15	3,0	-	-	



SNHU 120608 ZNER-LP Inserts



(1) Geometry	(2) Grade Code	P					M		K					Dimensions (mm)				
		54	68	66	G1	I5	68	66	54	68	66	G1	I5	IC	S	I	R	F
1112020	SNHU 120608 ZNER-LP	PH6910	PH6920	PH6930	PH7910	PH6740	PH6920	PH6930	PH6910	PH6920	PH6930	PH7910	PH6740	13,3	6,35	11,6	0,8	1,0

⊗ First choice / 1ª escolha / 1ª opción

⊗ Stock items / Itens de stock ○ Available under request / Disponibilidade sob consulta / Disponible bajo consulta

Order code = (1) Geometry Code + (2) Grade Code

Chip Breaker

Chip Breaker	Cutting Edge	Features
Geometry LP Light machining of steels		Positive top rake angle to promote a good chip flow and reduce power consumption.

Grades Selection Guide

ISO	HB (Brinell)	Grades			
		Wear Resistance		Toughness	
		PH5920	PH6920	PH5740	PH6740
P Unalloyed Steel Low-Alloyed Steel High-Alloyed Steel	125 - 220		✓		✓
	220 - 280		✓		✓
	280 - 380		✓		✓
K Malleable Cast Iron Grey Cast Iron Nodular Cast Iron	130 - 230	✓		✓	
	180 - 245	✓		✓	
	160 - 250	✓		✓	

Grades

Grades	Information
New PH5705	MT-CVD coated carbide grade with a hard substrate and very smooth surface. Ideal for high speed cutting of cast irons.
PH6920	Coated carbide grade for high cutting speed applications, excellent solution to massive production with stable conditions.
New PH5740	Substrate grade binary (Wc & Co) with medium grain size combined with the medium temperature coating. Suitable for heavy roughing to roughing operations of cast irons with interrupted cut at medium to low cutting speeds.
PH6740	PVD coated carbide grade with large thickness coated grade for heavy roughing applications. Can work in all type of materials and endures a lot of vibration.

Rec. Cutting Conditions

ISO	HB (Brinell)	Vc (m/min)				Feed fz (mm/t)
		PH5705	PH6920	PH5740	PH6740	
P	Unalloyed Steel	125 - 220	-	170 (240) 290	-	140 (170) 190
	Low-Alloyed Steel	220 - 280	-	130 (170) 210	-	120 (140) 170
	High-Alloyed Steel	280 - 380	-	120 (140) 170	-	100 (120) 150
K	Malleable Cast Iron	130 - 230	160 (180) 295	-	140 (160) 250	-
	Grey Cast Iron	180 - 245	170 (270) 340	-	145 (180) 280	-
	Nodular Cast Iron	160 - 250	120 (150) 200	-	105 (150) 170	-

0,10 **(0,25)** 0,35

- (1) The above chart indicates the cutting conditions of 70% of the tool engagement.
- (2) With low workpiece clamping rigidity or long overhang of the tool, adjust cutting speed and feed to 70 or 80% of the recommended conditions above.
- (3) Surface finishing is determined by speed/feed used.

Selection Example:

ISO	HB (Brinell)	Vc (m/min)				Feed fz (mm/t)	
		PH5705	PH6920	PH5740	PH6740		
K	Malleable Cast Iron	130 - 230	160 (180) 295	-	140 (160) 250	-	0,10 (0,25) 0,35
	Grey Cast Iron	180 - 245	170 (270) 340	-	145 (180) 280	-	0,10 (0,25) 0,35
	Nodular Cast Iron	160 - 250	120 (150) 200	-	105 (150) 170	-	0,10 (0,25) 0,35

This example shows the recommended starting cutting conditions, indicated in Bold type.