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

ISO	PSM	Material	HB (Brinell)	Vc (m/min) ← Wear Resistance			Vc (m/min) Toughness →			Feed fz (mm/t)
				PH5705	PH7920	PH7930	PH5740	PHS740	PH7740	SNH(K)U 1206...
P	1	Unalloyed Steel	125-220	-	180 **(250)** 320	-	-	140 **(170)** 190	150 **(180)** 200	0,10 **(0,25)** 0,35
	2	Low-Alloyed Steel	220-280	-	140 **(180)** 250	-	-	120 **(140)** 170	130 **(150)** 180	0,10 **(0,25)** 0,35
	3	High-Alloyed Steel	280-380	-	130 **(180)** 220	-	-	100 **(120)** 150	110 **(130)** 160	0,10 **(0,25)** 0,35
M	4	SS - Ferritic / Martensitic	200-330	-	-	140 **(170)** 190	-	-	130 **(150)** 170	0,10 **(0,25)** 0,35
	5	SS - Austenitic	200-330	-	-	120 **(140)** 170	-	-	100 **(130)** 160	0,10 **(0,25)** 0,35
	6	SS - Austenitic-ferritic (Duplex)	230-260	-	-	100 **(120)** 150	-	-	80 **(100)** 140	0,10 **(0,25)** 0,35
K	7	Malleable Cast Iron	130-230	160 **(180)** 295	-	-	140 **(160)** 250	-	-	0,10 **(0,25)** 0,35
	8	Grey Cast Iron	180-245	170 **(270)** 340	-	-	145 **(180)** 280	-	-	0,10 **(0,25)** 0,35
	9	Nodular Cast iron	160-250	120 **(150)** 200	-	-	105 **(150)** 170	-	-	0,10 **(0,25)** 0,35

(Note 1) The above table indicates the cutting conditions of 70% of the tool engagement.
(Note 2) With low workspace clamping rigidity or long overhang of the tool, adjust cutting speed and feed to 70 or 80% of the recommended conditions above
(Note 3) Surface finishing is determinated by speed/feed used.
(Note 4) PH5... and PHS... can be used wet or dry. PH7... use only air.

Selection Example:

ISO	PSM	Material	HB (brinell)	Vc (m/min) ← Wear Resistance Toughness →		Feed fz (mm/t)
				PH5705	PH5740	SNHU 1206... SNKU 1206...
K	7	Malleable cast iron	130-230	160 **(180)** 295	140 **(160)** 250	0,10 **(0,25)** 0,35
	8	Grey cast iron	180-245	170 **(270)** 340	145 **(180)** 280	0,10 **(0,25)** 0,35
	9	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**.