

K	CAST IRON	
		Hardness
		Group
		Rm 100 - 400 [N/mm²]
		6a
		Rm 400 - 800 [N/mm²]
		6b

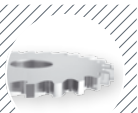
1	2	3	4
Machining type	Material group p.III	Recommended tools	Cutting Parameters

Rough milling / contour milling	 ap: 1.0xØ ae: 0.5xØ	Group Index p.III	Recommended Reference	Recommended Coating	V _c uncoated [m/min]	V _c coated [m/min]	F _z Ø 0.25 [mm]	F _z Ø 0.5 [mm]	F _z Ø 1 [mm]	F _z Ø 2 [mm]	F _z Ø 4 [mm]	F _z Ø 6 [mm]	F _z Ø 8 [mm]	F _z Ø 10 [mm]	F _z Ø 12 [mm]	F _z Ø 16 [mm]	F _z Ø 20 [mm]
		6a	115/115-1	Nemo	80	90	0.002	0.003	0.007	0.010	0.020	0.030	0.040	0.050	0.060	0.080	0.100
			110-1	Nemo	80	90	0.001	0.002	0.005	0.008	0.012	0.025	0.030	0.035	0.050	0.070	0.075
		6b	115/115-1	Nemo	70	80	0.002	0.003	0.007	0.010	0.020	0.030	0.040	0.050	0.060	0.070	0.080
			110-1	Nemo	60	70	0.001	0.002	0.005	0.008	0.012	0.025	0.030	0.035	0.045	0.060	0.070

Finish milling / contour milling	 ap: 1.5xØ ae: 0.1xØ	Group Index p.III	Recommended Reference	Recommended Coating	V _c uncoated [m/min]	V _c coated [m/min]	F _z Ø 0.25 [mm]	F _z Ø 0.5 [mm]	F _z Ø 1 [mm]	F _z Ø 2 [mm]	F _z Ø 4 [mm]	F _z Ø 6 [mm]	F _z Ø 8 [mm]	F _z Ø 10 [mm]	F _z Ø 12 [mm]	F _z Ø 16 [mm]	F _z Ø 20 [mm]
		6a	110-1	Nemo	120	140	0.002	0.003	0.007	0.010	0.020	0.030	0.040	0.050	0.060	0.080	0.100
			1510→1540/102/...	Nemo	100	120	0.001	0.002	0.005	0.008	0.012	0.025	0.030	0.035	0.050	0.070	0.075
		6b	110-1	Nemo	100	120	0.002	0.003	0.007	0.010	0.020	0.030	0.040	0.050	0.060	0.070	0.080
			1510→1540/102/...	Nemo	90	100	0.001	0.002	0.005	0.008	0.012	0.025	0.030	0.035	0.045	0.060	0.070

Centering		Group Index p.III	Recommended Reference	Recommended Coating	V _c uncoated [m/min]	V _c coated [m/min]	F [mm]	Pecking
		6a	337	Nemo	26	37	Ø/120	-
		6b	337	Nemo	24	34	Ø/120	-

Drilling		Group Index p.III	Recommended Reference	Recommended Coating	V _c uncoated [m/min]	V _c coated [m/min]	F [mm]	Pecking
		6a	340/342/343-6→343-12/352	Nemo	31	36	Ø/120	Øx1.2
		6b	340/342/343-6→343-12/352	Nemo	28	34	Ø/120	Øx1.2

Sawing		Group Index p.III	Recommended Reference	Recommended Coating	V _c uncoated [m/min]	V _c coated [m/min]	F _t [mm]
		6a	223	Nemo	110	140	Ø/10000
		6b	223	Nemo	100	120	Ø/10000

Engraving		Group Index p.III	Recommended Reference	Recommended Coating	n [rpm]	F _r ↓ [mm]	F _r → [mm]
		6a	119/119-3	Hot	22000	0.002	0.005
		6b	119/119-3	Hot	22000	0.002	0.005

Formulas

$$F = F_z \cdot Z$$
$$V_f = F_z \cdot Z \cdot n$$
$$n = \frac{V_c \cdot 1000}{\pi \cdot d_1}$$

$$V_c = \frac{\pi \cdot d_1 \cdot n}{1000}$$
$$f_z = \frac{V_f}{Z \cdot n}$$

Caption

F [mm]: Feed per rotation
Z : Number of teeth
n : Spindle speed

F_z [mm]: Feed per tooth
V_c [mm/min]: Feed speed

K	Index - Cast iron
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N° Wsn	DIN	AFNOR	Gr.
0.6010	GG10	FT10D	6a
0.6015	GG15	FT15D	6a
0.6020	GG20	FT20D	6a
0.6025	GG25	FT25D	6a
0.6030	GG30	FT30D	6a
0.6035	GG35	FT35D	6a
0.6040	GG – 40	FT40D	6b
0.6652	GGL – NiMn137	L – NM137	6b
0.6655	GGL – NiCuCr1562	L – NUC1562	6b
0.6656	GGL – NiCuCr1563	L – NUC1563	6b
0.6660	GGL – NiCr202	L – NC202	6b
0.6661	GGL – NiCr203	L – NC203	6b
0.6667	GGL – NiSiCr2053	L – NSC2053	6b
0.6676	GGL – NiCr303	L – NC303	6b
0.6680	GGL – NiSiCr3055	L – NSC3055	6b
0.7033	GGG35.3	FGS370 – 17	6b
0.7040	GGG – 40	FGS400 – 12	6b
0.7043	GGG – 40.3	FGS370 – 17	6b
0.7044	GGG40	FGS400 – 12	6b
0.7050	GGG50	FGS500 – 7	6b
0.7060	GGG60	FGS600-3	6b
0.7070	GGG70	FGS700-2	6b
0.7080	GGG80	FGS800-2	6b
0.7652	GGG – NiMn137	S – NM137	6b
0.7660	GGG – NiCr202	S – NC202	6b
0.7661	GGG – NiCr203	S – NC203	6b
0.7665	GGG – NiSiCr2052	S – NSC2052	6b
0.7670	GGG – Ni22	S – N22	6b
0.7673	GGG – NiMn234	S – NM234	6b
0.7676	GGG – NiCr303	S – NC303	6b
0.7677	GGG – NiCr301	S – NC301	6b
0.7680	GGG – NiSiCr3055	S – NSC3055	6b
0.7683	GGG – Ni35	S – N35	6b
0.7685	GGG – NiCr353	S – NC353	6b
0.8038	GTWS3812	MB38012	6a
0.8040	GTW40 – 05	MB400 – 5	6a
0.8045	GTW45 – 07	MB450 – 7	6a
0.8135	GTS35 – 10	MN350 – 10	6a
0.8135	GTS – 35 – 10	MN35 – 10	6b
0.8145	GTS45 – 06	MN450 – 6	6a
0.8155	GTS55 – 04	MN550 – 4	6a
0.8155	GTS – 55 – 04	MP50 – 5	6b
0.8165	GTS65 – 02	MN650 – 3	6a
0.8165	GTS – 65 – 02	MP60 – 3	6b
0.8170	GTS70 – 02	MN700 – 2	6a
0.8170	GTS – 70 – 02	IP70 – 2	6b