



Technical Info. Page No. 136

Steels <35HRC		Stainless Steels <1100 N/mm²		Cast Irons <300 HB		Hardened Steels -		Titaniums <1100 N/mm²		Super Alloys <1100 N/mm²		Aluminiums -	
d ₁	d ₁	d ₂	d ₃	l ₂	l ₃	l ₁	CCx45°	z	EDP No. HA		EDP No. HA		
tol.		h6	-0.10	±0.50	±0.50	±0.80	-0.05		AlCrN		GX		
4.0	-0.025	6	3.8	11.0	18	57	0.15	4	904SCA 0400		904SCT 0400		
5.0	-0.025	6	4.8	13.0	18	57	0.15	4	904SCA 0500		904SCT 0500		
5.7	-0.025	6	5.5	13.0	20	57	0.20	4	904SCA 0570		904SCT 0570		
6.0	-0.025	6	5.8	13.0	20	57	0.20	4	904SCA 0600		904SCT 0600		
7.7	-0.025	8	7.5	19.0	26	63	0.20	4	904SCA 0770		904SCT 0770		
8.0	-0.025	8	7.6	19.0	26	63	0.20	4	904SCA 0800		904SCT 0800		
9.7	-0.035	10	9.4	22.0	31	72	0.30	4	904SCA 0970		904SCT 0970		
10.0	-0.035	10	9.5	22.0	30	72	0.30	4	904SCA 1000		904SCT 1000		
11.7	-0.035	12	11.2	26.0	35	83	0.35	4	904SCA 1170		904SCT 1170		
12.0	-0.035	12	11.5	26.0	36	83	0.35	4	904SCA 1200		904SCT 1200		
13.7	-0.035	14	13.2	26.0	35	83	0.35	4	904SCA 1370		904SCT 1370		
14.0	-0.035	14	13.5	26.0	36	83	0.35	4	904SCA 1400		904SCT 1400		
15.6	-0.035	16	15.1	32.0	41	92	0.40	4	904SCA 1560		904SCT 1560		
16.0	-0.035	16	15.5	32.0	42	92	0.40	4	904SCA 1600		904SCT 1600		
19.5	-0.035	20	19.0	38.0	51	104	0.50	4	904SCA 1950		904SCT 1950		
20.0	-0.035	20	19.5	38.0	52	104	0.50	4	904SCA 2000		904SCT 2000		

HB Weldon Shank available on request. Order Code for AlCrN Coated : 904SWA | Order Code for GX Coated: 904SWT

	MATERIAL		Hardness	ap max xD	ae max xD	Vc (m/min)	fz (mm/z) Ø						
	SLOTING						6	8	10	12	14	16	20
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	1	1	130-150	0.030	0.040	0.050	0.060	0.070	0.080	0.100
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	1	1	90-110	0.022	0.028	0.034	0.039	0.044	0.049	0.059
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²	≤ 1	1	50-70	0.018	0.024	0.029	0.032	0.036	0.041	0.049
	M	Stainless Steel : Easy To Machine	<750 N/mm²	1	1	70-90	0.022	0.028	0.034	0.039	0.044	0.049	0.059
		Stainless Steel : Difficult To Machine	<950 N/mm²	0.5	1	50-70	0.017	0.022	0.026	0.030	0.034	0.038	0.046
	K	Cast Irons, Grey, Spher., Malleable	<300 HB	1	1	90-130	0.022	0.028	0.034	0.039	0.044	0.049	0.059
	N	Aluminiums, Aluminiums Alloys	<6% Si										
	S	Titanium , Titanium Alloys	<1100N/mm²	0.5	1	30-50	0.017	0.022	0.026	0.030	0.034	0.038	0.046
	S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²	0.5	1	30-50	0.017	0.022	0.026	0.030	0.034	0.038	0.046
SIDE MILLING													
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	1	0.3	150-180	0.030	0.040	0.050	0.060	0.070	0.080	0.100
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	1	0.3	120-150	0.024	0.032	0.040	0.048	0.056	0.064	0.080
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²	1	0.3	60-80	0.023	0.030	0.036	0.041	0.047	0.052	0.063
	M	Stainless Steel : Easy To Machine	<750 N/mm²	1.5	0.5	90-110	0.026	0.034	0.041	0.047	0.052	0.058	0.071
		Stainless Steel : Difficult To Machine	<950 N/mm²	1.2	0.3	60-80	0.023	0.030	0.036	0.041	0.047	0.052	0.063
	K	Cast Irons, Grey, Spher., Malleable	<300 HB	1	0.3	120-150	0.026	0.034	0.041	0.047	0.052	0.058	0.071
	N	Aluminiums, Aluminiums Alloys	<6% Si										
	S	Titanium , Titanium Alloys	<1100N/mm²	1	0.3	40-50	0.032	0.042	0.050	0.057	0.064	0.064	0.078
	S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²	1	0.3	40-50	0.032	0.042	0.050	0.057	0.064	0.064	0.078
RAMPING													
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	45°	1	100-120	0.019	0.021	0.024	0.028	0.032	0.035	0.043
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	15°	1	55-75	0.017	0.023	0.023	0.026	0.029	0.032	0.039
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²										
	M	Stainless Steel : Easy To Machine	<750 N/mm²	10°	1	60-80	0.018	0.023	0.028	0.032	0.036	0.040	0.048
		Stainless Steel : Difficult To Machine	<950 N/mm²	5°	1	45-65	0.017	0.022	0.026	0.030	0.034	0.038	0.046
	K	Cast Irons, Grey, Spher., Malleable	<300 HB	15°	1	60-80	0.018	0.023	0.028	0.032	0.036	0.040	0.048
	N	Aluminiums, Aluminiums Alloys	<6% Si										
	S	Titanium , Titanium Alloys	<1100N/mm²	5°	1	30-40	0.023	0.030	0.036	0.042	0.047	0.052	0.063
	S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²	5°	1	30-40	0.023	0.030	0.036	0.042	0.047	0.052	0.063
HELICAL MILLING													
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	5°	0.3	110-130	0.018	0.024	0.030	0.032	0.035	0.040	0.048
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	4°	0.3	70-90	0.016	0.021	0.026	0.029	0.033	0.037	0.045
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²	3°	0.3	50-70	0.015	0.019	0.023	0.026	0.029	0.032	0.039
	M	Stainless Steel : Easy To Machine	<750 N/mm²	4°	0.4	70-90	0.016	0.021	0.026	0.029	0.033	0.037	0.045
		Stainless Steel : Difficult To Machine	<950 N/mm²	3°	0.4	70-90	0.015	0.019	0.023	0.026	0.029	0.036	0.039
	K	Cast Irons, Grey, Spher., Malleable	<300 HB	4°	0.4	70-90	0.016	0.021	0.026	0.029	0.033	0.037	0.045
	N	Aluminiums, Aluminiums Alloys	<6% Si										
	S	Titanium , Titanium Alloys	<1100N/mm²	3°	0.4	30-50	0.014	0.019	0.021	0.024	0.027	0.030	0.037
	S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²	3°	0.4	30-50	0.014	0.019	0.021	0.024	0.027	0.030	0.037
DRILLING													
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	1	1	85-105	0.012	0.016	0.019	0.022	0.024	0.027	0.033
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	1	1	55-75	0.011	0.014	0.017	0.019	0.022	0.024	0.030
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²										
	M	Stainless Steel : Easy To Machine	<750 N/mm²	1	1	55-75	0.011	0.014	0.017	0.019	0.022	0.024	0.030
		Stainless Steel : Difficult To Machine	<950 N/mm²										
	K	Cast Irons, Grey, Spher., Malleable	<300 HB	1	1	55-75	0.011	0.014	0.017	0.019	0.022	0.024	0.030
	N	Aluminiums, Aluminiums Alloys	<6% Si										
	S	Titanium , Titanium Alloys	<1100N/mm²	0.5	1	20-40	0.013	0.017	0.021	0.024	0.027	0.030	0.036
	S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²										
TROCHOIDAL MILLING													
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	2	0.1	160-200	0.061	0.079	0.095	0.108	0.122	0.135	0.164
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	2	0.1	110-130	0.055	0.071	0.085	0.097	0.109	0.122	0.148
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²	2	0.1	80-100	0.049	0.063	0.076	0.086	0.097	0.108	0.131
	M	Stainless Steel : Easy To Machine	<750 N/mm²	2	0.1	110-130	0.055	0.071	0.085	0.097	0.109	0.122	0.148
		Stainless Steel : Difficult To Machine	<950 N/mm²	1.5	0.1	80-100	0.049	0.063	0.076	0.086	0.097	0.108	0.131
	K	Cast Irons, Grey, Spher., Malleable	<300 HB	2	0.1	150	0.055	0.071	0.085	0.097	0.109	0.122	0.148
	N	Aluminiums, Aluminiums Alloys	<6% Si										
	S	Titanium , Titanium Alloys	<1100N/mm²	1.5	0.05	50-70	0.067	0.087	0.104	0.119	0.134	0.149	0.181
	S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²	1.5	0.05	50-70	0.067	0.087	0.104	0.119	0.134	0.149	0.181

Technical Data provided should be considered advisory only as variations may be necessary depending on the particular application