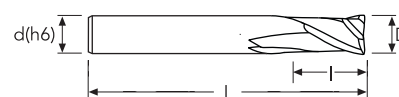
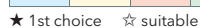


cylindrical shank, 2 flutes, long



● stock standard ○ non-standard stock ▽ stock exhaustion

CUTTING PARAMETERS

G2210-G2211

	Material Group ISO 513	P1 P2 K1			P3 P4 M1 M2 K2			P5 M3 K3			N1 N2 N3 N4		
	Hardness/Rm	< 700 N/mm ²			700-1000 N/mm ²			< 40 HRC					
	ap x ae	0.5D x D			0.5D x D			0.5D x D			0.5D x D		
	Vc (m/min)	70-90			45-65			30-50			80-120		
	D (mm)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)
	2	12740	0.007	180	8760	0.006	100	6370	0.005	70	15920	0.009	290
	3	8490	0.010	170	5840	0.009	100	4250	0.008	60	10620	0.013	280
	4	6370	0.014	180	4380	0.012	100	3180	0.011	70	7960	0.018	290
	5	5100	0.018	180	3500	0.015	110	2550	0.014	70	6370	0.023	300
	6	4250	0.023	190	2920	0.019	110	2120	0.017	70	5310	0.029	310

< D3 mm: ap = 0.2D

	Material Group ISO 513	P1 P2 K1			P3 P4 M1 M2 K2			P5 M3 K3			N1 N2 N3 N4		
	Hardness/Rm	< 700 N/mm ²			700-1000 N/mm ²			< 40 HRC					
	ap x ae	1.5D x 0.5D			1.5D x 0.5D			1.5D x 0.5D			1.5D x 0.5D		
	Vc (m/min)	70-90			45-65			30-50			80-120		
	D (mm)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)
	2	12740	0.008	210	8760	0.007	130	6370	0.006	80	15920	0.011	350
	3	8490	0.012	200	5840	0.010	120	4250	0.009	80	10620	0.016	330
	4	6370	0.017	210	4380	0.014	130	3180	0.013	80	7960	0.022	350
	5	5100	0.022	220	3500	0.018	130	2550	0.016	80	6370	0.028	360
	6	4250	0.027	230	2920	0.023	130	2120	0.020	90	5310	0.035	370

< D3 mm: ae = 0.2D

	Material Group ISO 513	P1 P2 K1			P3 P4 M1 M2 K2			P5 M3 K3			N1 N2 N3 N4		
	Hardness/Rm	< 700 N/mm ²			700-1000 N/mm ²			< 40 HRC					
	ap x ae	D x D			D x D			0.5D x D			D x D		
	Vc (m/min)	60-80			40-60			25-45			70-110		
	D (mm)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)
	2	11150	0.004	90	7960	0.004	60	5570	0.003	40	14330	0.005	160
	3	7430	0.006	90	5310	0.005	50	3720	0.005	30	9550	0.008	150
	4	5570	0.008	90	3980	0.007	60	2790	0.006	40	7170	0.011	160
	5	4460	0.011	100	3180	0.009	60	2230	0.008	40	5730	0.014	160
	6	3720	0.014	100	2650	0.011	60	1860	0.010	40	4780	0.018	170

< D3 mm: ap = 0.5D

INFO

TYPHOON
TA-HTA-4HTATYPHOON
PU-HPUTYPHOON
SUHTYPHOON
ALHTYPHOON
HRCTYPHOON
SUH MINITYPHOON
HL

C-SD-TA

LFTA

SUTA

HSS-HSS/CO
DRILLS

G2

MDTA

HF VH/UP

MEF

ALU

MEX

UH

HSS/CO-HSSP
END MILLSCARBIDE
BURRS

CUTTING PARAMETERS

G2212

	Material Group ISO 513	P1P2K1			P3P4M1M2K2			P5M3K3			N1N2N3N4		
	Hardness/Rm	< 700 N/mm²			700-1000 N/mm²			< 40 HRC					
	ap x ae	0.3D x D			0.3D x D			0.3D x D			0.3D x D		
	Vc (m/min)	55-75			40-60			20-40			70-90		
	D (mm)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)
	8	2590	0.026	130	1990	0.022	90	1190	0.020	50	3180	0.034	210
	10	2070	0.032	130	1590	0.027	90	960	0.024	50	2550	0.042	210
	12	1730	0.036	120	1330	0.031	80	800	0.027	40	2120	0.047	200
14	1480	0.042	120	1140	0.036	80	680	0.032	40	1820	0.055	200	
16	1290	0.048	120	1000	0.041	80	600	0.036	40	1590	0.062	200	

SIDE MILLING	Material Group ISO 513	P1 P2 K1			P3 P4 M1 M2 K2			P5 M3 K3			N1 N2 N3 N4		
	Hardness/Rm	< 700 N/mm ²			700-1000 N/mm ²			< 40 HRC					
	ap x ae	1.5D x 0.3D			1.5D x 0.3D			1.5D x 0.3D			1.5D x 0.3D		
	Vc (m/min)	55-75			40-60			20-40			70-90		
	D (mm)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)
	8	2590	0.031	160	1990	0.027	110	1190	0.023	60	3180	0.041	260
	10	2070	0.038	160	1590	0.033	100	960	0.029	60	2550	0.050	250
	12	1730	0.043	150	1330	0.037	100	800	0.032	50	2120	0.056	240
	14	1480	0.050	150	1140	0.043	100	680	0.038	50	1820	0.066	240
16	1290	0.058	150	1000	0.049	100	600	0.043	50	1590	0.075	240	

 DRILLING	Material Group ISO 513	P1 P2 K1			P3 P4 M1 M2 K2			P5 M3 K3			N1 N2 N3 N4		
	Hardness/Rm	< 700 N/mm ²			700-1000 N/mm ²			< 40 HRC					
	ap x ae	D X D			D X D			0.5D X D			D X D		
	Vc (m/min)	50-70			35-55			20-30			60-80		
	D (mm)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)	n (rpm)	fz (mm/z)	Vf (mm/min)
	8	2390	0.016	70	1790	0.013	50	1000	0.012	20	2790	0.020	110
	10	1910	0.019	70	1430	0.016	50	800	0.014	20	2230	0.025	110
	12	1590	0.022	70	1190	0.018	40	660	0.016	20	1860	0.028	100
14	1360	0.025	70	1020	0.021	40	570	0.019	20	1590	0.033	100	
16	1190	0.029	70	900	0.024	40	500	0.022	20	1390	0.037	100	