GB305

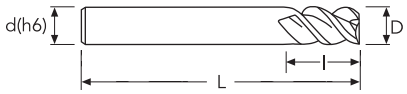
cylindrical shank, 3 flutes

OSAWA NORM | N | MG / BR | <45 HRC | 45° | SQUARE | Z3

P	M	K	N	S	H
★	☆	★	☆		

★ 1st choice ☆ suitable

SLOTTING | SIDE MILLING



D	D Tol.	C	C Tol.	d(h6)	l	l1	L	z	EDP No.	Stock
1	0/-0.020			4	3		50	3	GB305010	●
1.5	0/-0.020			4	4.5		50	3	GB305015	●
2	0/-0.020			4	6		50	3	GB305020	●
3	0/-0.020			4	8		50	3	GB305030	●
4	0/-0.020			4	11		50	3	GB305040	●
5	0/-0.020			6	13		50	3	GB305050	●
6	0/-0.020			6	15		50	3	GB305060	●
8	0/-0.025			8	20		60	3	GB305080	●
10	0/-0.025			10	30		75	3	GB305100	●
12	0/-0.025			12	30		75	3	GB305120	●

● stock standard ○ non-standard stock ▽ stock exhaustion

CUTTING PARAMETERS

GB305

	Material Group ISO 513	P1 K1			P2 M1 K2			P3 M2			N1 N2 N3 N4		
	Hardness/Rm	< 700 N/mm²			700-1000 N/mm²			< 40 HRC					
	ap x ae	**0.5D x D**			**0.5D x D**			**0.3D x D**			**0.5D x D**		
	Vc (m/min)	**50-60**			**30-50**			**20-40**			**70-90**		
SLOTTING	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)
	1	17520	0.003	160	12740	0.003	100	9550	0.002	60	25480	0.004	300
	2	8760	0.006	160	6370	0.005	100	4780	0.004	60	12740	0.008	300
	3	5840	0.009	150	4250	0.007	90	3180	0.006	60	8490	0.011	280
	4	4380	0.012	160	3180	0.010	100	2390	0.009	60	6370	0.016	300
	5	3500	0.015	160	2550	0.013	100	1910	0.012	70	5100	0.020	310
	6	2920	0.020	170	2120	0.017	110	1590	0.015	70	4250	0.026	330
	8	2190	0.026	170	1590	0.022	100	1190	0.019	70	3180	0.033	320
	10	1750	0.032	170	1270	0.028	110	960	0.024	70	2550	0.042	320
	12	1460	0.038	170	1060	0.033	100	800	0.029	70	2120	0.050	320

< D3 mm: ap = 0.2D

	Material Group ISO 513	P1 K1			P2 M1 K2			P3 M2			N1 N2 N3 N4		
	Hardness/Rm	< 700 N/mm²			700-1000 N/mm²			< 40 HRC					
	ap x ae	**1.5D x 0.3D**			**1.5D x 0.3D**			**1.5D x 0.2D**			**1.5D x 0.3D**		
	Vc (m/min)	**50-70**			**40-50**			**20-40**			**80-100**		
SIDE MILLING	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)
	1	19110	0.004	210	14330	0.003	130	9550	0.003	80	28660	0.005	400
	2	9550	0.007	210	7170	0.006	130	4780	0.005	80	14330	0.009	400
	3	6370	0.010	200	4780	0.009	130	3180	0.008	70	9550	0.013	380
	4	4780	0.014	210	3580	0.012	130	2390	0.011	80	7170	0.019	400
	5	3820	0.018	210	2870	0.016	140	1910	0.014	80	5730	0.024	410
	6	3180	0.024	230	2390	0.020	140	1590	0.018	80	4780	0.031	440
	8	2390	0.031	220	1790	0.026	140	1190	0.023	80	3580	0.040	430
	10	1910	0.039	220	1430	0.033	140	960	0.029	80	2870	0.051	440
	12	1590	0.046	220	1190	0.039	140	800	0.035	80	2390	0.060	430

< D3 mm: ae = 0.1D