

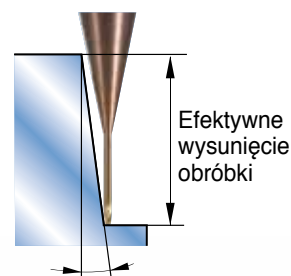
RibEndmills

● System oznaczeń Rib Endmills

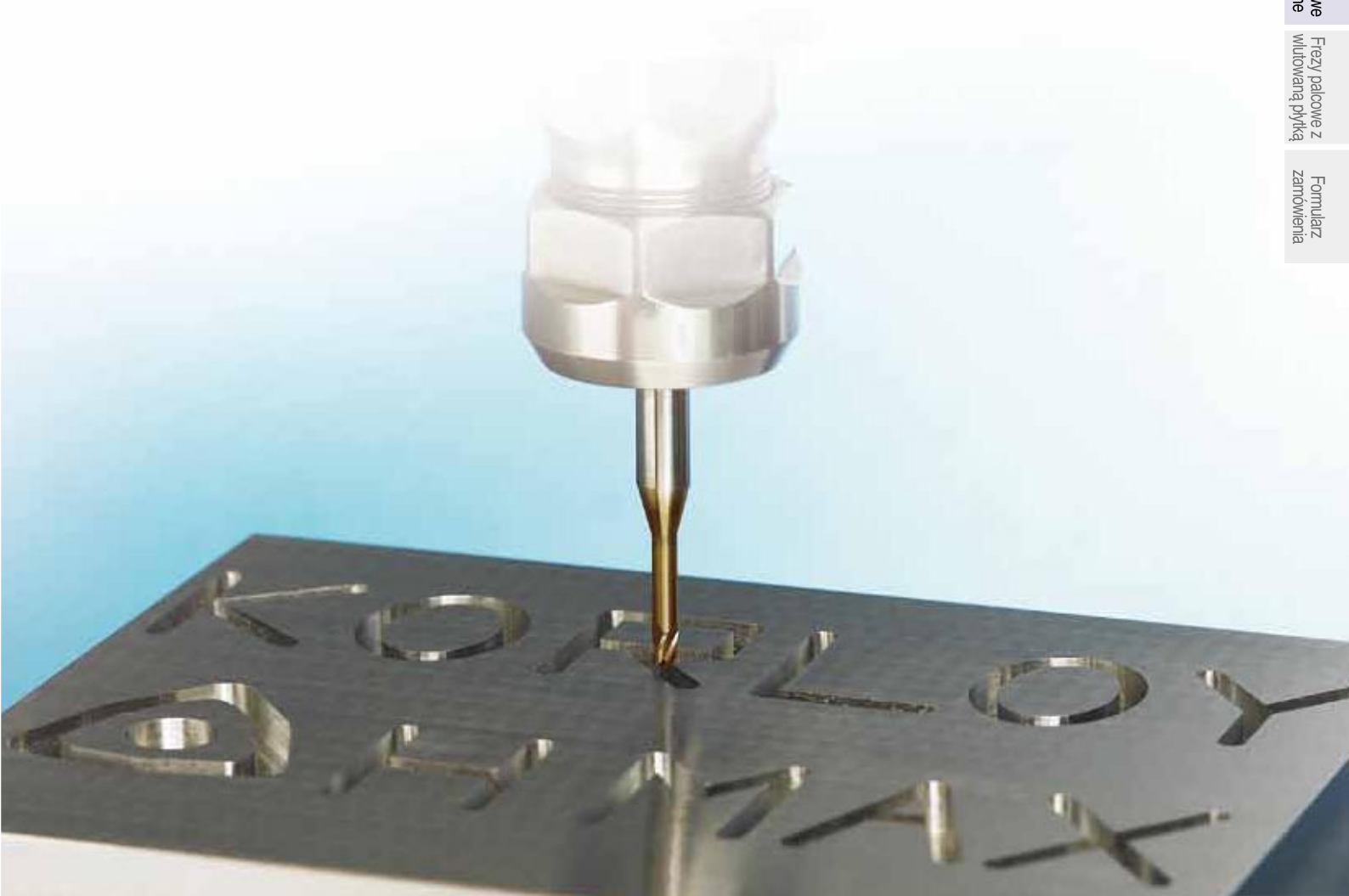
DMAH	040	L01	R02	RB
Rodzaj	Średnica	Długość szyjki Kąt stożka	Promień naroża	Rodzaj krawędzi
DMAH : Stal zwykła (HRC~55) DMVH : Stal hartowana (HRC~65)	0.4	L04 : 4.0 T130 : 1° 30'	R0.2	RB : Kulowa RF : Płaska RNR : Promieniowa TNB : Kula na szyjce stożkowej

● Właściwości

- ▶ Dwustronne Rib Endmills do materiałów obrabianych cieplnie (HRC 65) przy obróbce szybkościowej.
- ▶ Matryce do części samochodowych, telefony komórkowe, obróbka części elektrycznych i półprzewodnikowych
- ▶ Idealne do głębokich rowków, usuwania pozostałości oraz mikro operacji.
- ▶ Konstrukcja krawędzi skrawającej zapobiegającej wykruszaniu.



Idealne do głębokich rowków i usuwania pozostałości.
Oszczędność czasu dla procesu elektro drążenia.



● Zalecane parametry obróbki (DMAH/ DMVH-RB)

Frezowanie z wysokimi prędkościami

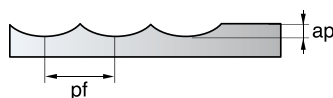
Materiał obrabiany			~ 45HRC (SCM, STD61, NAK)			~ 55HRC (STAVAX, STD11)			~ 65HRC (STD11, SKH)		
			Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa
Parametry											
D	R	l ₂									
0.1	0.05	1	50,000	270	0.002	48,000	220	0.002	45,000	170	0.002
		2	50,000	220	0.001	48,000	180	0.001	45,000	140	0.001
0.2	0.1	1	40,000	360	0.003	40,000	300	0.003	40,000	300	0.002
		2	40,000	360	0.002	40,000	300	0.002	40,000	200	0.001
0.3	0.15	1	40,000	600	0.007	40,000	500	0.007	40,000	500	0.005
		2	40,000	600	0.003	40,000	500	0.003	40,000	500	0.002
		3	40,000	480	0.002	40,000	400	0.002	40,000	400	0.001
0.4	0.2	1	40,000	1,700	0.015	40,000	1,400	0.015	40,000	1,400	0.010
		2	40,000	1,200	0.010	40,000	1,000	0.010	40,000	1,000	0.006
		3	40,000	840	0.005	40,000	700	0.005	40,000	700	0.003
		4	40,000	720	0.003	40,000	600	0.003	40,000	600	0.002
		5	40,000	480	0.002	40,000	400	0.002	40,000	400	0.001
0.5	0.25	2	40,000	2,400	0.020	40,000	2,000	0.020	40,000	2,000	0.015
		3	40,000	1,400	0.015	40,000	1,200	0.015	40,000	1,200	0.010
		4	40,000	1,200	0.010	36,000	900	0.010	36,000	900	0.007
		5	40,000	930	0.007	36,000	700	0.007	36,000	700	0.005
		6	40,000	900	0.005	32,000	600	0.005	32,000	600	0.003
		8	40,000	600	0.003	32,000	400	0.003	32,000	400	0.002
		10	40,000	450	0.002	32,000	300	0.002	32,000	300	0.001
0.6	0.3	2	40,000	3,300	0.030	40,000	2,800	0.030	40,000	2,800	0.020
		4	40,000	2,600	0.020	36,000	2,000	0.020	36,000	2,000	0.015
		6	39,000	1,200	0.008	30,000	800	0.008	30,000	800	0.005
		8	39,000	900	0.006	30,000	600	0.006	30,000	600	0.005
		10	39,000	600	0.004	30,000	400	0.004	30,000	400	0.003
0.8	0.4	2	40,000	4,200	0.040	40,000	3,200	0.040	40,000	3,200	0.030
		4	40,000	3,600	0.020	40,000	3,000	0.020	40,000	3,000	0.015
		6	39,000	2,500	0.020	30,000	1,600	0.020	30,000	1,600	0.010
		8	33,000	1,600	0.010	25,000	1,000	0.010	25,000	1,000	0.007
		10	33,000	1,300	0.008	25,000	800	0.008	25,000	800	0.005
1.0	0.5	4	40,000	4,800	0.050	40,000	3,500	0.050	40,000	3,500	0.045
		6	40,000	2,800	0.040	35,000	2,000	0.040	35,000	2,000	0.035
		8	39,000	2,500	0.035	30,000	1,600	0.035	30,000	1,600	0.030
		10	33,000	1,900	0.030	25,000	1,200	0.030	25,000	1,200	0.025
		12	33,000	1,600	0.025	25,000	1,000	0.025	25,000	1,000	0.020
		16	26,000	1,000	0.025	20,000	700	0.025	20,000	600	0.020
		20	26,000	1,000	0.020	20,000	700	0.020	20,000	600	0.015
1.2	0.6	6	40,000	4,800	0.050	40,000	3,500	0.050	40,000	3,500	0.040
		8	40,000	3,600	0.050	40,000	3,000	0.050	27,000	2,000	0.040
		10	35,000	3,000	0.030	27,000	1,900	0.030	24,000	1,700	0.020
		12	25,000	1,800	0.030	16,000	1,000	0.030	16,000	1,000	0.020
		16	25,000	1,700	0.025	16,000	900	0.025	16,000	900	0.015
1.5	0.75	6	40,000	5,000	0.070	40,000	4,000	0.070	32,000	2,880	0.060
		8	40,000	5,000	0.070	40,000	3,500	0.070	28,000	2,200	0.060
		10	40,000	4,500	0.060	40,000	2,400	0.060	21,000	1,130	0.040
		12	36,000	3,400	0.040	32,000	2,000	0.040	19,000	1,050	0.035
		16	20,000	1,500	0.030	16,000	1,300	0.030	14,000	1,000	0.030
		20	20,000	1,300	0.020	16,000	1,000	0.020	14,000	790	0.025
2.0	1.0	6	40,000	6,000	0.100	40,000	3,400	0.100	24,000	1,840	0.100
		8	40,000	5,000	0.100	40,000	3,000	0.100	24,000	1,620	0.100
		10	40,000	5,000	0.080	40,000	3,000	0.080	24,000	1,620	0.070
		12	40,000	5,000	0.080	40,000	2,600	0.080	24,000	1,400	0.050
		16	36,000	3,500	0.050	32,000	1,700	0.050	16,000	770	0.040
		20	22,000	1,600	0.040	16,000	1,200	0.040	12,000	810	0.030
		25	20,000	1,000	0.035	12,000	900	0.035	10,000	770	0.025
		30	20,000	700	0.030	10,000	700	0.030	10,000	630	0.020

● Zalecane parametry obróbki (DMAH/ DMVH-RB)

Frezowanie z wysokimi prędkościami

Materiał obrabiany Parametry			~ 45HRC (SCM, STD61, NAK)			~ 55HRC (STAVAX, STD11)			~ 65HRC (STD11, SKH)		
			Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa
D	R	l ₂									
3.0	1.5	8	40,000	6,400	0.150	32,000	3,000	0.150	16,000	1,350	0.150
		10	35,000	5,100	0.150	32,000	2,200	0.150	16,000	990	0.150
		12	35,000	5,100	0.130	32,000	2,200	0.130	16,000	990	0.130
		16	35,000	4,500	0.100	32,000	1,600	0.100	14,000	630	0.100
		20	30,000	3,800	0.100	27,000	1,600	0.100	14,000	750	0.060
		25	28,000	2,700	0.080	21,000	1,200	0.080	11,000	570	0.060
		30	20,000	1,600	0.070	14,000	1,100	0.070	10,000	710	0.050
		35	16,000	1,400	0.060	12,000	800	0.060	8,000	480	0.040
4.0	2.0	10	32,000	4,800	0.200	24,000	2,200	0.200	12,000	990	0.200
		12	32,000	4,800	0.200	24,000	2,200	0.200	12,000	990	0.200
		16	32,000	3,800	0.150	24,000	1,500	0.150	12,000	680	0.150
		20	32,000	3,800	0.150	24,000	1,500	0.150	12,000	680	0.150
		25	32,000	3,800	0.150	24,000	900	0.150	8,000	270	0.100
		30	26,000	3,000	0.100	20,000	800	0.100	7,000	250	0.100
		35	16,000	1,700	0.100	12,000	700	0.100	6,000	320	0.080
		40	16,000	1,700	0.085	12,000	600	0.085	6,000	270	0.070
		45	14,000	1,500	0.070	11,000	500	0.070	6,000	250	0.055
5.0	2.5	20	25,000	5,300	0.200	19,000	3,400	0.200	10,000	1,400	0.200
		25	25,000	5,300	0.200	19,000	3,400	0.200	10,000	1,400	0.200
		30	25,000	5,000	0.150	19,000	3,200	0.150	8,000	1,000	0.150
		35	21,000	4,200	0.100	16,000	2,700	0.100	6,000	700	0.100
		40	21,000	3,700	0.080	16,000	2,400	0.080	6,000	600	0.070
6.0	3.0	30	21,000	5,500	0.200	16,000	3,500	0.200	8,000	1,000	0.200
		40	21,000	4,200	0.100	16,000	2,700	0.100	6,000	700	0.100
		50	21,000	3,700	0.100	16,000	2,400	0.100	6,000	600	0.080

● Wskazówka



$$pf = ap \times 2$$

F Frezy palcowe monolityczne - Informacja techniczna

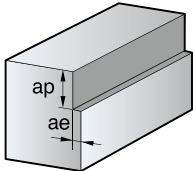
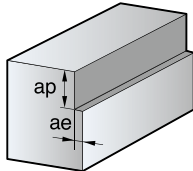
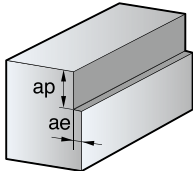
● zalecane parametry obróbki (DMAH/ DMVH-RF/ Frezowanie boczne)

Frezowanie z wysokimi prędkościami jednostronne

Materiał obrabiany		~ 45HRC (SCM, STD61, NAK)			~ 55HRC (STAVAX, STD11)			~ 65HRC (STD11, SKH)		
		Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa
D	l ₂	Parametry								
		0.1	1	38,000	290	0.008	32,000	170	0.005	23,000
	2	38,000	250	0.005	32,000	150	0.004	23,000	80	0.002
0.2	1	34,000	300	0.016	30,000	180	0.010	21,000	90	0.005
	2	34,000	260	0.010	30,000	160	0.008	21,000	80	0.004
0.3	1	34,000	340	0.027	30,000	210	0.015	21,000	110	0.007
	2	34,000	300	0.019	30,000	200	0.011	21,000	100	0.005
	3	34,000	280	0.014	28,000	180	0.008	19,000	90	0.004
0.4	1	34,000	340	0.040	30,000	240	0.022	21,000	130	0.011
	2	34,000	300	0.032	30,000	230	0.018	21,000	120	0.009
	3	34,000	280	0.024	30,000	220	0.013	21,000	110	0.007
	4	34,000	260	0.019	27,000	190	0.011	19,000	100	0.005
	5	34,000	240	0.014	27,000	180	0.008	19,000	90	0.004
0.5	2	34,000	680	0.045	30,000	450	0.025	21,000	220	0.012
	3	34,000	660	0.037	30,000	430	0.020	21,000	210	0.010
	4	34,000	640	0.024	30,000	420	0.013	21,000	200	0.007
	5	34,000	620	0.024	27,000	380	0.013	19,000	180	0.007
	6	34,000	600	0.019	27,000	380	0.011	19,000	170	0.005
	8	30,000	520	0.013	24,000	340	0.007	17,000	150	0.004
	10	30,000	500	0.008	24,000	340	0.004	17,000	140	0.002
0.6	2	32,000	980	0.054	26,000	600	0.030	19,000	290	0.015
	4	32,000	960	0.040	26,000	560	0.022	19,000	280	0.011
	6	32,000	940	0.029	26,000	540	0.016	19,000	270	0.008
	8	30,000	880	0.019	24,000	500	0.011	17,000	240	0.005
	10	30,000	860	0.014	24,000	480	0.008	17,000	230	0.004
0.8	2	32,000	1,600	0.064	26,000	910	0.035	19,000	500	0.018
	4	32,000	1,560	0.052	26,000	900	0.029	19,000	480	0.014
	6	32,000	1,520	0.038	26,000	880	0.021	19,000	470	0.011
	8	25,000	1,150	0.031	20,000	670	0.017	14,000	340	0.008
	10	25,000	1,100	0.023	20,000	650	0.013	14,000	330	0.006
1.0	4	32,000	2,000	0.057	26,000	1,150	0.031	19,000	600	0.016
	6	32,000	1,950	0.046	26,000	1,100	0.025	19,000	590	0.013
	8	30,000	1,800	0.037	24,000	1,000	0.020	17,000	530	0.010
	10	30,000	1,700	0.030	24,000	950	0.016	17,000	520	0.008
	12	25,000	1,500	0.024	20,000	800	0.013	14,000	430	0.007
	16	25,000	1,450	0.016	20,000	780	0.009	14,000	420	0.004
	20	25,000	1,400	0.011	20,000	760	0.006	14,000	400	0.003
1.2	6	30,000	2,000	0.061	24,000	1,200	0.033	17,000	600	0.017
	8	30,000	1,900	0.050	24,000	1,100	0.027	17,000	580	0.014
	10	26,000	1,600	0.045	20,000	900	0.025	14,000	470	0.012
	12	26,000	1,500	0.036	20,000	880	0.020	14,000	460	0.010
	16	19,000	1,000	0.026	16,000	700	0.014	12,000	380	0.007
1.5	6	30,000	2,400	0.084	24,000	1,400	0.051	17,000	700	0.025
	8	30,000	2,350	0.077	24,000	1,350	0.046	17,000	680	0.023
	10	30,000	2,300	0.062	24,000	1,300	0.037	17,000	670	0.018
	12	27,000	2,000	0.056	22,000	1,100	0.033	16,000	620	0.017
	16	15,000	1,100	0.041	12,000	600	0.024	9,000	350	0.012
	20	15,000	1,050	0.033	12,000	580	0.020	9,000	340	0.010
2.0	6	28,000	2,600	0.115	22,000	1,500	0.097	16,000	770	0.055
	8	28,000	2,500	0.103	22,000	1,470	0.087	16,000	750	0.049
	10	28,000	2,400	0.093	22,000	1,400	0.079	16,000	740	0.044
	12	28,000	2,300	0.084	22,000	1,350	0.071	16,000	720	0.040
	16	25,000	2,000	0.067	20,000	1,200	0.057	14,000	630	0.032
	20	16,000	1,500	0.055	13,000	780	0.046	10,000	450	0.026
	25	14,000	1,300	0.040	11,000	660	0.034	8,000	350	0.019
	30	14,000	1,200	0.033	11,000	640	0.028	8,000	340	0.016

● zalecane parametry obróbki (DMAH/ DMVH-RF/ Frezowanie boczne)

Frezowanie z wysokimi prędkościami jednostronne

Materiał obrabiany		~ 45HRC (SCM, STD61, NAK)			~ 55HRC (STAVAX, STD11)			~ 65HRC (STD11, SKH)		
		Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa
D	l ₂	Parametry								
3.0	8	26,000	3,500	0.172	20,000	1,950	0.146	14,000	860	0.082
	10	26,000	3,400	0.172	20,000	1,900	0.146	14,000	840	0.082
	12	23,000	3,000	0.155	18,000	1,700	0.131	13,000	780	0.074
	16	23,000	2,900	0.139	18,000	1,650	0.118	13,000	770	0.066
	20	20,000	2,500	0.113	16,000	1,450	0.096	11,000	650	0.054
	25	18,000	2,200	0.102	14,000	1,250	0.087	10,000	590	0.049
	30	13,000	1,600	0.082	10,000	860	0.070	8,000	470	0.039
	35	12,000	1,450	0.066	9,500	800	0.056	7,000	410	0.032
4.0	10	20,000	3,200	0.229	16,000	1,800	0.149	11,000	880	0.080
	12	20,000	3,200	0.229	16,000	1,800	0.149	11,000	880	0.080
	16	20,000	3,000	0.207	16,000	1,700	0.134	11,000	870	0.073
	20	20,000	3,000	0.186	16,000	1,700	0.121	11,000	870	0.065
	25	20,000	2,800	0.167	16,000	1,600	0.109	11,000	820	0.059
	30	17,000	2,300	0.136	14,000	1,400	0.088	10,000	740	0.048
	35	11,000	1,500	0.122	9,500	900	0.079	7,000	510	0.043
	40	11,000	1,500	0.109	9,500	900	0.071	7,000	510	0.038
	45	10,000	1,300	0.098	8,000	730	0.064	6,000	430	0.034
50	10,000	1,300	0.080	8,000	730	0.052	6,000	430	0.028	
5.0	20	16,000	3,200	0.258	13,000	1,900	0.186	9,000	900	0.093
	25	16,000	3,200	0.232	13,000	1,900	0.167	9,000	900	0.084
	30	16,000	3,100	0.209	13,000	1,800	0.151	9,000	800	0.075
	35	14,000	2,700	0.188	11,000	1,500	0.136	8,000	700	0.068
	40	14,000	2,700	0.169	11,000	1,500	0.122	8,000	700	0.061
6.0	30	14,000	3,200	0.278	11,000	1,800	0.200	8,000	920	0.100
	40	14,000	2,800	0.226	11,000	1,600	0.162	8,000	880	0.081
	50	14,000	2,600	0.203	11,000	1,500	0.146	8,000	800	0.073
● Wskazówka		 $ae = 0.03 \times \varnothing D$			 $ae = 0.02 \times \varnothing D$			 $ae = 0.01 \times \varnothing D$		

F Frezy palcowe monolityczne - Informacja techniczna

● Zalecane parametry obróbki (DMAH/ DMVH-RF/ Frezowanie rowków)

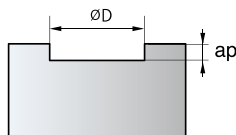
Frezowanie rowków z wysokimi prędkościami

Materiał obrabiany		~ 45HRC (SCM, STD61, NAK)			~ 55HRC (STAVAX, STD11)			~ 65HRC (STD11, SKH)		
		Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa
D	l ₂	Parametry								
		0.1	1	35,000	175	0.009	28,000	100	0.006	23,000
	2	34,000	135	0.005	27,000	80	0.004	22,000	60	0.002
0.2	1	32,000	220	0.018	26,000	130	0.011	21,000	100	0.006
	2	30,000	180	0.011	24,000	100	0.009	19,000	80	0.004
0.3	1	32,000	330	0.030	26,000	190	0.016	21,000	150	0.008
	2	32,000	255	0.021	26,000	160	0.012	21,000	130	0.006
	3	30,000	250	0.016	24,000	140	0.009	19,000	110	0.004
0.4	1	32,000	480	0.044	26,000	270	0.024	21,000	220	0.012
	2	32,000	330	0.035	26,000	190	0.019	21,000	150	0.010
	3	30,000	240	0.026	24,000	140	0.015	19,000	110	0.007
	4	30,000	225	0.021	24,000	130	0.012	19,000	100	0.006
	5	28,000	165	0.016	22,000	90	0.009	17,000	70	0.004
0.5	2	30,000	310	0.049	24,000	170	0.027	19,000	140	0.014
	3	30,000	255	0.040	24,000	140	0.022	19,000	113	0.011
	4	28,000	230	0.026	23,000	130	0.015	18,000	110	0.007
	5	28,000	220	0.026	23,000	130	0.015	18,000	100	0.007
	6	27,000	205	0.021	22,000	120	0.012	17,000	90	0.006
	8	27,000	180	0.014	22,000	100	0.008	17,000	85	0.004
	10	27,000	170	0.009	22,000	100	0.005	17,000	80	0.002
0.6	2	30,000	330	0.060	24,000	185	0.033	19,000	150	0.016
	4	30,000	240	0.044	24,000	130	0.024	19,000	110	0.012
	6	28,000	210	0.032	23,000	120	0.017	18,000	100	0.009
	8	27,000	200	0.021	22,000	110	0.012	17,000	90	0.006
	10	27,000	200	0.016	22,000	110	0.009	17,000	90	0.004
0.8	2	30,000	540	0.070	24,000	300	0.039	19,000	240	0.019
	4	28,000	450	0.058	23,000	260	0.032	18,000	210	0.016
	6	27,000	380	0.042	22,000	220	0.023	17,000	170	0.012
	8	27,000	300	0.034	22,000	180	0.019	17,000	150	0.009
	10	25,000	280	0.025	20,000	160	0.014	16,000	130	0.007
1.0	4	28,000	890	0.062	23,000	510	0.034	18,000	410	0.017
	6	27,000	810	0.050	22,000	460	0.028	17,000	370	0.014
	8	27,000	600	0.040	22,000	340	0.022	17,000	270	0.011
	10	27,000	540	0.033	22,000	310	0.018	17,000	260	0.009
	12	22,000	420	0.026	20,000	280	0.014	16,000	220	0.007
	16	22,000	400	0.017	20,000	240	0.010	16,000	190	0.005
	20	22,000	380	0.012	20,000	210	0.007	16,000	170	0.003
1.2	6	23,000	800	0.067	18,000	440	0.037	14,000	350	0.018
	8	21,000	600	0.055	17,000	340	0.030	13,000	280	0.015
	10	21,000	600	0.049	17,000	340	0.027	13,000	270	0.014
	12	21,000	580	0.039	17,000	330	0.022	13,000	260	0.011
	16	17,000	400	0.028	16,000	220	0.016	12,000	180	0.008
1.5	6	16,000	680	0.093	13,000	390	0.056	10,000	310	0.028
	8	15,000	500	0.084	12,000	280	0.051	9,500	220	0.025
	10	15,000	500	0.068	12,000	280	0.041	9,500	220	0.020
	12	15,000	500	0.061	12,000	280	0.037	9,500	220	0.018
	16	14,000	420	0.045	11,000	230	0.027	8,500	190	0.013
	20	14,000	420	0.036	11,000	230	0.022	8,500	190	0.011
2.0	6	15,000	950	0.126	12,000	530	0.107	9,500	430	0.060
	8	15,000	950	0.113	12,000	530	0.096	9,500	430	0.054
	10	15,000	840	0.102	12,000	470	0.087	9,500	380	0.049
	12	14,000	770	0.092	11,000	420	0.078	8,500	340	0.044
	16	14,000	770	0.074	11,000	420	0.063	8,500	340	0.035
	20	14,000	770	0.060	11,000	420	0.051	8,500	340	0.029
	25	13,000	700	0.044	10,000	380	0.037	8,000	300	0.021
	30	13,000	700	0.036	10,000	380	0.031	8,000	300	0.017

● Zalecane parametry obróbki (DMAH/ DMVH-RB/ Frezowanie rowków)

Frezowanie rowków z wysokimi prędkościami

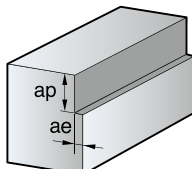
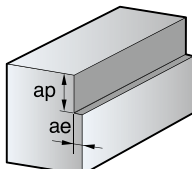
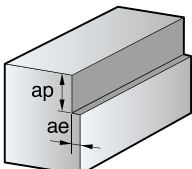
Materiał obrabiany		~ 45HRC (SCM, STD61, NAK)			~ 55HRC (STAVAX, STD11)			~ 65HRC (STD11, SKH)		
		Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa
D	l ₂	Parametry								
		● Wskazówka								



F Frezy palcowe monolityczne - Informacja techniczna

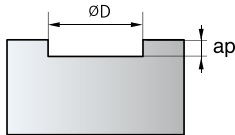
● Zalecane parametry obróbki (DMAH/ DMVH-RNR/ Frezowanie boczne)

Frezowanie z wysokimi prędkościami jednostronne

Materiał obrabiany		~ 45HRC (SCM, STD61, NAK)			~ 55HRC (STAVAX, STD11)			~ 65HRC (STD11, SKH)		
		Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa
D	l ₂	Parametry								
		1.0	4	38,000	2,380	0.057	30,000	1,320	0.031	24,000
	6	36,000	2,260	0.046	29,000	1,270	0.025	23,000	710	0.013
	8	36,000	2,260	0.037	29,000	1,270	0.020	23,000	710	0.010
	10	36,000	2,260	0.030	29,000	1,270	0.016	23,000	710	0.008
	12	34,000	2,130	0.024	27,000	1,180	0.013	22,000	680	0.007
	16	34,000	2,130	0.016	27,000	1,180	0.009	22,000	680	0.004
	20	34,000	2,130	0.011	27,000	1,180	0.006	22,000	680	0.003
1.5	6	32,000	2,570	0.084	26,000	1,460	0.051	21,000	830	0.025
	8	30,000	2,400	0.077	24,000	1,350	0.046	19,000	750	0.023
	10	30,000	2,400	0.062	24,000	1,350	0.037	19,000	750	0.018
	12	30,000	2,400	0.056	24,000	1,350	0.033	19,000	750	0.017
	16	28,000	2,250	0.041	22,000	1,240	0.024	18,000	710	0.012
	20	28,000	2,250	0.033	22,000	1,240	0.020	18,000	710	0.010
2.0	8	28,000	2,670	0.103	22,000	1,470	0.087	18,000	840	0.049
	10	28,000	2,670	0.093	22,000	1,470	0.079	18,000	840	0.044
	16	26,000	2,480	0.067	21,000	1,400	0.057	17,000	790	0.032
	20	26,000	2,480	0.055	21,000	1,400	0.046	17,000	790	0.026
	30	24,000	2,290	0.033	19,000	1,270	0.028	15,000	700	0.016
3.0	10	25,000	3,050	0.172	20,000	1,700	0.146	16,000	960	0.082
	12	25,000	3,050	0.155	20,000	1,700	0.131	16,000	960	0.074
	16	23,000	2,800	0.139	18,000	1,540	0.118	14,000	840	0.066
	20	23,000	2,800	0.113	18,000	1,540	0.096	14,000	840	0.054
	30	23,000	2,800	0.082	18,000	1,540	0.070	14,000	840	0.039
	35	21,000	2,560	0.066	17,000	1,450	0.056	13,500	810	0.032
4.0	10	19,000	3,050	0.229	15,000	1,680	0.149	12,000	940	0.080
	12	18,000	2,890	0.229	14,000	1,570	0.149	11,000	870	0.080
	16	18,000	2,890	0.207	14,000	1,570	0.134	11,000	870	0.073
	20	18,000	2,890	0.186	14,000	1,570	0.121	11,000	870	0.065
6.0	20	13,000	3,050	0.278	10,500	1,720	0.200	8,500	980	0.100
	30	13,000	3,050	0.278	10,500	1,720	0.200	8,500	980	0.100
● Wskazówka		 $ae = 0.03 \times \varnothing D$			 $ae = 0.02 \times \varnothing D$			 $ae = 0.01 \times \varnothing D$		

● Zalecane parametry obróbki (DMAH/ DMVH-RNR/ Frezowanie boczne)

Frezowanie boczne z wysokimi prędkościami

Materiał obrabiany		~ 45HRC (SCM, STD61, NAK)			~ 55HRC (STAVAX, STD11)			~ 65HRC (STD11, SKH)		
		Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa	Obroty n(min-1)	Posuw vf(mm/min)	Głębokość osiowa
D	l ₂	Parametry								
		1.0	4	28,000	445	0.068	23,000	255	0.037	18,500
	6	27,000	405	0.055	22,000	230	0.030	17,500	185	0.015
	8	27,000	300	0.044	22,000	170	0.024	17,500	135	0.012
	10	27,000	270	0.036	22,000	155	0.020	17,500	130	0.010
	12	25,000	250	0.029	20,000	140	0.016	16,000	110	0.008
	16	25,000	210	0.019	20,000	120	0.010	16,000	95	0.005
	20	25,000	190	0.013	20,000	105	0.007	16,000	85	0.004
1.5	6	16,000	340	0.101	13,000	195	0.061	10,500	155	0.030
	8	15,000	250	0.092	12,000	140	0.055	9,600	110	0.028
	10	15,000	250	0.074	12,000	140	0.044	9,600	110	0.022
	12	15,000	250	0.067	12,000	140	0.040	9,600	110	0.020
	16	14,000	210	0.049	11,000	115	0.029	8,800	95	0.015
	20	14,000	210	0.039	11,000	115	0.024	8,800	95	0.012
2.0	8	15,000	475	0.123	12,000	265	0.105	9,600	215	0.059
	10	15,000	420	0.111	12,000	235	0.095	9,600	190	0.053
	16	14,000	385	0.081	11,000	210	0.069	8,800	170	0.038
	20	14,000	385	0.066	11,000	210	0.056	8,800	170	0.031
	30	13,000	350	0.039	10,000	190	0.033	8,000	150	0.019
3.0	10	13,000	570	0.206	10,000	305	0.175	8,000	245	0.098
	12	13,000	570	0.186	10,000	305	0.158	8,000	245	0.088
	16	11,000	455	0.167	8,500	245	0.142	6,800	195	0.080
	20	11,000	430	0.135	8,500	235	0.115	6,800	185	0.064
	30	11,000	430	0.098	8,500	235	0.084	6,800	185	0.047
	35	10,000	390	0.080	8,000	220	0.068	6,400	170	0.038
4.0	10	8,000	510	0.275	6,500	290	0.179	5,200	230	0.097
	12	7,500	475	0.275	6,000	265	0.179	4,800	210	0.097
	16	7,500	475	0.248	6,000	265	0.161	4,800	210	0.087
	20	7,500	375	0.223	6,000	220	0.145	4,800	170	0.078
6.0	20	6,500	460	0.334	5,000	250	0.241	4,000	200	0.120
	30	6,500	460	0.334	5,000	250	0.241	4,000	200	0.120
● Wskazówka										

F Frezy palcowe Rib

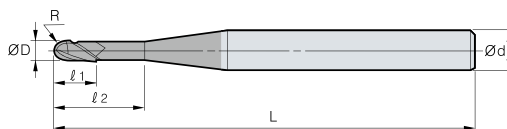
RB (Kulisty Rib)

2

Helix Angle 30°

Podłoże PC220G PC203G

R	øD	ød
0	0	-0.004
-0.005	-0.008	-0.008



(mm)

Oznaczenie	Stan	Oznaczenie	Stan	Stare oznaczenie	R	D	d	h _t	l ₂	L
	PC220G		PC203G							
DMAH		DMVH		HRB						
002L01 RB		002L01 RB		002L01	0.1	0.2	4	0.25	1	50
003L01 RB		003L01 RB		003L01	0.15	0.3	4	0.4	1	50
003L02 RB		003L02 RB		003L02	0.15	0.3	4	0.4	2	50
004L02 RB		004L02 RB		004L02	0.2	0.4	4	0.5	2	50
004L04 RB		004L04 RB		004L04	0.2	0.4	4	0.5	4	50
005L02 RB		005L02 RB		005L02	0.25	0.5	4	0.6	2	50
005L03 RB		005L03 RB		005L03	0.25	0.5	4	0.6	3	50
005L04 RB		005L04 RB		005L04	0.25	0.5	4	0.6	4	50
006L02 RB		006L02 RB		006L02	0.3	0.6	4	0.7	2	50
006L04 RB		006L04 RB		006L04	0.3	0.6	4	0.7	4	50
006L06 RB		006L06 RB		006L06	0.3	0.6	4	0.7	6	50
007L04 RB		007L04 RB		007L04	0.35	0.7	4	0.8	4	50
008L02 RB		008L02 RB		008L02	0.4	0.8	4	0.9	2	50
008L04 RB		008L04 RB		008L04	0.4	0.8	4	0.9	4	50
008L06 RB		008L06 RB		008L06	0.4	0.8	4	0.9	6	50
010L02 RB		010L02 RB		010L02	0.5	1	4	1.2	2	50
010L03 RB		010L03 RB		010L03	0.5	1	4	1.2	3	50
010L04 RB		010L04 RB		010L04	0.5	1	4	1.2	4	50
010L06 RB		010L06 RB		010L06	0.5	1	4	1.2	6	50
010L08 RB		010L08 RB		010L08	0.5	1	4	1.2	8	50
010L10 RB		010L10 RB		010L10	0.5	1	4	1.2	10	50
010L12 RB		010L12 RB		010L12	0.5	1	4	1.2	12	50
010L16 RB		010L16 RB		010L16	0.5	1	4	1.2	16	60
010L20 RB		010L20 RB		010L20	0.5	1	4	1.2	20	60
012L10 RB		012L10 RB		012L10	0.6	1.2	4	1.4	10	50
014L04 RB		014L04 RB		014L04	0.7	1.4	4	1.7	4	50
015L04 RB		015L04 RB		015L04	0.75	1.5	4	1.8	4	50
015L06 RB		015L06 RB		015L06	0.75	1.5	4	1.8	6	50
015L08 RB		015L08 RB		015L08	0.75	1.5	4	1.8	8	50
015L10 RB		015L10 RB		015L10	0.75	1.5	4	1.8	10	50
015L12 RB		015L12 RB		015L12	0.75	1.5	4	1.8	12	50
015L16 RB		015L16 RB		015L16	0.75	1.5	4	1.8	16	60
020L06 RB		020L06 RB		020L06	1	2	4	2.2	6	60
020L08 RB		020L08 RB		020L08	1	2	4	2.2	8	60
020L10 RB		020L10 RB		020L10	1	2	4	2.2	10	60
020L12 RB		020L12 RB		020L12	1	2	4	2.2	12	60
020L16 RB		020L16 RB		020L16	1	2	4	2.2	16	60
020L20 RB		020L20 RB		020L20	1	2	4	2.2	20	60
020L30 RB		020L30 RB		020L30	1	2	4	2.2	30	70
025L12 RB		025L12 RB		025L12	1.25	2.5	6	3	12	50
030L10 RB		030L10 RB		030L10	1.5	3	6	3.6	10	50
030L12 RB		030L12 RB		030L12	1.5	3	6	3.6	12	50
030L16 RB		030L16 RB		030L16	1.5	3	6	3.6	16	60
030L20 RB		030L20 RB		030L20	1.5	3	6	5	20	60
040L10 RB		040L10 RB		040L10	2	4	6	5	10	50
040L12 RB		040L12 RB		040L12	2	4	6	5	12	50
040L16 RB		040L16 RB		040L16	2	4	6	5	16	60
040L20 RB		040L20 RB		040L20	2	4	6	5	20	60
040L30 RB		040L30 RB		040L30	2	4	6	5	30	70
060L20 RB		060L20 RB		060L20	3	6	6	7	20	60

* Rib Endmills dostarcza firma współpracująca z firmą Korloy.

● : Pozycja standardowa ○ : Pozycja na zamówienie

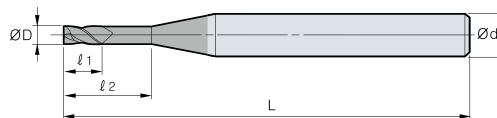
RF (Płaski Rib)

2

Helix Angle
30°

Podłoże
PC220G
PC203G

øD	ød
0	-0.004
-0.008	-0.008



(mm)

Oznaczenie	Stan PC220G	Oznaczenie	Stan PC203G	Stare oznaczenie	D	d	l ₁	l ₂	L
DMAH		DMVH		HRF					
002L01 RF		002L01 RF		002L01	0.2	4	0.3	1	50
003L01 RF		003L01 RF		003L01	0.3	4	0.4	1	50
003L02 RF		003L02 RF		003L02	0.3	4	0.4	2	50
003L03 RF		003L03 RF		003L03	0.3	4	0.4	3	50
004L02 RF		004L02 RF		004L02	0.4	4	0.6	2	50
004L04 RF		004L04 RF		004L04	0.4	4	0.6	4	50
005L02 RF		005L02 RF		005L02	0.5	4	0.8	2	50
005L04 RF		005L04 RF		005L04	0.5	4	0.8	4	50
006L02 RF		006L02 RF		006L02	0.6	4	0.9	2	50
006L04 RF		006L04 RF		006L04	0.6	4	0.9	4	50
006L06 RF		006L06 RF		006L06	0.6	4	0.9	6	50
008L02 RF		008L02 RF		008L02	0.8	4	1.2	2	50
008L03 RF		008L03 RF		008L03	0.8	4	1.2	3	50
008L04 RF		008L04 RF		008L04	0.8	4	1.2	4	50
008L06 RF		008L06 RF		008L06	0.8	4	1.2	6	50
009L04 RF		009L04 RF		009L04	0.9	4	1.4	4	50
010L02 RF		010L02 RF		010L02	1	4	1.5	2	50
010L04 RF		010L04 RF		010L04	1	4	1.5	4	50
010L05 RF		010L05 RF		010L05	1	4	1.5	5	50
010L06 RF		010L06 RF		010L06	1	4	1.5	6	50
010L10 RF		010L10 RF		010L10	1	4	1.5	10	50
012L04 RF		012L04 RF		012L04	1.2	4	1.8	4	50
012L08 RF		012L08 RF		012L08	1.2	4	1.8	8	50
012L10 RF		012L10 RF		012L10	1.2	4	1.8	10	50
015L04 RF		015L04 RF		015L04	1.5	4	2.2	4	50
015L05 RF		015L05 RF		015L05	1.5	4	2.2	5	50
015L06 RF		015L06 RF		015L06	1.5	4	2.2	6	50
015L08 RF		015L08 RF		015L08	1.5	4	2.2	8	50
015L10 RF		015L10 RF		015L10	1.5	4	2.2	10	50
020L04 RF		020L04 RF		020L04	2	4	3	4	50
020L06 RF		020L06 RF		020L06	2	4	3	6	50
020L10 RF		020L10 RF		020L10	2	4	3	10	50
020L12 RF		020L12 RF		020L12	2	4	3	12	50
020L16 RF		020L16 RF		020L16	2	4	3	16	60
020L20 RF		020L20 RF		020L20	2	4	3	20	60
025L16 RF		025L16 RF		025L16	2.5	4	3.5	16	60
030L10 RF		030L10 RF		030L10	3	6	4	10	50
030L12 RF		030L12 RF		030L12	3	6	4	12	50
030L16 RF		030L16 RF		030L16	3	6	4	16	60
030L20 RF		030L20 RF		030L20	3	6	4	20	60
030L25 RF		030L25 RF		030L25	3	6	4	25	70
030L30 RF		030L30 RF		030L30	3	6	4	30	70
040L12 RF		040L12 RF		040L12	4	6	6	12	50
040L16 RF		040L16 RF		040L16	4	6	6	16	60
040L18 RF		040L18 RF		040L18	4	6	6	18	60
040L20 RF		040L20 RF		040L20	4	6	6	20	60
040L30 RF		040L30 RF		040L30	4	6	6	30	70
060L20 RF		060L20 RF		060L20	6	6	8	20	60
060L30 RF		060L30 RF		060L30	6	6	8	30	80
060L40 RF		060L40 RF		060L40	6	6	8	40	90

* Rib Endmills dostarcza firma współpracująca z firmą Korloy.

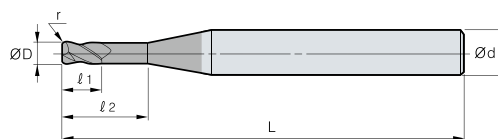
● : Pozycja standardowa ○ : Pozycja na zamówienie

F Frezy palcowe Rib

RNR (Kulisty Rib)



r	øD	ød
0	0	-0.004
-0.005	-0.008	-0.008



(mm)

Oznaczenie	Stan	Oznaczenie	Stan	Stare oznaczenie	r	D	d	h	l ₂	L
	PC220G		PC203G							
DMAH		DMVH		HRNR						
010L04R02 RNR		010L04R02 RNR		010L04R02	0.2	1	4	1.5	4	50
015L06R02 RNR		015L06R02 RNR		015L06R02	0.2	1.5	4	2.2	6	50
015L08R02 RNR		015L08R02 RNR		015L08R02	0.2	1.5	4	2.2	8	50
015L10R02 RNR		015L10R02 RNR		015L10R02	0.2	1.5	4	2.2	10	50
015L12R02 RNR		015L12R02 RNR		015L12R02	0.2	1.5	4	2.2	12	50
020L06R02 RNR		020L06R02 RNR		020L06R02	0.2	2	4	3	6	50
020L10R02 RNR		020L10R02 RNR		020L10R02	0.2	2	4	3	10	50
020L12R02 RNR		020L12R02 RNR		020L12R02	0.2	2	4	3	12	50
020L10R03 RNR		020L10R03 RNR		020L10R03	0.3	2	4	3	10	50
020L06R05 RNR		020L06R05 RNR		020L06R05	0.5	2	4	3	6	50
020L10R05 RNR		020L10R05 RNR		020L10R05	0.5	2	4	3	10	50
020L12R05 RNR		020L12R05 RNR		020L12R05	0.5	2	4	3	12	50
030L10R02 RNR		030L10R02 RNR		030L10R02	0.2	3	6	4	10	60
030L12R02 RNR		030L12R02 RNR		030L12R02	0.2	3	6	4	12	60
030L10R03 RNR		030L10R03 RNR		030L10R03	0.3	3	6	4	10	60
030L12R03 RNR		030L12R03 RNR		030L12R03	0.3	3	6	4	12	60
030L12R05 RNR		030L12R05 RNR		030L12R05	0.5	3	6	4	12	60
030L16R05 RNR		030L16R05 RNR		030L16R05	0.5	3	6	4	16	60
030L20R05 RNR		030L20R05 RNR		030L20R05	0.5	3	6	4	20	60
040L12R02 RNR		040L12R02 RNR		040L12R02	0.2	4	6	6	12	60
040L16R02 RNR		040L16R02 RNR		040L16R02	0.2	4	6	6	16	60
040L20R03 RNR		040L20R03 RNR		040L20R03	0.3	4	6	6	20	60
040L12R05 RNR		040L12R05 RNR		040L12R05	0.5	4	6	6	12	60
040L16R05 RNR		040L16R05 RNR		040L16R05	0.5	4	6	6	16	60
040L20R05 RNR		040L20R05 RNR		040L20R05	0.5	4	6	6	20	60

* Rib Endmills dostarcza firma współpracująca z firmą Korloy.

● : Pozycja standardowa ○ : Pozycja na zamówienie

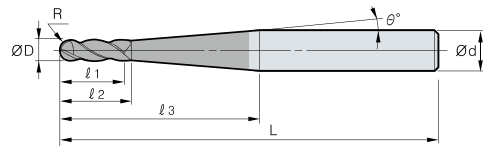
TNB (Rib szyjka stożkowa)



Helix Angle 30°

Podłoże
PC220G
PC203G

R	øD	ød
0	0	-0.004
-0.005	-0.008	-0.008



													(mm)
Oznaczenie	Stan	Oznaczenie	Stan	Stare oznaczenie	R	D	d	h	ℓ	b	θ°	L	
	PC220G		PC203G										
DMAH		DMVH		HRTNB									
010T130 TNB		010T130 TNB		010T130	0.5	1	6	2.3	5	23	1.5°	60	
010T300 TNB		010T300 TNB		010T300	0.5	1	6	2.3	5	40	3°	80	
010T500 TNB		010T500 TNB		010T500	0.5	1	6	2.3	5	23	5°	60	
015T130 TNB		015T130 TNB		015T130	0.8	1.5	6	4	7	23	1.5°	60	
015T300 TNB		015T300 TNB		015T300	0.8	1.5	6	4	7	40	3°	80	
015T500 TNB		015T500 TNB		015T500	0.8	1.5	6	4	7	23	5°	60	
020T130 TNB		020T130 TNB		020T130	1	2	6	5	8	23	1.5°	60	
020T300 TNB		020T300 TNB		020T300	1	2	6	5	8	40	3°	80	
020T500 TNB		020T500 TNB		020T500	1	2	6	5	8	25	5°	70	
030T130 TNB		030T130 TNB		030T130	1.5	3	6	8	11	50	1.5°	90	
030T300 TNB		030T300 TNB		030T300	1.5	3	6	8	11	30	3°	80	
030T500 TNB		030T500 TNB		030T500	1.5	3	8	8	11	30	5°	80	
040T130 TNB		040T130 TNB		040T130	2	4	6	8	11	52	1.5°	90	
040T300 TNB		040T300 TNB		040T300	2	4	6	8	11	28	3°	70	
040T500 TNB		040T500 TNB		040T500	2	4	8	8	11	35	5°	90	
050T130 TNB		050T130 TNB		050T130	2.5	5	8	10	14	60	1.5°	110	
050T300 TNB		050T300 TNB		050T300	2.5	5	8	10	14	40	3°	90	
060T130 TNB		060T130 TNB		060T130	3	6	8	12	16	52	1.5°	100	
060T300 TNB		060T300 TNB		060T300	3	6	8	12	16	35	3°	90	
060T500 TNB		060T500 TNB		060T500	3	6	10	12	16	40	5°	90	
080T130 TNB		080T130 TNB		080T130	4	8	10	14	19	55	1.5°	120	
080T300 TNB		080T300 TNB		080T300	4	8	10	14	19	36	3°	100	
100T130 TNB		100T130 TNB		100T130	5	10	12	18	23	58	1.5°	120	
100T300 TNB		100T300 TNB		100T300	5	10	12	18	23	40	3°	100	
120T130 TNB		120T130 TNB		120T130	6	12	16	22	28	85	1.5°	150	
120T300 TNB		120T300 TNB		120T300	6	12	16	22	28	65	3°	150	

* Rib Endmills dostarcza firma współpracująca z firmą Korloy.

● : Pozycja standardowa ○ : Pozycja na zamówienie