

SOLID CARBIDE BALL NOSE END MILLS

VOLLHARTMETALL RADIUSFRASER KURZ

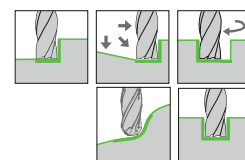
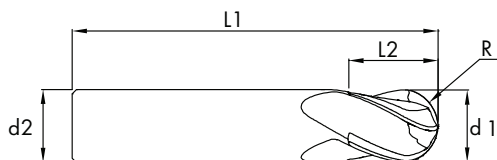
KARBÜR KÜRE FREZE KISA

HEIKENEI®
wir produzieren industrielle Lösungen



STUBBY

<52 HRC



TYPE



QUALITY



DIAMETER



NORM



4 FLUTES



SHAFT TYPE



HELICAL



RADIUS



COATED

d1(e8)	L2	L1	d2(h6)	Z	R	Uncoated Code	Coated Code
3	5	40	3	2	1,5	4003500	4003510
4	7	40	4	2	2	4003520	4003530
5	8	40	5	2	2,5	4003540	4003550
6	8	40	6	2	3	4003560	4003570
8	10	45	8	2	4	4003580	4003590
10	12	50	10	2	5	4003600	4003610
12	14	60	12	2	6	4003620	4003630
14	15	70	14	2	7	4003640	4003650
16	15	70	16	2	8	4003660	4003670
18	15	70	18	2	9	4003680	4003690
20	15	70	20	2	10	4003700	4003710
3	5	40	3	3	1,5	4003280	4003290
4	7	40	4	3	2	4003300	4003310
5	8	40	5	3	2,5	4003320	4003330
6	8	40	6	3	3	4003340	4003350
8	10	45	8	3	4	4003360	4003370
10	12	50	10	3	5	4003380	4003390

d1(e8)	L2	L1	d2(h6)	Z	R	Uncoated Code	Coated Code
12	14	60	12	3	6	4003400	4003410
14	15	70	14	3	7	4003420	4003430
16	15	70	16	3	8	4003440	4003450
18	15	70	18	3	9	4003460	4003470
20	15	70	20	3	10	4003480	4003490
3	5	40	3	4	1,5	4003060	4003070
4	7	40	4	4	2	4003080	4003090
5	8	40	5	4	2,5	4003100	4003110
6	8	40	6	4	3	4003120	4003130
8	10	45	8	4	4	4003140	4003150
10	12	50	10	4	5	4003160	4003170
12	14	60	12	4	6	4003180	4003190
14	15	70	14	4	7	4003200	4003210
16	15	70	16	4	8	4003220	4003230
18	15	70	18	4	9	4003240	4003250
20	15	70	20	4	10	4003260	4003270

				P (20-30 Hrc)			P (30-40 Hrc)			M			GG			AL			CU			Titan			< 52 HRC		
				1.0050-2	1.0060-2	1.0070-2	1.5864	1.4460	1.7225	1.4405	1.4460	1.4505	0.6035	0.7080	0.8055	3.2151	3.2373	3.2382	2.1247	2.0580	2.0598	3.7035	3.7055	3.7065	1.3255	1.3265	1.3333
				Vc=110 m/dk.			Vc = 80 m/dk.			Vc = 60 m/dk.			Vc= 130 m/dk.			Vc = 320 m/dk.			Vc = 200 m/dk.			Vc = 50 m/dk.			Vc = 50 m/dk.		
d1	de	ap	ae	fz	n	Vf	fz	n	Vf	fz	n	Vf	fz	n	Vf	fz	n	Vf	fz	n	Vf	fz	n	Vf	fz	n	Vf
2	2	1.0	1.0	0.012	17500	210xZ	0.015	12740	190xZ	0.0013	9554	125xZ	0.030	20700	620xZ	0.022	50950	1120xZ	0.025	31850	800 xZ	0.008	7960	65 xZ	0.007	7960	55 xZ
3	3	1.5	1.5	0.018	11666	210xZ	0.022	8492	190xZ	0.020	6369	125xZ	0.045	13800	620xZ	0.033	33966	1120xZ	0.038	21233	800 xZ	0.012	5306	65xZ	0.010	5306	55 xZ
4	4	2.0	2.0	0.024	8750	210xZ	0.030	6370	190xZ	0.026	4777	125xZ	0.060	10350	620xZ	0.044	25475	1120xZ	0.050	15925	800 xZ	0.016	3980	65xZ	0.014	3980	55 xZ
5	5	2.5	2.5	0.030	7000	210xZ	0.037	5100	190xZ	0.033	3822	125xZ	0.075	8280	620xZ	0.055	20380	1120xZ	0.063	12740	800 xZ	0.020	3184	65xZ	0.017	3184	55 xZ
6	6	3.0	3.0	0.036	5833	210xZ	0.045	4250	190xZ	0.039	3185	125xZ	0.090	6900	620xZ	0.066	16983	1120xZ	0.075	10616	800 xZ	0.025	2653	65xZ	0.020	2653	55 xZ
8	8	4.0	4.0	0.048	4375	210xZ	0.060	3185	190xZ	0.052	2389	125xZ	0.122	5175	620xZ	0.077	12737	1120xZ	0.100	7962	800 xZ	0.033	1990	65xZ	0.028	1990	55 xZ
10	10	5.0	5.0	0.060	3500	210xZ	0.075	2550	190xZ	0.065	1911	125xZ	0.150	4140	620xZ	0.088	10190	1120xZ	0.126	6370	800 xZ	0.041	1592	65xZ	0.035	1592	55 xZ
12	12	6.0	6.0	0.072	2916	210xZ	0.089	2123	190xZ	0.078	1592	125xZ	0.180	3450	620xZ	0.132	8492	1120xZ	0.151	5308	800 xZ	0.049	1327	65 xZ	0.041	1327	55 xZ
14	14	7.0	7.0	0.084	2500	210xZ	0.104	1820	190xZ	0.092	1365	125xZ	0.194	3204	620xZ	0.154	7278	1120xZ	0.176	4550	800 xZ	0.057	1137	65xZ	0.048	1135	55 xZ
16	16	8.0	8.0	0.096	2187	210xZ	0.119	1592	190xZ	0.105	1194	125xZ	0.240	2587	620xZ	0.176	6369	1120xZ	0.201	3981	800 xZ	0.065	995	65xZ	0.055	995	55 xZ
18	18	9.0	9.0	0.108	1944	210xZ	0.134	1415	190xZ	0.118	1062	125xZ	0.270	2300	620xZ	0.198	5661	1120xZ	0.226	3539	800 xZ	0.073	885	65 xZ	0.062	885	55 xZ
20	20	10.0	10.0	0.120	1750	210xZ	0.149	1275	190xZ	0.131	955	125xZ	0.300	2070	620xZ	0.220	5095	1120xZ	0.251	3185	800 xZ	0.082	796	65xZ	0.069	796	55 xZ
25	25	12.5	12.5	0.150	1400	210xZ	0.186	1020	190xZ	0.164	764	125xZ	0.370	1656	620xZ	0.275	4076	1120xZ	0.314	2548	800 xZ	0.102	637	65xZ	0.086	637	55 xZ