

YE-E219



///G **X5070**

BLUE-COATED SOLID CARBIDE END MILLS

For Machining High Hardened Steels
For High Speed Cutting & Dry Cutting
For Mold & Die



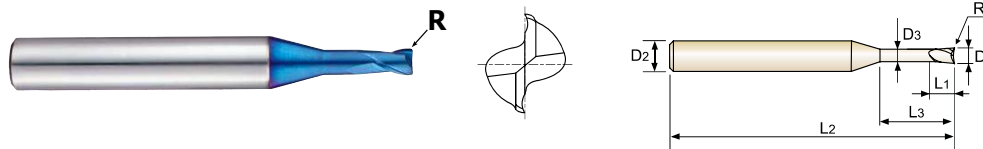
BLUE-COATED SOLID CARBIDE END MILLS

2 FLUTE CORNER RADIUS for RIB PROCESSING

PLAIN SHANK

G8A52 SERIES

- ▶ Designed to machine high hardened materials.
- ▶ Suitable for dry cutting and high speed cutting thanks to the newly-developed raw material and new coating
- ▶ Excellent workpiece finish.
- ▶ Deep slotting is possible due to the reduced neck.
- ▶ Corner radius for preventing chipping in high speed machining.
- ▶ Higher wear-resistance.



Unit : mm

EDP No.	Corner Radius	Mill Diameter	Shank Diameter	Length of Cut	Length Below Shank	Overall Length	Neck Diameter
	R (±0.010)	D1	D2	L1	L3	L2	D3
G8A52005	R0.05	0.5	6	0.7	1.5	50	0.45
G8A52901	R0.05	0.5	6	0.7	3.3	50	0.45
G8A52006	R0.05	0.6	6	0.9	2	50	0.55
G8A52902	R0.05	0.6	6	0.9	4	50	0.55
G8A52008	R0.05	0.8	6	1.2	2.5	50	0.75
G8A52903	R0.05	0.8	6	1.2	5.5	50	0.75
G8A52010	R0.10	1.0	6	1.5	3.3	50	0.95
G8A52904	R0.10	1.0	6	1.5	6.7	50	0.95
G8A52012	R0.10	1.2	6	1.8	4.4	50	1.15
G8A52905	R0.10	1.2	6	1.8	8	50	1.15
G8A52015	R0.15	1.5	6	2.2	5	50	1.45
G8A52906	R0.15	1.5	6	2.2	9.7	50	1.45
G8A52020	R0.15	2.0	6	2.2	6	50	1.95
G8A52907	R0.15	2.0	6	2.2	13	50	1.95

Due to the characteristics of the blue decoration layer, it might be erased during short-term use and the color layer may become non-uniform. However, this doesn't affect the performance of the tool.

Mill Dia. Tolerance (mm)	Shank Dia. Tolerance
0 ~ - 0.012	h5

◎ : Excellent ○ : Good

ISO	P										M				K							
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
HRc	13	23	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	40	21		
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230		
Recommend					○			○	○		○											
ISO	N					S					H											
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys				Titanium Alloys		Hardened steel		Chilled Cast Iron		Hardened Cast Iron	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34	36	37	55	60	42	55	
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550	
Recommend																		◎	◎	○	◎	

G8A52 SERIES

2 FLUTE CORNER RADIUS FOR RIB PROCESSING - **SLOTING**

Vc = m/min.
 fz = mm/tooth
 RPM = rev./min.
 FEED = mm/min.
 Ap = mm

ISO	VDI 3323	Material Description	Parameter	Diameter (Ø)						
				0.5	0.6	0.8	1.0	1.2	1.5	2.0
P	5	Non-alloy steel	Vc	40~52	39~66	41~66	39~59	39~66	43~83	40~66
			fz	0.006~0.009	0.005~0.013	0.007~0.018	0.009~0.022	0.010~0.028	0.012~0.046	0.016~0.045
			RPM	25650~33000	20900~35200	16150~26400	12300~18700	10450~17600	9100~17600	6350~10550
	8-9	Low alloy steel	FEED	370~470	330~560	360~590	350~540	350~590	430~830	340~570
			Ap	0.0056~0.0350	0.0063~0.0294	0.0084~0.0392	0.0105~0.0280	0.0245~0.0700	0.0161~0.0770	0.0210~0.1400
			Vc	40~52	39~66	41~66	39~59	39~66	43~83	40~66
	11.1 - 11.2	High alloyed steel, and tool steel	fz	0.006~0.009	0.005~0.013	0.007~0.018	0.009~0.022	0.010~0.028	0.012~0.046	0.016~0.045
			RPM	25650~33000	20900~35200	16150~26400	12300~18700	10450~17600	9100~17600	6350~10550
			FEED	370~470	330~560	360~590	350~540	350~590	430~830	340~570
			Ap	0.0056~0.0350	0.0063~0.0294	0.0084~0.0392	0.0105~0.0280	0.0245~0.0700	0.0161~0.0770	0.0210~0.1400
			Vc	37~41	38~41	38~42	33~36	34~38	33~38	38~42
			fz	0.005~0.007	0.004~0.007	0.006~0.010	0.008~0.013	0.009~0.015	0.011~0.020	0.015~0.025
38.1 - 38.2	Hardened steel	RPM	23750~26000	19900~22000	15200~16700	10500~11500	9100~10000	7000~8000	6100~6700	
		FEED	285~315	190~290	210~310	190~280	180~280	180~280	200~300	
		Ap	0.0040~0.0250	0.0450~0.0210	0.0060~0.0280	0.0075~0.0200	0.0150~0.0420	0.0115~0.0550	0.0150~0.1000	
39.1 - 39.3	Hardened steel	Vc	22~28	22~29	23~29	20~25	20~26	20~26	23~30	
		fz	0.016~0.014	0.017~0.015	0.024~0.021	0.032~0.029	0.037~0.033	0.047~0.042	0.056~0.051	
		RPM	14200~18000	11900~15500	9000~11700	6300~8050	5400~7000	4300~5500	3600~4700	
40	Chilled Cast Iron	FEED	115~130	100~120	110~125	100~115	100~115	100~115	100~120	
		Ap	0.016~0.014	0.017~0.015	0.024~0.021	0.032~0.029	0.037~0.033	0.047~0.042	0.056~0.051	
		Vc	40~52	39~66	41~66	39~59	39~66	43~83	40~66	
41	Hardened Cast Iron	fz	0.006~0.009	0.005~0.013	0.007~0.018	0.009~0.022	0.010~0.028	0.012~0.046	0.016~0.045	
		RPM	25650~33000	20900~35200	16150~26400	12300~18700	10450~17600	9100~17600	6350~10550	
		FEED	370~470	330~560	360~590	350~540	350~590	430~830	340~570	
			Ap	0.0056~0.0350	0.0063~0.0294	0.0084~0.0392	0.0105~0.0280	0.0245~0.0700	0.0161~0.0770	0.0210~0.1400
			Vc	37~41	38~41	38~42	33~36	34~38	33~38	38~42
			fz	0.005~0.007	0.004~0.007	0.006~0.010	0.008~0.013	0.009~0.015	0.011~0.020	0.015~0.025
38.1 - 38.2	Hardened steel	RPM	23750~26000	19900~22000	15200~16700	10500~11500	9100~10000	7000~8000	6100~6700	
		FEED	285~315	190~290	210~310	190~280	180~280	180~280	200~300	
		Ap	0.0040~0.0250	0.0450~0.0210	0.0060~0.0280	0.0075~0.0200	0.0150~0.0420	0.0115~0.0550	0.0150~0.1000	

