

# CX500 3枚刃高硬度ボールエンドミル

CX500 3-Flute Ball Nose End Mill for hard material

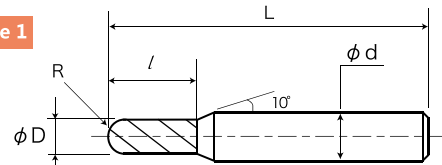
## CX500-HBE3



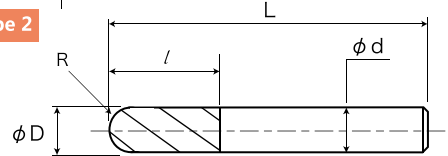
CX500-HBE3050

Model Flute R

Type 1



Type 2



ボール Ball

### 特性 Features

- CX500-Coating is new epoch-making coating developed for super long tool life, High-speed processing and dry cutting due to the high acid resistance and hardening if compared with other conventional and popular coating which is existing in the market.-The optimum tool for alloy steel, S45C/SCM440,NAK to HRC45
- CKK Original design Chip pocket enables similar or same cutting depth which 3-flutes could realize
- Surface finish is very accurate after reprocessing
- Suitable for hardened steel processing (up to 65 HRC)

R 値 Radius	R 精度 Accuracy
0.5~2	+0.005 -0.005
3~6	+0.003 -0.007

スクエア Square

炭素鋼 Carbon Steel	合金鋼 Alloy Steel	調質鋼 Prehardened Steel	焼き入れ鋼 Hardened Steel				鋳鉄 Cast Iron	ステンレス鋼 Stainless Steels	アルミ合金 Aluminium Alloys	銅合金 Copper Alloys	チタン合金 耐熱合金 Ti/Ni Alloy	グラファイト Graphite	樹脂 Resin
			~45HRC	~55HRC	~60HRC	~65HRC							
○	○	○	◎	◎	◎	◎	○						

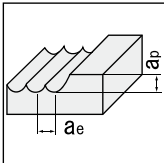
◎ = Best ○ = Good

ラジアス Radius

MODEL 型番	R	D 外径	l 刃長	L 全長	d 柄径	Type
CX500-HBE3005	0.5	1	1.5	50	4	1
CX500-HBE3010	1	2	3	50	6	1
CX500-HBE3015	1.5	3	4.5	60	6	1
CX500-HBE3020	2	4	6	70	6	1
CX500-HBE3025	2.5	5	7.5	80	6	1
CX500-HBE3030	3	6	9	90	6	2
CX500-HBE3040	4	8	12	100	8	2
CX500-HBE3050	5	10	15	100	10	2
CX500-HBE3060	6	12	18	110	12	2

ボール Ball

### 推奨切削条件 Standard Milling Condition



- The table show standard milling guidance of perforating process as written picture
- Use a rigid and precise machine and tool holder
- Select a cutting fluid appropriate to the particular usage
- In case the revolution could not be increased by the machine used, Please reduce feed sped and revolution speed at same ration
- When mounting End Mills, The run out of the till will have to be set within 0.01mm

ロングネック Long Neck

ラフニング Roughing

被削材 Work Material	高硬度鋼 Hardened Steel (40 ~ 55HRC)				高硬度鋼 Hardened Steel (55 ~ 60HRC)				高硬度鋼 Hardened Steel (60 ~ 65HRC)			
	送り速度 (mm/min) Feed rate		回転数 (mm <sup>-1</sup> ) Revolution		送り速度 (mm/min) Feed rate		回転数 (mm <sup>-1</sup> ) Revolution		送り速度 (mm/min) Feed rate		回転数 (mm <sup>-1</sup> ) Revolution	
	Standard	High Speed	Standard	High Speed	Standard	High Speed	Standard	High Speed	Standard	High Speed	Standard	High Speed
0.5	3360	3975	47700	50000	2145	3450	35000	50000	1680	2925	30600	50000
1	2610	5505	23900	43000	1620	3930	17500	36600	1500	2910	15300	28600
1.5	2595	5145	15900	28600	1620	3855	11700	24400	1425	2820	10200	19100
2	2385	4920	11900	21500	1530	3765	8800	18300	1395	2730	7600	14300
2.5	2310	5430	9500	17200	1485	3900	7000	14600	1560	2850	6100	11500
3	2085	4290	8000	14300	1335	3300	5800	12200	1260	2505	5100	9500
4	1875	4065	6000	10700	1200	3165	4400	9200	1140	2355	3800	7200
5	1695	3795	4800	8600	1050	2865	3500	7300	1050	2160	3100	5700
6	1515	3510	4000	7200	900	2502	2900	6100	930	1920	2500	4800
加工内容 Processing	Ad		Pf		Ad		Pf		Ad		Pf	
粗加工	≦0.1D	≦0.08D	≦0.3D	≦0.24D	≦0.07D	≦0.05D	≦0.21D	≦0.15D	≦0.07D	≦0.05D	≦0.21D	≦0.15D
精加工	≦0.03D	≦0.02D	≦0.1D	≦0.05D	≦0.02D	≦0.01D	≦0.05D	≦0.05D	≦0.02D	≦0.01D	≦0.05D	≦0.05D

面取り加工用 Chamfering

ドリル Drill