

# CX200 3枚刃スクエアエンドミル

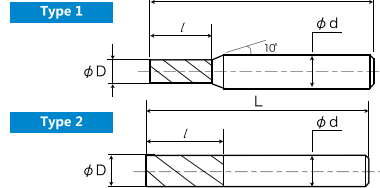
CX200 Series 3-Flute Square End Mill

## CX200-HEM3



**CX200-HEM3010**

Model Flute D



### 特性 Features

- CX200-Coating is new epoch-Making Coating 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 opular coating which is existing in the market
- 3-Flutes eliminates chattering and realizes processing from drilling to grooving without steps.
- CKK original designed chip-pocket enables similar or same cutting depth. And then feed rate can be increased more than double if compare with normal square endmill.

MG  
超微粒

45°  
Corner  
Protect

CX200  
Coat

外径公差 Tolerance

0

-0.02

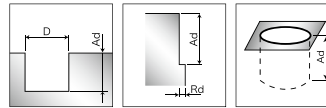
炭素鋼 Carbon Steel	合金鋼 Alloy Steel	調質鋼 Prehardened Steel	焼き入れ鋼 Hardened Steel	鋼鉄 Cast Iron	ステンレス鋼 Stainless Steels	アルミ合金 Aluminum Alloys	銅合金 Copper Alloys	チタン合金 耐熱合金 Ti/Ni Alloy	グラファイト Graphite	樹脂 Resin
◎	◎	◎	◎	○	◎	○	○	○	○	○

◎=Best ○=Good

MODEL 型番	D 外径	l 刃長	L 全長	d シャンク径	Type
CX200-HEM3010	1	4	60	6	1
CX200-HEM3015	1.5	6	60	6	1
CX200-HEM3020	2	8	60	6	1
CX200-HEM3025	2.5	10	60	6	1
CX200-HEM3030	3	16	60	6	1
CX200-HEM3040	4	18	60	6	1
CX200-HEM3050	5	21	60	6	1
CX200-HEM3060	6	21	60	6	2
CX200-HEM3070	7	24	70	8	1
CX200-HEM3075	7.5	24	70	8	1
CX200-HEM3080	8	26	75	8	2
CX200-HEM3090	9	26	80	10	1
CX200-HEM3100	10	34	90	10	2
CX200-HEM3110	11	34	100	12	1
CX200-HEM3120	12	38	100	12	2
CX200-HEM3160	16	48	110	16	2
CX200-HEM3200	20	56	130	20	2

# CX200-HEM3

### 推奨切削条件 Standard Milling Condition



- The table shows 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 speed and Revolution at same ratio.
- When mounting End Mills, the run out of the lip will have to be set within 0.01mm.
- In case of milling for stainless steel, please take wet cut milling.

### 溝切削 Slotting

切削材 Work Material	炭素鋼 Carbon Steel S 45-S55 C			合金鋼 工具鋼 Alloy Steel Tool Steel SKD5CM			調質鋼 プリハードン鋼 Prehardened Steel 35-40HRC/HPM/NAK		
	送り速度 (mm/min) Feed rate	回転数 (min <sup>-1</sup> ) Revolution	送り速度 (mm/min) Feed rate	回転数 (min <sup>-1</sup> ) Revolution	送り速度 (mm/min) Feed rate	回転数 (min <sup>-1</sup> ) Revolution			
外径 Diameter									
1 ~ 1.5	277	25000	150	22300	127	19100			
2 ~ 2.5	457	14700	232	12300	202	10700			
3	502	10600	255	9000	232	8000			
4	525	8000	270	6800	240	6000			
5	592	6400	300	5400	270	4800			
6	585	5300	300	4500	270	4000			
7 ~ 7.5	577	4500	307	3900	262	3400			
8	585	4000	300	3400	270	3000			
9	592	3500	307	3000	277	2700			
10	570	3200	292	2700	262	2400			
11	570	2900	300	2500	262	2200			
12	577	2700	300	2300	262	2000			
16	472	2000	240	1700	210	1500			
20	345	1600	180	1400	157	1200			

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### 側面切削 Side Milling

切削材 Work Material	炭素鋼 Carbon Steel S 45-S55 C				合金鋼 工具鋼 Alloy Steel Tool Steel SKD5CM				調質鋼 プリハードン鋼 Prehardened Steel 35-40HRC/HPM/NAK			
	送り速度 (mm/min) Feed rate		回転数 (min <sup>-1</sup> ) Revolution		送り速度 (mm/min) Feed rate		回転数 (min <sup>-1</sup> ) Revolution		送り速度 (mm/min) Feed rate		回転数 (min <sup>-1</sup> ) Revolution	
外径 Diameter												
1 ~ 1.5	412	637	25000	50000	277	427	22300	44600	232	367	19100	38200
2 ~ 2.5	682	1050	14700	29400	435	667	12300	24700	375	577	10700	21500
3	750	1147	10600	21200	480	735	9000	18000	427	652	8000	15900
4	787	1200	8000	15900	502	772	6800	13500	442	682	6000	11900
5	877	1342	6400	12700	562	862	5400	10800	495	757	4800	9500
6	877	1350	5300	10600	562	862	4500	9000	502	765	4000	8000
7 ~ 7.5	862	1342	4500	9100	570	862	3900	7700	495	757	3400	6800
8	870	1342	4000	8000	562	862	3400	6800	495	757	3000	6000
9	885	1380	3500	7100	570	877	3000	6000	517	780	2700	5300
10	855	1312	3200	6400	547	840	2700	5400	487	742	2400	4800
11	855	1312	2900	5800	555	832	2500	4900	487	735	2200	4300
12	862	1305	2700	5300	555	840	2300	4500	480	742	2000	4000
16	697	1072	2000	4000	450	690	1700	3400	397	607	1500	3000
20	510	787	1600	3200	337	502	1400	2700	292	450	1200	2400

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### 突っ込み切削 Perforating

切削材 Work Material	炭素鋼 Carbon Steel S 45-S55 C			合金鋼 工具鋼 Alloy Steel Tool Steel SKD5CM			調質鋼 プリハードン鋼 Prehardened Steel 35-40HRC/HPM/NAK		
	送り速度 (mm/min) Feed rate	回転数 (min <sup>-1</sup> ) Revolution	送り速度 (mm/min) Feed rate	回転数 (min <sup>-1</sup> ) Revolution	送り速度 (mm/min) Feed rate	回転数 (min <sup>-1</sup> ) Revolution			
外径 Diameter									
1 ~ 1.5	70	15000	40	15000	50	15000			
2 ~ 2.5	100	11000	60	9100	60	9100			
3	200	9500	90	6000	100	6000			
4	210	7200	110	4500	110	4500			
5	260	5700	110	3600	120	3600			
6	300	4800	140	3000	130	3000			
7 ~ 7.5	300	4100	140	2600	110	2600			
8	300	3600	120	2300	100	2300			
9	300	3200	90	2000	90	2000			
10	290	2900	90	1800	80	1800			
11	280	2600	90	1600	80	1600			
12	260	2400	80	1500	70	1500			
16	210	1800	60	1100	60	1100			
20	160	1400	50	900	50	900			

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スクエア Square

スクエア Square

半径 Radius

ボール Ball

ロングネック Long Neck

ラフヘンチング Roughing

面取り/面出し Chamfering

ドリル Drill

スクエア Square

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