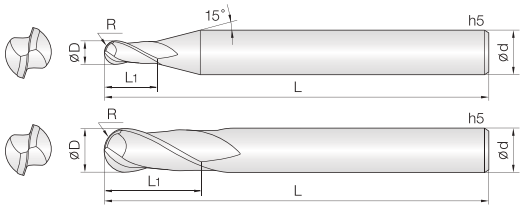
2CPB

2 Flutes Ball End Mills for Composite

2刃 复合材料加工用 球头铣刀



- **钢化玻璃 CRRP、GFRP、玻璃/碳纤维、铜以及铜合金等，非铁非金属类多种复合材料加工专用铣刀**
- 在多种复合材料加工领域，发挥卓越的性能。
- 涂层表面硬度高，耐磨性非常优秀。
- 采用摩擦系数低的金刚石涂层技术，实现了粘刃现象的最小化。

- **Endmills for CFRP, GFRP, glass/carbon fiber, nonferrous and non-metallic materials.**
- Outstanding performance in machining of various composite materials.
- Excellent wear resistance by applying high hardness coating layer.
- Minimize built up edge by low friction diamond coating technology.

2 | WC 미립자 | NANO DIA. Coating | R ±0.005 (0.25 ~ 0.5R) | R ±0.01 (0.75 ~ 6R) | 30° Helix Angle | CUTTING DATA 347P

D Size	D Tolerance
::0.5 ~ 1	+0 ~ −0.01mm
::1.5 ~ 12	−0.005 ~ −0.02mm

单位：mm

Order Number	刃径 Diameter R . D	刃长 Length of cut L1	全长 Overall Length L	柄径 Shank Dia d	备注
2CPB 005 010 S04	0.25R X 0.5	1	50	4	
2CPB 006 012 S04	0.3R X 0.6	1.2	50	4	
2CPB 008 020 S04	0.4R X 0.8	2	50	4	
2CPB 010 025 S04	0.5R X 1	2.5	50	4	
2CPB 015 040 S04	0.75R X 1.5	4	50	4	
2CPB 020 050 S04	1R X 2	5	50	4	
2CPB 025 060 S04	1.25R X 2.5	6	50	4	
2CPB 030 080 S06	1.5R X 3	8	60	6	
2CPB 040 080 S06	2R X 4	8	70	6	
2CPB 050 100 S06	2.5R X 5	10	80	6	
2CPB 060 120 080	3R X 6	12	80	6	
2CPB 060 120 110	3R X 6	12	110	6	

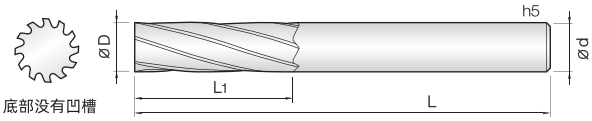
Order Number	刃径 Diameter R . D	刃长 Length of cut L1	全长 Overall Length L	柄径 Shank Dia d	备注
2CPB 080 140 080	4R X 8	14	80	8	
2CPB 080 140 110	4R X 8	14	110	8	
2CPB 100 180 080	5R X 10	18	80	10	
2CPB 100 180 110	5R X 10	18	110	10	
2CPB 120 220 080	6R X 12	22	80	12	
2CPB 120 220 110	6R X 12	22	110	12	

FOR COMPOSITE

8~12CPE

8~12 Flutes Finishing End Mills for Composite

8~12刃 复合材料加工用 精加工铣刀



底部没有凹槽
No flutes - in the bottom

- **钢化玻璃 CRRP、GFRP、玻璃/碳纤维、铜以及铜合金等，非铁非金属类多种复合材料加工专用铣刀**
- 在多种复合材料加工领域，发挥卓越的性能。
- 涂层表面硬度高，耐磨性非常优秀。
- 采用摩擦系数低的金刚石涂层技术，实现了粘刃现象的最小化。

- **Endmills for CFRP, GFRP, glass/carbon fiber, graphite, nonferrous and non-metallic materials.**
- Outstanding performance in machining of various composite materials.
- Excellent wear resistance by applying high hardness coating layer.
- Minimize built up edge by low friction diamond coating technology.

8 ~ 12 | WC 미립자 | NANO DIA. Coating | D −0.01 ~ −0.025 (::6~::12) | 15° Helix Angle | CUTTING DATA 347P

D Size	D Tolerance
::6 ~ 12	−0.01 ~ −0.025mm

单位：mm

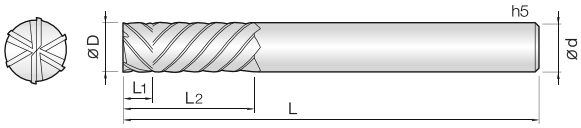
Order Number	刃径 Diameter D	刃长 Length of cut L1	全长 Overall Length L	柄径 Shank Dia d	备注
8CPE 060 180 080	6	18	80	6	
10CPE 080 240 080	8	24	80	8	
12CPE 100 300 100	10	30	100	10	
12CPE 120 360 100	12	36	100	12	

Order Number	刃径 Diameter D	刃长 Length of cut L1	全长 Overall Length L	柄径 Shank Dia d	备注

3&4&6CPR

3~6 Flutes Compresion Router for Composite

3~6刃复合材料加工用 左右螺旋铣刀



- **钢化玻璃（CRRP）、玻璃/碳纤维、铜以及铜合金等，非铁非金属类多种复合材料加工专用铣刀**
- 左右螺旋角铣刀在进行侧铣加工时，被加工材料更稳定。
- 被加工材料不会出现毛刺。
- 涂层表面硬度高，耐磨性非常优秀。
- 采用摩擦系数低的金刚石涂层技术，实现了粘刃现象的最小化。
- **Router for CFRP, GFRP, glass/carbon fiber, graphite, nonferrous and non-metallic materials.**
- No up-moving work material at wall cutting.
- No burr in work materials.
- Excellent wear resistance by applying high hardness coating layer.
- Minimize built up edge by low friction diamond coating technology.

3 | 4 | 6 | WC 미립자 | GTAC Coating (3F) | NANO DIA. Coating (4F, 6F) | D -0.01 -0.025 (::6~::12) | 30° Helix Angle | Shield Edge | CUTTING DATA 348P

D Size	D Tolerance
::6 ~ 12	−0.01~ −0.025mm

单位：mm

Order Number GTAC 涂层 GTAC Coating	刃径 Diameter D	刃长 Length of cut L1	有效长 Length of cut L2	全长 Overall Length L	柄径 Shank Dia d	备注
3CPR 060 200 S06	6	5	20	70	6	
3CPR 080 250 S08	8	5	25	80	8	
3CPR 100 270 S10	10	6	27	80	10	
3CPR 120 300 S12	12	6	30	80	12	

Order Number 金刚石涂层 DIA Coating	刃径 Diameter D	刃长 Length of cut L1	有效长 Length of cut L2	全长 Overall Length L	柄径 Shank Dia d	备注
4CPR 060 200 S06	6	5	20	70	6	
6CPR 080 250 S08	8	5	25	80	8	
6CPR 100 270 S10	10	6	27	80	10	
6CPR 120 300 S12	12	6	30	80	12	

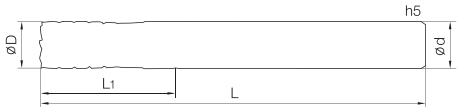
6~16CPO

6~16 Flutes Router for Composite

6~16刃 复合材料加工用 玉米铣刀

A Type

B Type



- **钢化玻璃（CRRP）、玻璃/碳纤维、铜以及铜合金等，非铁非金属类多种复合材料加工专用铣刀**
- 左右螺旋角铣刀在进行侧铣加工时，被加工材料更稳定。
- 被加工材料不会出现毛刺。
- 涂层表面硬度高，耐磨性非常优秀。
- 采用摩擦系数低的金刚石涂层技术，实现了粘刃现象的最小化。
- **Router for CFRP, GFRP, glass/carbon fiber, graphite, nonferrous and non-metallic materials.**
- Outstanding performance in roughing of various composite materials.
- A type has many bottom edges and optimized for slotting.
- B type has two bottom edges and excellent performance in vertical, horizontal machining.
- Excellent wear resistance by applying high hardness coating layer.
- Minimize built up edge by low friction diamond coating technology.

6 ~ 16 | WC 미립자 | NANO DIA. Coating | D +0 -0.01 (::2~::5) | D -0.01 -0.025 (::6~::12) | 30° Helix Angle | Shield Edge | CUTTING DATA 348P

D Size	D Tolerance
::2 ~ 5	+0~ −0.01mm
::6 ~ 12	−0.005 ~ −0.02mm

单位：mm

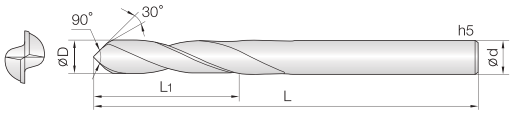
Order Number	刃径 Diameter D	刃长 Length of cut L1	有效长 Overall Length L	全长 Type	柄径 Shank Dia d	备注
6CPOA 020 070 S04	2	7	40	A	4	
6CPOB 020 070 S04	2	7	40	B	4	
6CPOA 030 120 S04	3	12	50	A	4	
6CPOB 030 120 S04	3	12	50	B	4	
8CPOA 040 160 S04	4	16	60	A	4	
8CPOB 040 160 S04	4	16	60	B	4	
10CPOA 050 200 S06	5	20	60	A	6	
10CPOB 050 200 S06	5	20	60	B	6	
10CPOA 060 200 S06	6	20	70	A	6	
10CPOB 060 200 S06	6	20	70	B	6	

Order Number	刃径 Diameter D	刃长 Length of cut L1	有效长 Overall Length L	全长 Type	柄径 Shank Dia d	备注
12CPOA 080 250 S08	8	25	80	A	8	
12CPOB 080 250 S08	8	25	80	B	8	
14CPOA 100 270 S10	10	27	80	A	10	
14CPOB 100 270 S10	10	27	80	B	10	
16CPOA 120 300 S12	12	30	80	A	12	
16CPOB 120 300 S12	12	30	80	B	12	

2DDCA

2 Flutes Diamond Coated Drills for Composite

2刃 复合材料加工用 金刚石涂层钻头



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- 涂层表面硬度高，耐磨性非常优秀。
- 采用摩擦系数低的金刚石涂层技术，实现了粘刃现象的最小化。
- **Endmills for CFRP, GFRP, glass/carbon fiber, graphite, copper, copper alloy, nonferrous and non-metallic materials.**
- Outstanding performance in machining of various composite materials.
- Excellent wear resistance by applying high hardness coating layer.
- Minimize built up edge by low friction diamond coating technology.

2 | WC 미립자 | NANO DIA. Coating | D +0 −0.01 ::2~::5.5 | D −0.005 −0.015 ::6~::12 | 20° Helix Angle | CUTTING DATA 349P

D Size	D Tolerance
::2 ~ 5.5	+0 ~ −0.01mm
::6 ~ 12	−0.005 ~ −0.015mm

单位：mm

Order Number	刃径 Diameter D	刃长 Length of cut L1	全长 Overall Length L	柄径 Shank Dia d	备注
2DDCA 020 160 S04	2	16	60	4	
2DDCA 023 180 S04	2.3	18	60	4	
2DDCA 025 200 S04	2.5 X M3	20	60	4	
2DDCA 030 220 S04	3	22	60	4	
2DDCA 033 230 S04	3.3 X M4	23	60	4	
2DDCA 035 270 S04	3.5	27	60	4	
2DDCA 040 300 S04	4	30	60	4	
2DDCA 042 300 S06	4.2 X M5	30	80	6	
2DDCA 045 330 S06	4.5	33	80	6	
2DDCA 050 360 S06	5 X M6	36	80	6	
2DDCA 055 380 S06	5.5	38	80	6	
2DDCA 060 380 S06	6	38	80	6	
2DDCA 065 450 S08	6.5	45	90	8	
2DDCA 068 450 S08	6.8 X M8	45	90	8	
2DDCA 070 450 S08	7	45	90	8	
2DDCA 075 480 S08	7.5	48	90	8	
2DDCA 080 480 S08	8	48	90	8	
2DDCA 085 510 S10	8.5 X M10	51	110	10	
2DDCA 090 540 S10	9	54	110	10	
2DDCA 095 540 S10	9.5	54	110	10	
2DDCA 100 600 S10	10	60	110	10	
2DDCA 103 600 S12	10.3 X M12	60	110	12	
2DDCA 105 600 S12	10.5	60	110	12	
2DDCA 110 650 S12	11	65	110	12	
2DDCA 115 650 S12	11.5	65	110	12	
2DDCA 120 700 S12	12	70	120	12	

Order Number	刃径 Diameter D	刃长 Length of cut L1	全长 Overall Length L	柄径 Shank Dia d	备注

FOR COMPOSITE

■ JJ drills benefit（特点）

特殊的设计减少了毛刺的产生
Minimize burr by the best drill design

Machining Sample

2DDCA type　　Other manufacturer