

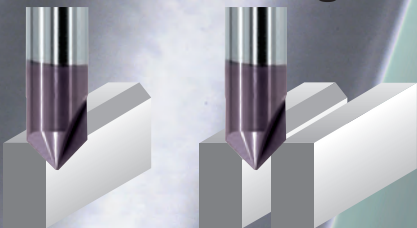
MIRACLE Chamfering Cutter

# VC-2C

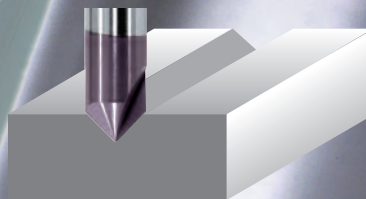
**VC-2C is a multi purpose chamfering cutter which can be used not only for chamfering, but also chamfering of hole, V slotting and center drilling.**

- Widely used for milling from raw materials to hardened steels and difficult-to-cut materials.
- VC-2C adopts MIRACLE coating (Al,Ti)N. It is possible to cut high speed and high efficient machining.
- Due to end cutting edge, it is possible to cut V slotting and center drilling.

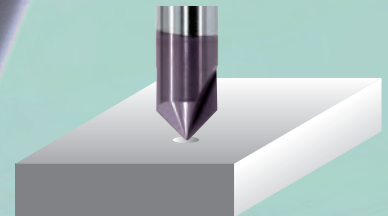
**Chamfering**



**V slotting**



**Center drilling**



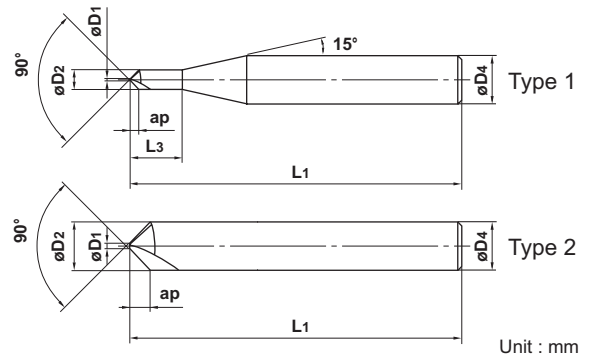
\*With end cutting edge.

## VC-2C

2 flute Chamfering Cutter



● It is possible to cut hardened steel & difficult-to-cut material.



Unit : mm

| Order Number     | Dia. D2 | Small mill Dia. D1 | Length of Cut ap | Neck Length L3 | Overall Length L1 | Shank Dia. D4 | No. of Flute N | Stock | Type |
|------------------|---------|--------------------|------------------|----------------|-------------------|---------------|----------------|-------|------|
| <b>VC2CD0200</b> | 2       | 0.3                | 0.85             | 6              | 50                | 6             | 2              | ●     | 1    |
| <b>D0400</b>     | 4       | 0.3                | 1.85             | 12             | 50                | 6             | 2              | ●     | 1    |
| <b>D0600</b>     | 6       | 0.3                | 2.85             | —              | 50                | 6             | 2              | ●     | 2    |
| <b>D0800</b>     | 8       | 0.4                | 3.8              | —              | 60                | 8             | 2              | ●     | 2    |
| <b>D1000</b>     | 10      | 0.5                | 4.75             | —              | 70                | 10            | 2              | ●     | 2    |
| <b>D1200</b>     | 12      | 0.5                | 5.75             | —              | 75                | 12            | 2              | ●     | 2    |

● : Inventory maintained.

| Work material | Carbon steel, Alloy steel (-30HRC)<br>AISI 1049, SCM<br>Cast iron FC250 |                                 | Alloy steel, Tool steel<br>Pre-hardened steel (30-45HRC)<br>AISI H13 NAK |                                 | Austenitic stainless steel<br>AISI 304, AISI 316 |                                 | Hardened steel (45-55HRC)<br>AISI H13 |                                 |
|---------------|---|---------------------------------|--|---------------------------------|--|---------------------------------|---------------------------------------|---------------------------------|
|               | Dia. (mm)   | Revolution (min <sup>-1</sup> ) | Feed rate (mm/min)   | Revolution (min <sup>-1</sup> ) | Feed rate (mm/min)                               | Revolution (min <sup>-1</sup> ) | Feed rate (mm/min)                    | Revolution (min <sup>-1</sup> ) |
| <b>2</b>      | 16,000  | 960                             | 11,000   | 590                             | 9,500  | 460                             | 8,000                                 | 320                             |
| <b>4</b>      | 8,000   | 480                             | 5,600  | 300                             | 4,800  | 230                             | 4,000                                 | 160                             |
| <b>6</b>      | 5,300   | 320                             | 3,700  | 200                             | 3,200  | 150                             | 2,700                                 | 110                             |
| <b>8</b>      | 4,000   | 240                             | 2,800  | 150                             | 2,400  | 120                             | 2,000                                 | 80                              |
| <b>10</b>     | 3,200   | 190                             | 2,200  | 120                             | 1,900  | 90                              | 1,600                                 | 60                              |
| <b>12</b>     | 2,700   | 160                             | 1,900  | 100                             | 1,600  | 80                              | 1,300                                 | 50                              |

| Depth of cut | Camfering |                             | Chamfering milling of hole |             |
|--------------|-----------|-----------------------------|----------------------------|-------------|
|              |           | $\leq 0.3D$<br>(MAX. 2.5mm) |                            | $\leq 0.2D$ |
|              | D: Dia.   |                             |                            |             |

1) The above table shows cutting condition for chamfering milling.

For V slotting, please reduce the feed rate at 1/3 or below of the above value. For center drilling, please reduce the feed rate at 1/5 or below of the above value.

2) If the rigidity of the machine or the material installation is very low, or chattering is generated, please reduce the revolution and the feed rate of the above table proportionately.

3) In cutting austenitic stainless steels or hardened steels, cutting oil is recommended.



JQA-2522  
JQA-EM0941

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