

## IMPACT MIRACLE END MILLS

**VFSD**End mill, Short cut length, 4/6 flutes,  
For hardened materials

D1&lt;3

D1≥3

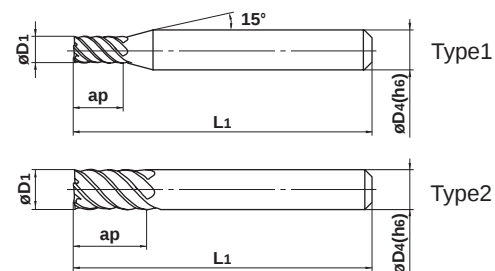
D1&lt;3

D1≥3

Carbon Steel, Alloy Steel, Cast Iron  
(≤30HRC)Tool Steel, Pre-Hardened Steel, Hardened Steel  
(≤45HRC)Hardened Steel  
(≤55HRC)Hardened Steel  
(>55HRC)Austenitic  
Stainless SteelTitanium Alloy,  
Heat Resistant Alloy

Copper Alloy

Aluminium Alloy



|              |              |              |  |  |
|--------------|--------------|--------------|--|--|
| 1≤D1≤12      |              |              |  |  |
| 0<br>- 0.02  |              |              |  |  |
| D4=6         | 8≤D4≤10      | D4=12        |  |  |
| 0<br>- 0.008 | 0<br>- 0.009 | 0<br>- 0.011 |  |  |

- End mill with Impact Miracle coating for high hardened materials.

Unit : mm

| Order Number | D1  | ap | L1 | D4 | Flutes | Stock | Type |
|--------------|-----|----|----|----|--------|-------|------|
| VFSD0100     | 1   | 2  | 45 | 6  | 4      | ●     | 1    |
| D0150        | 1.5 | 3  | 45 | 6  | 4      | ●     | 1    |
| D0200        | 2   | 4  | 45 | 6  | 4      | ●     | 1    |
| D0250        | 2.5 | 5  | 45 | 6  | 4      | ●     | 1    |
| D0300        | 3   | 6  | 45 | 6  | 6      | ●     | 1    |
| D0350        | 3.5 | 7  | 45 | 6  | 6      | ●     | 1    |
| D0400        | 4   | 8  | 45 | 6  | 6      | ●     | 1    |
| D0500        | 5   | 10 | 50 | 6  | 6      | ●     | 1    |
| D0600        | 6   | 12 | 50 | 6  | 6      | ●     | 2    |
| D0800        | 8   | 16 | 60 | 8  | 6      | ●     | 2    |
| D1000        | 10  | 20 | 70 | 10 | 6      | ●     | 2    |
| D1200        | 12  | 24 | 75 | 12 | 6      | ●     | 2    |

● : Inventory maintained.