

## RECOMMENDED CUTTING CONDITIONS

|          | Work Material               | Hardness                       | Grade         | Cutting Speed (m/min) | Feed per Tooth (mm/tooth) |
|----------|-----------------------------|--------------------------------|---------------|-----------------------|---------------------------|
| <b>P</b> | Carbon Steel<br>Alloy Steel | 180—280HB                      | <b>VP15TF</b> | 250 (150—350)         | 0.1 (0.05—0.15)           |
|          |                             | 280—380HB                      | <b>VP15TF</b> | 200 (100—300)         |                           |
| <b>K</b> | Cast Iron                   | Tensile Strength<br>≤350MPa    | <b>AP10H</b>  | 350 (200—500)         | 0.1 (0.05—0.15)           |
|          |                             |                                | <b>MB710</b>  | 1500 (1000—2000)      |                           |
|          | Ductile<br>Cast Iron        | Tensile Strength<br>360—500MPa | <b>AP10H</b>  | 250 (150—350)         | 0.1 (0.05—0.15)           |
|          |                             |                                | <b>MB710</b>  | 1000 (800—1200)       |                           |
|          |                             | Tensile Strength<br>500—800MPa | <b>AP10H</b>  | 200 (100—300)         | 0.1 (0.05—0.15)           |
|          |                             |                                | <b>MB710</b>  | 1000 (800—1200)       |                           |

● Revolution ( $\text{min}^{-1}$ ) =  $(1000 \times \text{Cutting Speed}) \div (3.14 \times \phi D_1)$

● Table Feed (mm/min) = Feed per Tooth × Number of Teeth × Cutter Revolution

(Note 1) Recommended radial depth of cut is 0.1mm.

(Note 2) 2 directional vertical cutting is recommended for efficiency.

(Note 3) For crossfeed cutting, feed per tooth should be reduced to less than 0.05 (mm/tooth).