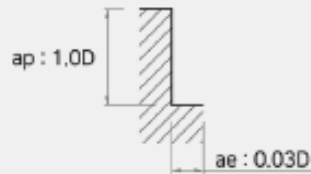


## □ ESE702 SERIES ▶ Side Cutting

| Workpiece     | Hardened Steels<br>Heat Resistant Steels |       | Hardened Steels |       |               |      |               |      |               |      |                |      |
|---------------|--|-------|-----------------|-------|---------------|------|---------------|------|---------------|------|----------------|------|
|               | HRc30 ~ HRc40                            |       | HRc40 ~ HRc50   |       | HRc50 ~ HRc55 |      | HRc55 ~ HRc60 |      | HRc60 ~ HRc65 |      | HRc 65 ~ HRc70 |      |
| Hardness      | RPM                                      | FEED  | RPM             | FEED  | RPM           | FEED | RPM           | FEED | RPM           | FEED | RPM            | FEED |
| Diameter (mm) | RPM                                      | FEED  | RPM             | FEED  | RPM           | FEED | RPM           | FEED | RPM           | FEED | RPM            | FEED |
| 1             | 48,000                                   | 1,050 | 38,000          | 820   | 25,500        | 510  | 20,500        | 310  | 16,000        | 190  | 12,500         | 125  |
| 2             | 33,300                                   | 1,200 | 26,000          | 970   | 17,500        | 600  | 14,500        | 370  | 11,000        | 230  | 9,500          | 165  |
| 3             | 21,800                                   | 1,200 | 17,300          | 970   | 11,500        | 600  | 9,500         | 370  | 7,500         | 230  | 6,400          | 165  |
| 4             | 16,700                                   | 1,250 | 13,200          | 1,000 | 8,800         | 625  | 7,200         | 385  | 5,600         | 240  | 4,750          | 170  |
| 5             | 15,700                                   | 1,450 | 12,500          | 1,150 | 8,300         | 710  | 6,400         | 410  | 5,100         | 260  | 4,450          | 190  |
| 6             | 13,100                                   | 1,350 | 10,350          | 1,100 | 6,900         | 690  | 5,300         | 400  | 4,200         | 255  | 3,700          | 185  |
| 8             | 9,880                                    | 1,320 | 7,800           | 1,030 | 5,200         | 635  | 4,000         | 365  | 3,200         | 235  | 2,800          | 170  |
| 10            | 7,800                                    | 1,200 | 6,150           | 970   | 4,100         | 590  | 3,200         | 340  | 2,550         | 220  | 2,200          | 160  |
| 12            | 6,650                                    | 1,200 | 5,250           | 970   | 3,500         | 590  | 2,650         | 340  | 2,100         | 220  | 1,860          | 160  |
| 16            | 4,900                                    | 1,050 | 3,900           | 840   | 2,600         | 520  | 2,000         | 300  | 1,600         | 190  | 1,400          | 140  |
| 20            | 3,900                                    | 950   | 3,100           | 750   | 2,050         | 475  | 1,600         | 275  | 1,300         | 175  | 1,100          | 125  |

RPM = rev/min  
FEED = mm/min



## □ ESE702 SERIES ▶ Slotting

| Workpiece     | Hardened Steels<br>Heat Resistant Steels |       | Hardened Steels |      |               |      |               |      |               |      |                |      |
|---------------|--|-------|-----------------|------|---------------|------|---------------|------|---------------|------|----------------|------|
|               | HRc30 ~ HRc40                            |       | HRc40 ~ HRc50   |      | HRc50 ~ HRc55 |      | HRc55 ~ HRc60 |      | HRc60 ~ HRc65 |      | HRc 65 ~ HRc70 |      |
| Hardness      | RPM                                      | FEED  | RPM             | FEED | RPM           | FEED | RPM           | FEED | RPM           | FEED | RPM            | FEED |
| Diameter (mm) | RPM                                      | FEED  | RPM             | FEED | RPM           | FEED | RPM           | FEED | RPM           | FEED | RPM            | FEED |
| ~0.2          | 50,000                                   | 130   | 45,000          | 115  | 40,000        | 95   | 33,000        | 60   | 33,000        | 45   | 26,400         | 30   |
| 0.3           | 50,000                                   | 190   | 45,000          | 140  | 40,000        | 115  | 33,000        | 70   | 25,000        | 50   | 20,000         | 35   |
| 0.4           | 50,000                                   | 235   | 45,000          | 180  | 40,000        | 140  | 33,000        | 90   | 25,000        | 55   | 20,000         | 40   |
| 0.5           | 50,000                                   | 370   | 45,000          | 280  | 40,000        | 220  | 33,000        | 140  | 25,000        | 85   | 20,000         | 60   |
| 0.6           | 50,000                                   | 470   | 45,000          | 360  | 40,000        | 285  | 33,000        | 160  | 25,000        | 105  | 20,000         | 75   |
| 0.8           | 50,000                                   | 600   | 40,000          | 440  | 30,000        | 295  | 25,000        | 185  | 19,000        | 110  | 15,200         | 80   |
| 0.9           | 49,000                                   | 655   | 39,000          | 520  | 27,800        | 330  | 22,700        | 205  | 17,500        | 125  | 14,000         | 90   |
| 1             | 48,000                                   | 750   | 38,000          | 570  | 25,500        | 360  | 20,500        | 215  | 16,000        | 135  | 12,500         | 85   |
| 2             | 33,300                                   | 850   | 26,000          | 680  | 17,500        | 420  | 14,500        | 260  | 11,000        | 160  | 9,500          | 115  |
| 3             | 21,800                                   | 850   | 17,300          | 680  | 11,500        | 420  | 9,500         | 260  | 7,500         | 160  | 6,400          | 115  |
| 4             | 16,700                                   | 880   | 13,200          | 700  | 8,800         | 440  | 7,200         | 270  | 5,600         | 170  | 4,750          | 118  |
| 5             | 15,700                                   | 1,000 | 12,500          | 805  | 8,300         | 500  | 6,400         | 285  | 5,100         | 180  | 4,450          | 132  |
| 6             | 13,100                                   | 950   | 10,350          | 770  | 6,900         | 480  | 5,300         | 280  | 4,200         | 180  | 3,700          | 130  |
| 8             | 9,880                                    | 930   | 7,800           | 720  | 5,200         | 445  | 4,000         | 255  | 3,200         | 165  | 2,800          | 120  |
| 10            | 7,800                                    | 850   | 6,150           | 680  | 4,100         | 415  | 3,200         | 240  | 2,550         | 155  | 2,200          | 122  |
| 12            | 6,650                                    | 850   | 5,250           | 680  | 3,500         | 415  | 2,650         | 240  | 2,100         | 155  | 1,860          | 112  |
| 16            | 4,900                                    | 730   | 3,900           | 580  | 2,600         | 365  | 2,000         | 210  | 1,600         | 135  | 1,400          | 95   |
| 20            | 3,900                                    | 660   | 3,100           | 525  | 2,050         | 335  | 1,600         | 195  | 1,300         | 125  | 1,100          | 85   |

RPM = rev/min  
FEED = mm/min

