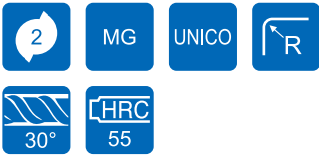
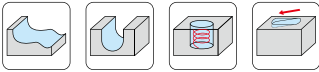
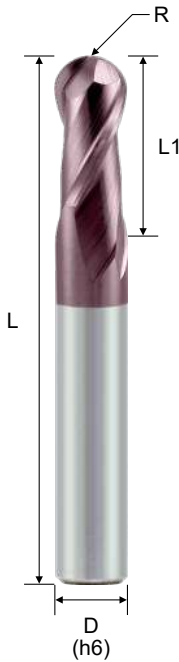


G550 - Ball Nose · 2F

- UNICO Coating provides superior wear resistance and reduces the coefficient of friction.
- Suitable for HRC 30 to HRC 55 Ordinary Steel, Alloy Steel, Cast Iron, Heat-Resistant Steel, etc.
- It provides an excellent surface due to better surface grindings.
- New tool geometry increases wear resistance and cutting force is decreased.
- Suitable for high speed profile surface milling.

EPBSC



| R Tolerance |        |
|-------------|--------|
| R ≤ 3       | ±0.015 |
| R > 3       | ±0.020 |

| Order No.      | Radius (R) | Dia. (d) | CL (L1) | OAL (L) | Shank (D) | Flutes (F) |
|----------------|------------|----------|---------|---------|-----------|------------|
| * EPBSC240200U | 0.10R      | 0.2      | 0.4     | 50      | 4         | 2          |
| * EPBSC240300U | 0.15R      | 0.3      | 0.6     | 50      | 4         | 2          |
| * EPBSC240400U | 0.20R      | 0.4      | 0.8     | 50      | 4         | 2          |
| * EPBSC240500U | 0.25R      | 0.5      | 1.0     | 50      | 4         | 2          |
| * EPBSC240600U | 0.30R      | 0.6      | 1.2     | 50      | 4         | 2          |
| * EPBSC240700U | 0.35R      | 0.7      | 1.4     | 50      | 4         | 2          |
| * EPBSC240800U | 0.40R      | 0.8      | 1.6     | 50      | 4         | 2          |
| * EPBSC240900U | 0.45R      | 0.9      | 1.8     | 50      | 4         | 2          |
| * EPBSC241000U | 0.50R      | 1.0      | 2.0     | 50      | 4         | 2          |
| * EPBSC241500U | 0.75R      | 1.5      | 3.0     | 50      | 4         | 2          |
| * EPBSC242000U | 1.00R      | 2.0      | 4.0     | 50      | 4         | 2          |
| EPBSC233000U   | 1.50R      | 3.0      | 6.0     | 50      | 3         | 2          |
| * EPBSC243000U | 1.50R      | 3.0      | 6.0     | 50      | 4         | 2          |
| * EPBSC244000U | 2.00R      | 4.0      | 8.0     | 50      | 4         | 2          |
| EPBSC203000U   | 1.50R      | 3.0      | 6.0     | 50      | 6         | 2          |
| EPBSC204000U   | 2.00R      | 4.0      | 8.0     | 50      | 6         | 2          |
| EPBSC205000U   | 2.50R      | 5.0      | 10.0    | 50      | 6         | 2          |
| EPBSC206000U   | 3.00R      | 6.0      | 12.0    | 50      | 6         | 2          |
| EPBSC207000U   | 3.50R      | 7.0      | 14.0    | 60      | 8         | 2          |
| EPBSC208000U   | 4.00R      | 8.0      | 16.0    | 60      | 8         | 2          |
| EPBSC210000U   | 5.00R      | 10.0     | 20.0    | 75      | 10        | 2          |
| EPBSC212000U   | 6.00R      | 12.0     | 24.0    | 75      | 12        | 2          |
| EPBSC216000U   | 8.00R      | 16.0     | 32.0    | 100     | 16        | 2          |
| EPBSC220000U   | 10.00R     | 20.0     | 40.0    | 100     | 20        | 2          |

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Cutting conditions : Table 035

## Recommended Cutting Conditions

Table 035

**H600 Seires EHBSC2** (H600 Series, vc, rpm and feed increase 20%)**G550 Seires EPBSC2**

| Material | CARBON STEEL / ALLOY STEEL |                  |            |            | ALLOY STEEL / TOOL STEEL<br>SCM, SKT, SKD |                  |            |            | PREHARDENED STEEL<br>NAK80 CENA1 |                  |            |            |
|----------|----------------------------|------------------|------------|------------|-------------------------------------------|------------------|------------|------------|----------------------------------|------------------|------------|------------|
| Hardness | HB180~250                  |                  |            |            | HRC25~35                                  |                  |            |            | HRC35~45                         |                  |            |            |
| Vc       | 120 (m/min)                |                  |            |            | 95 (m/min)                                |                  |            |            | 79 (m/min)                       |                  |            |            |
| Radius   | RPM                        | Feed<br>(mm/min) | ap<br>(mm) | ae<br>(mm) | RPM                                       | Feed<br>(mm/min) | ap<br>(mm) | ae<br>(mm) | RPM                              | Feed<br>(mm/min) | ap<br>(mm) | ae<br>(mm) |
| 1R       | 37470                      | 936              | 0.14       | 0.2        | 29660                                     | 740              | 0.14       | 0.2        | 24660                            | 616              | 0.14       | 0.2        |
| 2R       | 18730                      | 1120             | 0.28       | 0.4        | 14830                                     | 890              | 0.28       | 0.4        | 12330                            | 740              | 0.28       | 0.4        |
| 3R       | 12490                      | 936              | 0.42       | 0.6        | 9890                                      | 740              | 0.42       | 0.6        | 8220                             | 616              | 0.42       | 0.6        |
| 4R       | 9366                       | 750              | 0.56       | 0.8        | 7415                                      | 593              | 0.56       | 0.8        | 6170                             | 494              | 0.56       | 0.8        |
| 5R       | 7490                       | 636              | 0.7        | 1          | 5930                                      | 504              | 0.7        | 1          | 4930                             | 420              | 0.7        | 1          |
| 6R       | 6244                       | 560              | 0.84       | 1.2        | 4940                                      | 444              | 0.84       | 1.2        | 4110                             | 370              | 0.84       | 1.2        |

| Material | HARDENED STEEL<br>SKD61, SKD11 |                  |            |            | STAINLESS STEEL<br>SUS304 316 |                  |            |            | CAST IRON<br>FC / FCD |                  |            |            |
|----------|--------------------------------|------------------|------------|------------|-------------------------------|------------------|------------|------------|-----------------------|------------------|------------|------------|
| Hardness | HRC 40~55)                     |                  |            |            |                               |                  |            |            |                       |                  |            |            |
| Vc       | 48 (m/min)                     |                  |            |            | 79 (m/min)                    |                  |            |            | 120 (m/min)           |                  |            |            |
| Radius   | RPM                            | Feed<br>(mm/min) | ap<br>(mm) | ae<br>(mm) | RPM                           | Feed<br>(mm/min) | ap<br>(mm) | ae<br>(mm) | RPM                   | Feed<br>(mm/min) | ap<br>(mm) | ae<br>(mm) |
| 1R       | 14990                          | 374              | 0.14       | 0.2        | 24660                         | 616              | 0.14       | 0.2        | 37470                 | 936              | 0.14       | 0.2        |
| 2R       | 7490                           | 450              | 0.28       | 0.4        | 12330                         | 740              | 0.28       | 0.4        | 18730                 | 1120             | 0.28       | 0.4        |
| 3R       | 4995                           | 374              | 0.42       | 0.6        | 8220                          | 616              | 0.42       | 0.6        | 12490                 | 936              | 0.42       | 0.6        |
| 4R       | 3750                           | 300              | 0.56       | 0.8        | 6170                          | 494              | 0.56       | 0.8        | 9366                  | 750              | 0.56       | 0.8        |
| 5R       | 3000                           | 255              | 0.7        | 1          | 4930                          | 420              | 0.7        | 1          | 7490                  | 636              | 0.7        | 1          |
| 6R       | 2500                           | 225              | 0.84       | 1.2        | 4110                          | 370              | 0.84       | 1.2        | 6244                  | 560              | 0.84       | 1.2        |

1. Use as highly rigid and accurate machine as possible.
2. If the rpm available is lower than the recommend condition, please reduce the feed rate to the same ratio.
3. Use long shank type please reduce the rpm and feed rate.
4. The Feed and RPM may be changed depending on the M/C conditions, lubricating and cooling system.

