

PLAIN SHANK  
GLATTER ZYLINDERSCHAFT

FLAT SHANK  
SEITLICHE MITNAHMEFLÄCHEN

# CARBIDE, 6 FLUTE 45° HELIX EXTRA LONG LENGTH VOLLHARTMETALL, 6 SCHNEIDEN 45° RECHTSSPIRALE EXTRA LANG

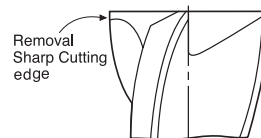
- ▶ Designed to machine high hardened materials.
- ▶ High speed cutting and finish milling with high feed rates.
- ▶ Superior workpiece finishes.
- ▶ Superior wear resistant.
- ▶ Suitable for dry milling.
- ▶ Geeignet zum Fräsen von hochgehärteten Stählen.
- ▶ Hochgeschwindigkeitsfräsen und Finishing mit erhöhtem Vorschub.
- ▶ Bessere Werkstückoberflächen
- ▶ Höhere Verschleißfestigkeit.
- ▶ Geeignet zum Trocken-Fräsen.



Unit : mm

| EDP No.  |          | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | No. of Flute |
|----------|----------|---------------|----------------|---------------|----------------|--------------|
| PLAIN    | FLAT     |               |                |               |                |              |
| EM834060 | EM844060 | 6.0           | 6              | 26            | 70             | 6            |
| EM834080 | EM844080 | 8.0           | 8              | 36            | 90             | 6            |
| EM834100 | EM844100 | 10.0          | 10             | 46            | 100            | 6            |
| EM834120 | EM844120 | 12.0          | 12             | 56            | 110            | 6            |
| EM834160 | EM844160 | 16.0          | 16             | 66            | 130            | 6            |
| EM834200 | EM844200 | 20.0          | 20             | 76            | 140            | 6            |
| EM834250 | EM844250 | 25.0          | 25             | 92            | 180            | 6            |

| Mill Dia. Tolerance(mm) | Shank Dia. Tolerance |
|-------------------------|----------------------|
| 0~-0.03                 | h6                   |

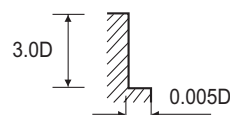
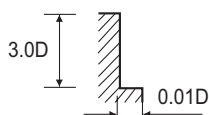


| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Copper | Graphite | Cast Iron | Aluminum | Stainless Steels | Titanium | Inconel |
|---------------|--------------|--------------------|-----------------|----------|----------------------|--------|----------|-----------|----------|------------------|----------|---------|
| ~HB225        | HB225~325    | HRc30~40           | HRc40~45        | HRc45~55 | HRc55~70             |        |          |           |          |                  |          |         |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |        |          |           |          |                  |          |         |

◎ : Excellent ○ : Good

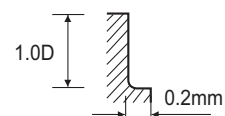
**CARBIDE, 6 FLUTE 45° HELIX EXTRA LONG - SIDE CUTTING**  
**VOLLHARTMETALL, 6 SCHNEIDEN 45° RECHTSSPIRALE EXTRA LANG - SEITENFRÄSEN**
**EM834, EM844 SERIES**

| MATERIAL | NON-ALLOYED STEELS<br>ALLOY STEELS |      | ALLOY STEELS<br>HEAT RESISTANT<br>STEELS |      | HARDENED STEELS              |      | HARDENED STEELS         |      |
|----------|------------------------------------|------|--|------|------------------------------|------|-------------------------|------|
| HARDNESS | ~ HRc40                            |      | HRc40 ~ HRc50                            |      | HRc50 ~ HRc60                |      | HRc60 ~ HRc65           |      |
| STRENGTH | ~ 1250N/mm <sup>2</sup>            |      | 1250 ~ 1750N/mm <sup>2</sup>             |      | 1750 ~ 2080N/mm <sup>2</sup> |      | 2080N/mm <sup>2</sup> ~ |      |
| DIAMETER | RPM                                | FEED | RPM                                      | FEED | RPM                          | FEED | RPM                     | FEED |
| 6.0      | 2230                               | 470  | 1670                                     | 350  | 1390                         | 250  | 1110                    | 200  |
| 8.0      | 1670                               | 450  | 1250                                     | 330  | 1050                         | 240  | 840                     | 180  |
| 10.0     | 1330                               | 440  | 1000                                     | 300  | 840                          | 230  | 680                     | 160  |
| 12.0     | 1110                               | 400  | 840                                      | 270  | 690                          | 210  | 560                     | 150  |
| 16.0     | 840                                | 330  | 630                                      | 230  | 530                          | 170  | 420                     | 130  |
| 20.0     | 670                                | 280  | 500                                      | 200  | 420                          | 150  | 320                     | 120  |
| 25.0     | 540                                | 240  | 400                                      | 170  | 340                          | 130  | 270                     | 95   |


 RPM = rev./min.  
 FEED = mm/min.

**CARBIDE, 6 FLUTE 45° HELIX CORNER RADIUS - SIDE CUTTING**  
**VOLLHARTMETALL, 6 SCHNEIDEN 45° RECHTSSPIRALE ECKENRADIUS - SEITENFRÄSEN**
**EM835, EM845 SERIES**
**HIGH SPEED**

| MATERIAL | ALLOY STEELS<br>HEAT RESISTANT<br>STEELS |      | HARDENED STEELS              |      | HARDENED STEELS         |      |
|----------|--|------|------------------------------|------|-------------------------|------|
| HARDNESS | ~ HRc50                                  |      | HRc50 ~ HRc60                |      | HRc60 ~ HRc65           |      |
| STRENGTH | ~ 1750N/mm <sup>2</sup>                  |      | 1750 ~ 2080N/mm <sup>2</sup> |      | 2080N/mm <sup>2</sup> ~ |      |
| DIAMETER | RPM                                      | FEED | RPM                          | FEED | RPM                     | FEED |
| 6.0      | 16800                                    | 6090 | 8400                         | 3050 | 4200                    | 1470 |
| 8.0      | 12600                                    | 6090 | 6300                         | 3050 | 3150                    | 1470 |
| 10.0     | 9980                                     | 5990 | 5040                         | 3050 | 2520                    | 1470 |
| 12.0     | 8400                                     | 5040 | 4200                         | 2520 | 2100                    | 1260 |
| 16.0     | 6300                                     | 3780 | 3150                         | 1890 | 1580                    | 950  |
| 20.0     | 5040                                     | 3050 | 2520                         | 1470 | 1260                    | 760  |


 RPM = rev./min.  
 FEED = mm/min.