

**Garant****GARANT Master Steel SlotMachine solid carbide roughing end mill HPC, TiAlN, Ø d11 DC: 12 mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 205556 12     |
| GTIN         | 4062406112141 |
| Item class   | 11X           |

**Description****Version:**

With a new-type knurled profile, optimised for higher feed rates. Improved cutting edge protection thanks to slight edge honing. Tremendous bending strength due to the use of ultra-fine grain substrate.

**Advantage:**

The tool geometry produces particularly tightly rolled swarf that is discharged via flat chip breaker recesses. As a result, the tool maintains an extremely stable core.

Plunge angle of up to 10° possible thanks to generous recess on the front face.

**Application:**

For roughing machining.

**Note:**

Particularly long neck recess for avoiding interference contours.

With conically increasing recess to guarantee stability at long overhangs.

Tolerance nominal Ø: d11

No. of teeth Z: 5

Helix angle: 42 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HB to h6

No. of teeth Z: 5

Flute length  $L_c$ : 26 mm

Overhang length  $L_1$  incl. recess: 73 mm

minimum shank recess dia.  $D_5$ : 10.8 mm

maximum shank recess dia.  $D_6$ : 11.6 mm

Overall length L: 120 mm

**Technical description**

|                                                             |                                  |
|-------------------------------------------------------------|----------------------------------|
| Overhang length $L_1$ incl. recess                          | 73 mm                            |
| Shank                                                       | DIN 6535 HB to h6                |
| No. of teeth Z                                              | 5                                |
| Direction of infeed                                         | horizontal, oblique and vertical |
| Flute length $L_c$                                          | 26 mm                            |
| Overall length L                                            | 120 mm                           |
| Feed $f_z$ for side milling in steel $< 900 \text{ N/mm}^2$ | 0.08 mm                          |
| maximum shank recess dia. $D_6$                             | 11.6 mm                          |
| Cutting edge $\varnothing D_c$                              | 12 mm                            |
| Shank $\varnothing D_s$                                     | 12 mm                            |
| Helix angle                                                 | 42 degrees                       |
| Tolerance nominal $\varnothing$                             | d11                              |
| Corner chamfer width at $45^\circ$                          | 0.6 mm                           |
| minimum shank recess dia. $D_5$                             | 10.8 mm                          |
| Corner chamfer angle                                        | 45 degrees                       |
| Series                                                      | GARANT Master Steel              |
| Coating                                                     | TiAlN                            |
| Tool material                                               | solid carbide                    |
| Standard                                                    | Manufacturer's standard          |
| Milling profile                                             | NR                               |
| Spacing of the cutters                                      | unequal spacing                  |
| Cutting width $a_e$ for milling operation                   | $0.3 \times D$ for side milling  |
| Through-coolant                                             | no                               |
| Machining strategy                                          | HPC                              |
| Colour ring                                                 | green                            |
| Type of product                                             | End mill                         |