

**Garant****GARANT Master Alu PickPocket solid carbide roughing end mill HPC, DLC, Ø e8 DC: 16mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 202004 16     |
| GTIN         | 4062406126032 |
| Item class   | 11X           |

**Description****Version:**

With the latest generation of DLC coating  $sp^2$ .

For roughing and finishing.

Up to  $2 \times D$  into solid material at very high feed rates and smooth cutting action.

Very high feed rates when plunging vertically.

Ramping capability up to  $45^\circ$ .

**Advantage:**

**Optimised flute form, eccentric relief ground, generous chip spaces.**

Tolerance nominal Ø: e8

No. of teeth Z: 3

Helix angle:  $42^\circ$

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HA to h6

Balance quality with shank: G 2.5 with HA

No. of teeth Z: 3

Flute length  $L_c$ : 31 mm

Overhang length  $L_1$  incl. recess: 42 mm

Recess Ø  $D_1$ : 15.8 mm

Overall length L: 92 mm

Shank Ø  $D_s$ : 16 mm

**Technical description**

|                |   |
|----------------|---|
| No. of teeth Z | 3 |
|----------------|---|

|                                                         |                                  |
|---------------------------------------------------------|----------------------------------|
| Balance quality with shank                              | G 2.5 with HA                    |
| Recess $\varnothing D_1$                                | 15.8 mm                          |
| Overall length L                                        | 92 mm                            |
| Overhang length $L_1$ incl. recess                      | 42 mm                            |
| Shank $\varnothing D_s$                                 | 16 mm                            |
| Direction of infeed                                     | horizontal, oblique and vertical |
| Shank                                                   | DIN 6535 HA to h6                |
| Flute length $L_c$                                      | 31 mm                            |
| Tolerance nominal $\varnothing$                         | e8                               |
| Feed $f_z$ for side milling in short-chipping aluminium | 0.18 mm                          |
| Helix angle                                             | 42 °                             |
| Cutting edge $\varnothing D_c$                          | 16 mm                            |
| Feed $f_z$ for slot milling in short-chipping aluminium | 0.14 mm                          |
| Corner rounding $r_v$                                   | 0.32 mm                          |
| Series                                                  | Master Alu                       |
| Coating                                                 | DLC                              |
| Tool material                                           | Solid carbide                    |
| Standard                                                | DIN 6527                         |
| Type                                                    | W                                |
| Helix angle characteristic                              | unequal spacing                  |
| Spacing of the cutters                                  | unequal spacing                  |
| Cutting width $a_e$ for milling operation               | Full slot cutting depth 1xD      |
| Cutting width $a_e$ for milling operation               | Full slot cutting depth 1xD      |
| Through-coolant                                         | no                               |
| Machining strategy                                      | HPC                              |
| Colour ring                                             | yellow                           |
| Type of product                                         | End / face mill                  |

## User data

|                            | <b>Suitability</b>                        | <b>V<sub>c</sub></b> | <b>ISO code</b> |
|----------------------------|-------------------------------------------|----------------------|-----------------|
| Aluminium                  | Suitable                                  | 550 m/min            | N               |
| Aluminium (short chipping) | suitable                                  | 500 m/min            | N               |
| Alu > 10% Si               | suitable                                  | 450 m/min            | N               |
| PMMA acrylic               | Suitable                                  | 200 m/min            | N               |
| PE-HD                      | Suitable                                  | 160 m/min            | N               |
| PA 66                      | Suitable                                  | 200 m/min            | N               |
| PEEK                       | Suitable                                  | 150 m/min            | N               |
| PF 31                      | Suitable                                  | 130 m/min            | N               |
| PVDF GF20                  | Suitable                                  | 180 m/min            | N               |
| POM GF25                   | Suitable                                  | 160 m/min            | N               |
| PA 66 GF30                 | Suitable                                  | 150 m/min            | N               |
| PEEK GF30                  | Suitable                                  | 130 m/min            | N               |
| PTFE CF25                  | Suitable                                  | 160 m/min            | N               |
| Honeycomb sandwich         | suitable only under restricted conditions | 300 m/min            | N               |
| Cu                         | Suitable                                  | 160 m/min            | N               |
| CuZn                       | Suitable                                  | 200 m/min            | N               |
| wet maximum                | suitable                                  |                      |                 |
| wet minimum                | suitable only under restricted conditions |                      |                 |
| dry                        | suitable only under restricted conditions |                      |                 |
| Air                        | suitable                                  |                      |                 |

## Services

Shank grinding Type HB

129100 HB