

# GARANT Master Alu solid carbide milling cutter with more chip separators TPC, DLC, Ø h6 DC: 8mm



### **Order data**

| Order number | 203115 8      |
|--------------|---------------|
| GTIN         | 4062406249717 |
| Item class   | 11X           |

## **Description**

#### **Version:**

**Specially designed for** TPC high-performance milling. **Optimised bending strength** due to the use of ultra-fine grain substrates. **1**×**D** chip separator for controlled chip breaking.

**Balanced** for very high process reliability and protecting the machine at high speeds.

#### **Application:**

Especially for milling aluminium and non-ferrous metals.

#### Note:

h<sub>max</sub>: The values stated in the table are maximum values.

 $ae_{max} = 0.1 \times D$  for TPC machining.

Successor product for No. 202283, 202284.

## **Technical description**

| Tolerance nominal Ø   | h6       |  |
|---|----------|--|
| Overhang length L <sub>1</sub> incl. recess   | 48 mm    |  |
| Recess Ø D <sub>1</sub>   | 7.5 mm   |  |
| Average chip thickness $h_{\text{max}}$ for TPC milling in short-chipping aluminium | 0.048 mm |  |
| Shank form  | HA       |  |
| Cutting edge Ø D <sub>C</sub>   | 8 mm     |  |
| Overall length L  | 90 mm    |  |
| Shank Ø D <sub>s</sub>  | 8 mm     |  |

| No. of teeth Z                                     | 4                       |  |  |
|--|-------------------------|--|--|
| Shank  | DIN 6535 HA to h6       |  |  |
| Balance quality with shank                         | G 2.5 with HA           |  |  |
| Direction of infeed                                | horizontal and oblique  |  |  |
| Flute length L <sub>c</sub>                        | 41 mm                   |  |  |
| Helix angle  | 38 degrees              |  |  |
| Corner rounding r <sub>v</sub>                     | 0.1 mm                  |  |  |
| Series   | Master Alu              |  |  |
| Coating  | DLC                     |  |  |
| Tool material                                      | Solid carbide           |  |  |
| Standard   | Manufacturer's standard |  |  |
| Туре   | W                       |  |  |
| Spacing of the cutters                             | unequal spacing         |  |  |
| Cutting width a <sub>e</sub> for milling operation | 0.1×D                   |  |  |
| Through-coolant                                    | no                      |  |  |
| Machining strategy                                 | TPC                     |  |  |
| Colour ring  | yellow                  |  |  |
| Type of product                                    | End / face mill         |  |  |

## **User data**

|                            | Suitability | $\mathbf{V}_{c}$ | ISO code |
|----------------------------|-------------|------------------|----------|
| Aluminium                  | suitable    | 500 m/min        | N        |
| Aluminium (short chipping) | suitable    | 450 m/min        | N        |
| Alu > 10% Si               | suitable    | 400 m/min        | N        |
| PMMA acrylic               | Suitable    | 180 m/min        | N        |
| PE-HD                      | Suitable    | 140 m/min        | N        |
| PA 66                      | Suitable    | 180 m/min        | N        |
| PEEK                       | Suitable    | 130 m/min        | N        |



| PF 31              | Suitable                                  | 110 m/min | N |
|--------------------|---|-----------|---|
| PVDF GF20          | suitable                                  | 160 m/min | N |
| POM GF25           | Suitable                                  | 140 m/min | N |
| PA 66 GF30         | Suitable                                  | 120 m/min | N |
| PEEK GF30          | Suitable                                  | 140 m/min | N |
| PTFE CF25          | Suitable                                  | 260 m/min | N |
| Honeycomb sandwich | suitable only under restricted conditions | 260 m/min | N |
| Cu                 | Suitable                                  | 140 m/min | N |
| CuZn               | suitable                                  | 120 m/min | N |
| wet maximum        | suitable                                  |           |   |
| wet minimum        | suitable only under restricted conditions |           |   |
| dry                | suitable                                  |           |   |
| Air<br>Services    | <del>suitable</del>                       |           |   |

Shank grinding Type HB 129100 HB