

# PCD milling cutter with internal cooling HPC, PCD, Ø DC: 20mm



### **Order data**

| Order number | 209808 20     |
|--------------|---------------|
| GTIN         | 4067263101130 |
| Item class   | 11Y           |

## **Description**

#### **Version:**

High-performance PCD milling cutter designed for high-volume machining. High rigidity due to conical design. Very well suited for structural components made of aluminium. Axial angle approx.  $10^{\circ}$  positive. Taper transition with  $1.5^{\circ}$  (angle  $\alpha$ ).

## **Technical description**

| Flute length L <sub>c</sub>                            | 14.2 mm                    |  |  |
|--|----------------------------|--|--|
| Recess Ø D <sub>1</sub>                                | 17 mm                      |  |  |
| Cutting edge Ø D <sub>C</sub>                          | 20 mm                      |  |  |
| $\emptyset$ D <sub>2</sub>                             | 19.4 mm                    |  |  |
| Overall length L                                       | 120 mm                     |  |  |
| $L_2$  | 70 mm                      |  |  |
| No. of teeth Z   | 3                          |  |  |
| Corner radius R <sub>1</sub>                           | 3 mm                       |  |  |
| Shank Ø D <sub>s</sub>                                 | 20 mm                      |  |  |
| Overhang length L₁ incl. recess                        | th L₁ incl. recess 22.6 mm |  |  |
| Feed f <sub>z</sub> for slot milling in cast aluminium | 0.2 mm                     |  |  |
| Shank  | DIN 6535 HA to h6          |  |  |
| Coating  | PCD                        |  |  |

| Tool material                                      | PCD                              |  |  |
|--|----------------------------------|--|--|
| Standard   | Works standard                   |  |  |
| Туре   | N                                |  |  |
| Tolerance nominal Ø                                | ±0.05                            |  |  |
| Direction of infeed                                | horizontal, oblique and vertical |  |  |
| Cutting width a <sub>e</sub> for milling operation | 0.3×D for side milling           |  |  |
| Through-coolant                                    | yes                              |  |  |
| Machining strategy                                 | HPC                              |  |  |
| Colour ring  | yellow                           |  |  |
| Type of product                                    | Torus cutter                     |  |  |

## **User data**

|                            | Suitability                               | $\mathbf{V}_{c}$ | ISO code |
|----------------------------|---|------------------|----------|
| Aluminium                  | suitable                                  | 900 m/min        | N        |
| Aluminium (short chipping) | suitable                                  | 900 m/min        | N        |
| Alu > 10% Si               | suitable                                  | 900 m/min        | N        |
| PMMA acrylic               | suitable                                  | 1000 m/min       | N        |
| PE-HD                      | suitable                                  | 1000 m/min       | N        |
| PA 66                      | suitable only under restricted conditions | 1000 m/min       | N        |
| PEEK                       | suitable only under restricted conditions | 1000 m/min       | N        |
| PF 31                      | suitable only under restricted conditions | 1000 m/min       | N        |
| AFRP aramid                | suitable only under restricted conditions | 1000 m/min       | N        |
| PVDF GF20                  | suitable only under restricted conditions | 1000 m/min       | N        |
| POM GF25                   | suitable only under restricted conditions | 1000 m/min       | N        |
|                            |   |                  |          |

| PA 66 GF30  | suitable only under restricted conditions | 1000 m/min | N |
|-------------|---|------------|---|
| PEEK GF30   | suitable only under restricted conditions | 1000 m/min | N |
| PTFE CF25   | suitable only under restricted conditions | 1000 m/min | N |
| PEEK CF30   | suitable only under restricted conditions | 1000 m/min | N |
| Cu          | suitable                                  | 900 m/min  | N |
| CuZn        | suitable                                  | 900 m/min  | N |
| Oil         | suitable                                  |            |   |
| wet maximum | suitable                                  |            |   |
| wet minimum | suitable                                  |            |   |
| dry         | suitable                                  |            |   |
| Air         | suitable                                  |            |   |