

# Solid carbide roughing end mill MTC, AlCrN, Ø e8 DC: 20mm



### **Order data**

| Order number | 203071 20     |
|--------------|---------------|
| GTIN         | 4045197776105 |
| Item class   | 11X           |

## **Description**

#### **Version:**

For **roughing and finishing** up to 0.7×D into solid material **at very high feed rates** with smooth cutting action.

For cutting force reduction and better surface quality due to 45° helix.

Improved coating for a further reduction in cutting force combined with increased tool life.

### **Application:**

Especially for MTC (Multi Task Cutting) use on the new generation of turning / milling centres.

# **Technical description**

| Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup> | mm <sup>2</sup> 0.08 mm          |  |
|--|----------------------------------|--|
| Overall length L   | 150 mm                           |  |
| Overhang length L₁ incl. recess                              | 98 mm                            |  |
| Flute length L <sub>c</sub>                                  | 41 mm                            |  |
| Shank Ø D₅   | 20 mm                            |  |
| Balance quality with shank                                   | G 2.5 with HB                    |  |
| Cutting edge Ø D <sub>C</sub>                                | 20 mm                            |  |
| Direction of infeed  | horizontal, oblique and vertical |  |
| Tolerance nominal Ø  | e8                               |  |
| Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup> | 0.06 mm                          |  |
| Corner chamfer width at 45°                                  | 0.3 mm                           |  |



| Recess Ø D <sub>1</sub>                            | 19.5 mm                     |  |
|--|-----------------------------|--|
|  |                             |  |
| No. of teeth Z                                     | 4                           |  |
| Shank  | DIN 6535 HB to h6           |  |
| Helix angle  | 45 degrees                  |  |
| Corner chamfer angle                               | 45 degrees                  |  |
| Coating  | AlCrN                       |  |
| Tool material                                      | solid carbide               |  |
| Standard   | Manufacturer's standard     |  |
| Туре   | N                           |  |
| Helix angle characteristic                         | unequal spacing             |  |
| Spacing of the cutters                             | unequal spacing             |  |
| Cutting width a <sub>e</sub> for milling operation | 0.1×D for side milling      |  |
| Cutting width a <sub>e</sub> for milling operation | Full slot cutting depth 1×D |  |
| Through-coolant                                    | no                          |  |
| Machining strategy                                 | MTC                         |  |
| Colour ring  | green                       |  |
| Type of product                                    | End / face mill             |  |

## **User data**

|                                | Suitability | $\mathbf{V}_{c}$ | ISO code |
|--------------------------------|-------------|------------------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable    | 100 m/min        | Р        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 90 m/min         | Р        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 85 m/min         | Р        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 80 m/min         | Р        |
| INOX < 900 N/mm <sup>2</sup>   | suitable    | 40 m/min         | М        |
| INOX > 900 N/mm <sup>2</sup>   | suitable    | 30 m/min         | М        |
| GG(G)                          | suitable    | 100 m/min        | K        |
| Uni                            | suitable    |                  |          |
| wet maximum                    | suitable    |                  |          |

| wet minimum | suitable only under restricted conditions |  |
|-------------|---|--|
| dry         | suitable                                  |  |
| Air         | suitable                                  |  |