

Garant

Solid carbide barrel milling cutter, conical form $\alpha/2 = 18^\circ$ PPC, TiAlN, \varnothing f8 DC / R2: 12/500mm



Order data

| | |
|--------------|---------------|
| Order number | 207537 12/500 |
| GTIN | 4045197922724 |
| Item class | 11X |

Description

Version:

High-performance tool for **exceptionally efficient finish machining of free-form surfaces**. For outstanding surface qualities in a **very short machining time**. For use on modern 5-axis milling machines with CAD / CAM support.

The end face geometry is designed so that the chips, especially those formed by the end radius, are of optimum shape and have optimum evacuation characteristics. For this purpose the number of cutting edges is reduced to the number of effective end face cutting edges.

Recommendation:

As an oversize for finishing operations we recommend 0.05 to 0.2 mm.

Note:

R_2 represents the effective radius on the tool.

Cannot be reground!

For machining walls and overcoming obstructions.

Technical description

| | |
|---|----------|
| Flute length L_c | 14.5 mm |
| Feed f_z for copy milling in stainless steel $> 900 \text{ N/mm}^2$ | 0.064 mm |
| Feed f_z for side milling in INOX $> 900 \text{ N/mm}^2$ | 0.052 mm |
| Overall length L | 90 mm |
| Shank $\varnothing D_s$ | 12 mm |
| No. of teeth Z | 6 |
| Effective radius R_2 | 500 mm |

| | |
|--|-------------------------|
| Corner radius R ₁ | 2 mm |
| Helix angle | 30 degrees |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Standard | Manufacturer's standard |
| Type | N |
| Tolerance nominal Ø | f8 |
| Direction of infeed | horizontal |
| Cutting width a _e for milling operation | 0.05×D for side milling |
| Cutting width a _e for milling operation | 0.05×D for copy milling |
| Shank | DIN 6535 HA to h6 |
| Machining strategy | PPC |
| Colour ring | blue |
| Type of product | Ball-nosed slot drill |

User data

| | Suitability | V _c | ISO code |
|------------------------------|---|----------------|----------|
| Aluminium (short chipping) | suitable only under restricted conditions | 200 m/min | N |
| Alu > 10% Si | suitable only under restricted conditions | 200 m/min | N |
| INOX < 900 N/mm ² | suitable | 150 m/min | M |
| INOX > 900 N/mm ² | suitable | 140 m/min | M |
| Ti > 850 N/mm ² | suitable | 70 m/min | S |
| Inconel | suitable | 60 m/min | S |
| wet maximum | suitable | | |
| wet minimum | suitable only under restricted conditions | | |
| dry | suitable only under restricted conditions | | |

Air

suitable only under
restricted conditions

Services

Shank grinding Type HB

129100 HB