

Garant

Solid carbide torus cutter TPC, uncoated, Ø h6 DC / R1: 20/4,0mm



Order data

| | |
|--------------|---------------|
| Order number | 206210 20/4,0 |
| GTIN | 4045197811998 |
| Item class | 11X |

Description

Version:

Eccentric relief ground, additionally **polish ground** in the flutes for **outstanding chip evacuation** in long-chipping aluminium workpieces.

With double chip-breaker for exemplary chip formation.

Application:

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

Note:

$a_{e\max} = 0.12 \times D$ for TPC machining.

h_{\max} : The values stated in the table are maximum values.

Technical description

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|---|----------|
| Shank form | HB |
| Corner radius R_1 | 4 mm |
| Shank $\varnothing D_s$ | 20 mm |
| Cutting edge $\varnothing D_c$ | 20 mm |
| No. of teeth Z | 3 |
| Flute length L_c | 82 mm |
| Overhang length L_1 incl. recess | 100 mm |
| Recess $\varnothing D_1$ | 19 mm |
| Overall length L | 154 mm |
| Average chip thickness h_{\max} for TPC milling in short-chipping aluminium | 0.125 mm |

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|---|----------------------------------|
| Balance quality with shank | G 2.5 with HB |
| Shank | DIN 6535 HB to h6 |
| Helix angle | 45 degrees |
| Coating | uncoated |
| Tool material | Solid carbide |
| Standard | Manufacturer's standard |
| Type | W |
| Tolerance nominal \varnothing | h6 |
| Helix angle characteristic | unequal spacing |
| Direction of infeed | horizontal, oblique and vertical |
| Cutting width a_e for milling operation | 0.12×D |
| Through-coolant | no |
| Machining strategy | TPC |
| Colour ring | yellow |
| Type of product | Torus cutter |

User data

| | Suitability | V_c | ISO code |
|----------------------------|---|-----------|----------|
| Aluminium | Suitable | 130 m/min | N |
| Aluminium (short chipping) | suitable | 100 m/min | N |
| Alu > 10% Si | suitable | 85 m/min | N |
| PMMA acrylic | suitable | 125 m/min | N |
| PE-HD | Suitable | 90 m/min | N |
| PA 66 | Suitable | 100 m/min | N |
| PEEK | suitable | 80 m/min | N |
| PF 31 | Suitable | 70 m/min | N |
| Honeycomb sandwich | suitable only under restricted conditions | 100 m/min | N |

| | | | |
|-------------|---|-----------|---|
| Cu | Suitable | 80 m/min | N |
| CuZn | Suitable | 100 m/min | N |
| wet maximum | suitable | | |
| wet minimum | Suitable only under restricted conditions | | |
| dry | suitable only under restricted conditions | | |
| Air | suitable only under restricted conditions | | |