

Garant
GARANT Master Alu SlotMachine solid carbide roughing end mill TPC, DLC, Ø e8 DC: 12mm

Order data

| | |
|--------------|---------------|
| Order number | 205275 12 |
| GTIN | 4062406381349 |
| Item class | 11X |

Description
Version:

For roughing.

Special profile for machining non-ferrous metals. Significant reduction in the chip volume due to targeted chip fragmentation using the **special cutter geometry**.

Problem-solver for TPC machining. Ideal for automated production as the risk of chip accumulations in the machine is largely prevented.

Note:

For **HB shanks** use order **no. 205277**.

HB shanks are available at the same price as HA.

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

ae_{max} is $0.12 \times D$ for TPC machining.

Technical description

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|--|----------------------------------|
| Average chip thickness h_{max} for TPC milling in short-chipping aluminium | 0.078 mm |
| Direction of infeed | horizontal, oblique and vertical |
| Shank Ø D_s | 12 mm |
| Tolerance nominal Ø | e8 |
| No. of teeth Z | 3 |
| Flute length L_c | 61 mm |
| Overhang length L_1 incl. recess | 72 mm |

| | |
|---|-------------------------|
| Recess $\varnothing D_1$ | 11 mm |
| Balance quality with shank | G 2.5 with HA |
| Helix angle | 35 degrees |
| Cutting edge $\varnothing D_c$ | 12 mm |
| Corner rounding r_v | 0.32 mm |
| Overall length L | 120 mm |
| Shank | DIN 6535 HA to h6 |
| Series | Master Alu |
| Coating | DLC |
| Tool material | Solid carbide |
| Standard | Manufacturer's standard |
| Milling profile | WR |
| Helix angle characteristic | unequal spacing |
| Spacing of the cutters | unequal spacing |
| Cutting width a_e for milling operation | $0.12 \times D$ |
| Through-coolant | no |
| Machining strategy | HPC |
| Colour ring | yellow |
| Type of product | End / face mill |

User data

| | Suitability | V_c | ISO code |
|----------------------------|---|-----------|----------|
| Aluminium | Suitable | 360 m/min | N |
| Aluminium (short chipping) | suitable | 320 m/min | N |
| Alu > 10% Si | Suitable | 300 m/min | N |
| PA 66 | suitable only under restricted conditions | 100 m/min | N |
| PEEK | suitable only under restricted conditions | 80 m/min | N |

| | | | |
|-------------|---|-----------|---|
| Cu | Suitable | 130 m/min | N |
| CuZn | Suitable | 160 m/min | N |
| wet maximum | Suitable | | |
| wet minimum | suitable only under restricted conditions | | |
| dry | suitable only under restricted conditions | | |
| Air | Suitable | | |