# Garant

Single tooth thread mill 2×D, TiAIN, M: M6



## **Order data**

| Order number | 139610 M6     |  |
|--------------|---------------|--|
| GTIN         | 4045197509734 |  |
| Item class   | 11J           |  |

## Description

#### Version:

**Corrected thread profile** for milling **exact internal threads** (ensure stable clamping conditions). Very sturdy **single-tooth** thread mill, **highly suitable especially for GRP, CRP, and graphite**. Also suitable for **Ti-based and Ni-based alloys** and **hardened steels up to 63 HRC**. **Advantage:** 

Significantly less radial pressure than with multi-tooth thread mills.

### Note:

Single-tooth thread mill exclusively for milling internal threads. The tapping hole (and where necessary the countersinking) has to be prepared beforehand!

Through-coolant: no No. of teeth Z: 6 Thread pitch: 1 mm Nominal  $\emptyset$  D<sub>c</sub>: 4.9 mm Shank length L<sub>s</sub>: 28 mm Overhang L<sub>1</sub>: 9 mm Overall length L: 40 mm Shank  $\emptyset$  D<sub>c</sub>: 5 mm

## **Technical description**

| Number of clamping slots                              | 6        |
|---|----------|
| maximum insertion depth L <sub>c</sub>                | 9 mm     |
| Thread pitch  | 1 mm     |
| Feed f <sub>z</sub> in steel < 1400 N/mm <sup>2</sup> | 0.035 mm |

| No. of teeth Z                   | 6                           |  |  |
|----------------------------------|-----------------------------|--|--|
| Shank Ø D <sub>s</sub>           | 5 mm                        |  |  |
| Overall length L                 | 40 mm                       |  |  |
| Feed $f_z$ in CRP                | 0.06 mm                     |  |  |
| Shank length L <sub>s</sub>      | 28 mm                       |  |  |
| Through-coolant                  | no                          |  |  |
| Thread depth                     | 12 mm                       |  |  |
| Thread size                      | M6                          |  |  |
| Nominal Ø D <sub>c</sub>         | 4.9 mm                      |  |  |
| Overhang L <sub>1</sub>          | 9 mm                        |  |  |
| Coating                          | TiAIN                       |  |  |
| Thread type                      | М                           |  |  |
| Thread type                      | M-LH                        |  |  |
| Flank angle                      | 60 °                        |  |  |
| Tool material                    | Solid carbide               |  |  |
| Thread standard                  | DIN 13                      |  |  |
| Shank                            | DIN 6535 HA with h6         |  |  |
| Application for type of drilling | up to 2×D for blind holes   |  |  |
| Application for type of drilling | up to 2×D for through holes |  |  |
| Shank tolerance                  | h6                          |  |  |
| Colour ring                      | green                       |  |  |
| Internal/external application    | Internal                    |  |  |
| Type of product                  | thread milling cutter       |  |  |

# User data

|                               | Suitability | Vc        | ISO code |
|-------------------------------|-------------|-----------|----------|
| Alu plastics                  | suitable    | 300 m/min | Ν        |
| Aluminium (short<br>chipping) | suitable    | 300 m/min | Ν        |

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| Alu > 10% Si                   | suitable                                  | 200 m/min | Ν |
|--------------------------------|---|-----------|---|
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 300 m/min | Р |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 250 m/min | Р |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 200 m/min | Р |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 100 m/min | Р |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 80 m/min  | Р |
| Steel < 55 HRC                 | suitable                                  | 60 m/min  | Н |
| Steel < 60 HRC                 | suitable                                  | 40 m/min  | Н |
| Steel < 67 HRC                 | suitable only under restricted conditions | 30 m/min  | н |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 100 m/min | М |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 80 m/min  | М |
| Ti > 850 N/mm²                 | suitable                                  | 60 m/min  | S |
| GRP                            | suitable                                  | 100 m/min | Ν |
| CRP                            | suitable                                  | 100 m/min | Ν |
| Graphite                       | suitable                                  | 150 m/min | Ν |
| Uni                            | suitable                                  |           |   |
| wet maximum                    | suitable                                  |           |   |
| wet minimum                    | suitable                                  |           |   |
| dry                            | suitable                                  |           |   |
| Air                            | suitable                                  |           |   |
|                                |   |           |   |