

# GARANT Master TM plain shank thread mill 2×D, AlTiN, UNC: 9/16-12



## **Order data**

| Order number | 139732 9/16-12 |
|--------------|----------------|
| GTIN         | 4067263129028  |
| Item class   | 11D            |

### **Description**

#### **Version:**

Solid carbide thread milling cutters with irregular cutting edge spacing and an increased number of cutting edges. Due to the irregular cutting edge spacing they achieve very smooth running and long tool life.

**Newly developed universal geometry** and **high-performance coating** for use across a wide spectrum of materials.

- · Significantly reduced vibration due to irregular cutting edge spacing.
- Increased number of cutting edges.
- The latest generation of AlTiN-based HiPIMS coating.
- · Corrected thread profile for avoidance of profile distortions.

#### **Application:**

For **UNC unified coarse threads** ASME-B1.1.

#### Note:

HB and HE shanks are available at the same price as HA

Order **HB** shank: with **No. 139732 + 129100 HB** 

Order HE shank: with No. 139732 + 129100 HE

# **Technical description**

| Shank length L <sub>s</sub> | 49.6 mm  |
|-----------------------------|----------|
| Number of clamping slots    | 6        |
| Nominal Ø D <sub>c</sub>    | 11.6 mm  |
| Flute length L <sub>c</sub> | 28.51 mm |
| Overall length L            | 92 mm    |

| Thread pitch                                | 2.117 mm                    |  |
|---------------------------------------------|-----------------------------|--|
| Thread size                                 | 9/16-12 UNC                 |  |
| Threads per inch                            | 12                          |  |
| Shank Ø D <sub>s</sub>                      | 12 mm                       |  |
| No. of teeth Z                              | 6                           |  |
| Thread Ø                                    | 14.29 mm                    |  |
| Feed $f_z$ in steel < 750 N/mm <sup>2</sup> | 0.1 mm                      |  |
| Thread type                                 | UNC                         |  |
| Thread type                                 | UNC-LH                      |  |
| Series                                      | Master TM                   |  |
| Coating                                     | AlTiN                       |  |
| Flank angle                                 | 60 degrees                  |  |
| Tool material                               | Solid carbide               |  |
| Shank                                       | DIN 6535 HA to h6           |  |
| Through-coolant                             | yes                         |  |
| Cutting direction                           | left-hand                   |  |
| Application for type of drilling            | up to 2×D for through holes |  |
| Application for type of drilling            | up to 2×D for blind holes   |  |
| Spacing of the cutters                      | unequal spacing             |  |
| Shank tolerance                             | h6                          |  |
| Colour ring                                 | green                       |  |
| Internal/external application               | Internal                    |  |
| Type of product                             | thread milling cutter       |  |

# **User data**

|                            | Suitability | $\mathbf{V}_{c}$ | ISO code |
|----------------------------|-------------|------------------|----------|
| Alu plastics               | suitable    | 220 m/min        | N        |
| Aluminium (short chipping) | suitable    | 220 m/min        | N        |

| Alu > 10% Si                   | suitable                                  | 180 m/min | N |
|--------------------------------|-------------------------------------------|-----------|---|
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 140 m/min | Р |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 130 m/min | Р |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 120 m/min | Р |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 90 m/min  | Р |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 80 m/min  | Р |
| Steel < 50 HRC                 | suitable only under restricted conditions | 45 m/min  | Н |
| TOOLOX 33                      | suitable                                  | 85 m/min  | Н |
| TOOLOX 44                      | suitable                                  | 50 m/min  | Н |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 82 m/min  | M |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 75 m/min  | M |
| $Ti > 850 \text{ N/mm}^2$      | suitable                                  | 50 m/min  | S |
| GG(G)                          | suitable                                  | 120 m/min | K |
| CuZn                           | suitable                                  | 200 m/min | N |
| Uni                            | suitable                                  |           |   |
| wet maximum                    | suitable                                  |           |   |
| wet minimum                    | suitable                                  |           |   |
| Air<br>Services                | suitable                                  |           |   |

| Shank grinding Type HB | 129100 HB |
|------------------------|-----------|
| Shank grinding Type HE | 129100 HE |