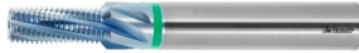


**Garant**
**GARANT Master TM plain shank thread mill with countersink 2×D, TiAlN, UNF: 7/16-20**

**Order data**

|              |                |
|--------------|----------------|
| Order number | 139728 7/16-20 |
| GTIN         | 4062406058326  |
| 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**
- **Corrected thread profile for avoidance of profile distortions**
- **increased number of cutting edges**
- **new coating for optimum wear resistance**

**Advantage:**

Incorporating a countersink profile for a 90° countersink and thread milling in a single operation.

**Application:**

For **UNF unified fine threads** ASME-B1.1.

**Note:**

Form HB and HE supplied at the same price as HA.

Form **HB**: order with **No. 139728 + 129100 HB**

Form **HE**: order with **No. 139728 + 129100 HE**

Thread type: UNF

Thread type: UNF-LH

No. of teeth Z: 6

Threads per inch: 20

Nominal Ø D<sub>c</sub>: 9.3 mm

Flute length L<sub>c</sub>: 23.45 mm

Shank length L<sub>s</sub>: 45 mm

Overall length L: 92 mm

Shank Ø D<sub>s</sub>: 12 mm

## Technical description

|                                                      |                                             |
|------------------------------------------------------|---------------------------------------------|
| Overall length L                                     | 92 mm                                       |
| Number of clamping slots                             | 6                                           |
| Thread Ø                                             | 11.11 mm                                    |
| Thread pitch                                         | 1.27 mm                                     |
| Programming value for countersink l <sub>1</sub>     | 24.6 mm                                     |
| No. of teeth Z                                       | 6                                           |
| Shank Ø D <sub>s</sub>                               | 12 mm                                       |
| Thread type                                          | UNF                                         |
| Thread type                                          | UNF-LH                                      |
| Shank length L <sub>s</sub>                          | 45 mm                                       |
| Full profile                                         | yes                                         |
| maximum countersink Ø D <sub>1</sub>                 | 11.6 mm                                     |
| Threads per inch                                     | 20                                          |
| Flute length L <sub>c</sub>                          | 23.45 mm                                    |
| Feed f <sub>z</sub> in steel < 750 N/mm <sup>2</sup> | 0.09                                        |
| Thread size                                          | 7/16-20 UNF                                 |
| Nominal Ø D <sub>c</sub>                             | 9.3 mm                                      |
| Series                                               | GARANT Master TM                            |
| Coating                                              | TiAlN                                       |
| Flank angle                                          | 60 degrees                                  |
| Tool material                                        | solid carbide                               |
| Shank                                                | DIN 6535 HA with h6                         |
| Through-coolant                                      | yes                                         |
| Cutting direction                                    | right-hand                                  |
| Application for type of drilling                     | up to 2xD for blind holes and through holes |
| Spacing of the cutters                               | unequal spacing                             |

|                               |                       |
|-------------------------------|-----------------------|
| Countersink angle             | 90 degrees            |
| Shank tolerance               | h6                    |
| Colour ring                   | green                 |
| Internal/external application | Internal              |
| Type of product               | thread milling cutter |