

Garant
GARANT Master TM plain shank thread mill with countersink 2×D, AlTiN, UNF: 3/8-24

Order data

| | |
|--------------|---------------|
| Order number | 139738 3/8-24 |
| GTIN | 4067263129271 |
| 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.**
- **The latest generation of AlTiN-based HiPIMS coating.**
- **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:

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

Order **HB** shank: with **No. 139738 + 129100 HB**

Order **HE** shank: with **No. 139738 + 129100 HE**

Technical description

| | |
|-------------|------------|
| Thread size | 3/8-24 UNF |
|-------------|------------|

| | |
|--------------------------------------------|--------------------------------------|
| Neck $\varnothing D_1$ | 10.1 mm |
| Overall length L | 82 mm |
| Number of clamping slots | 4 |
| Thread type | UNF-LH |
| Thread type | UNF |
| Threads per inch | 24 |
| Feed f_z in steel $< 750 \text{ N/mm}^2$ | 0.08 mm |
| Shank length L_s | 46.3 mm |
| Thread \varnothing | 9.53 mm |
| Thread pitch | 1.058 mm |
| Shank $\varnothing D_s$ | 12 mm |
| Nominal $\varnothing D_c$ | 8 mm |
| Flute length L_c | 19.54 mm |
| No. of teeth Z | 4 |
| Programming value for countersink L_1 | 20.55 mm |
| Series | Master TM |
| Coating | AlTiN |
| Flank angle | 60 degrees |
| Tool material | Solid carbide |
| Shank | DIN 6535 HA to h6 |
| Through-coolant | yes |
| Cutting direction | right-hand |
| Application for type of drilling | up to $2 \times D$ for blind holes |
| Application for type of drilling | up to $2 \times D$ for 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

User data

| | Suitability | 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 ² | suitable | 140 m/min | P |
| Steel < 750 N/mm ² | suitable | 130 m/min | P |
| Steel < 900 N/mm ² | suitable | 120 m/min | P |
| Steel < 1100 N/mm ² | suitable | 90 m/min | P |
| Steel < 1400 N/mm ² | suitable | 80 m/min | P |
| Steel < 50 HRC | suitable only under restricted conditions | 45 m/min | H |
| TOOLOX 33 | suitable | 85 m/min | H |
| TOOLOX 44 | suitable | 50 m/min | H |
| INOX < 900 N/mm ² | suitable | 82 m/min | M |
| INOX > 900 N/mm ² | suitable | 75 m/min | M |
| Ti > 850 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 | suitable | | |

Services

Shank grinding Type HB

129100 HB

Shank grinding Type HE

129100 HE

