

GARANT Master TM plain shank thread mill, TiAlN, G: G3/4



Order data

| Order number | 139705 G3/4 |
|--------------|---------------|
| GTIN | 4045197957733 |
| 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.
- · New coating for optimum wear resistance.
- · Corrected thread profile for avoidance of profile distortions.

Application:

For **Whitworth parallel pipe threads** DIN-ISO 228/1 (threads that do not form a seal within the connections). **Suitable for internal and external threads.**

Note:

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

Order **HB** shank: with **No. 139705 + 129100 HB**.

Order HE shank: with No. 139705 + 129100 HE.

Technical description

| Thread pitch | 1.814 mm |
|-----------------------------|----------|
| Thread depth | 40.82 mm |
| Shank length L _s | 48 mm |
| Number of clamping slots | 6 |

| Flute length L _c | 40.82 mm | |
|---|-------------------------------|--|
| Thread size | G3/4 | |
| Overall length L | 108 mm | |
| Threads per inch | 14 | |
| Feed f_z in steel < 750 N/mm ² | 0.15 mm | |
| Shank Ø D _s | 18 mm | |
| No. of teeth Z | 6 | |
| Series | Master TM | |
| Nominal Ø D _c | 17.95 mm | |
| Application for type of drilling | up to 1.5×D for through holes | |
| Application for type of drilling | up to 1.5×D for blind holes | |
| For use with external threads | up to 1.5×D for bolt threads | |
| Coating | TiAIN | |
| Thread type | G | |
| Thread type | G-LH | |
| Flank angle | 55 degrees | |
| Tool material | Solid carbide | |
| Shank | DIN 6535 HA to h6 | |
| Through-coolant | yes | |
| Spacing of the cutters | unequal spacing | |
| Colour ring | green | |
| Internal/external application | Internal and external | |
| 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 ² | suitable | 140 m/min | Р |
| Steel < 750 N/mm ² | suitable | 130 m/min | Р |
| Steel < 900 N/mm ² | suitable | 120 m/min | Р |
| Steel < 1100 N/mm ² | suitable | 90 m/min | Р |
| Steel < 1400 N/mm ² | 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 ² | suitable | 82 m/min | М |
| 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 Services | suitable | | |

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