

Garant
GARANT Master TM plain shank thread mill 2×D, TiAlN, MF: 10X1

Order data

| | |
|--------------|---------------|
| Order number | 139665 10X1 |
| GTIN | 4045197957610 |
| 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.**

Through-coolant feed $\geq 4 \times 0.5$

Note:

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

Order **HB** shank: with **No. 139665 + 129100 HB**.

Order **HE** shank: with **No. 139665 + 129100 HE**.

Technical description

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|--|----------|
| Number of clamping slots | 6 |
| No. of teeth Z | 6 |
| Feed f_z in steel $< 750 \text{ N/mm}^2$ | 0.075 mm |
| Overall length L | 68 mm |
| Shank length L_s | 36 mm |
| Shank $\varnothing D_s$ | 8 mm |

| | |
|----------------------------------|-----------------------------|
| Through-coolant | yes |
| Thread pitch | 1 mm |
| Thread depth | 20.5 mm |
| Thread size | M10×1 |
| Nominal $\varnothing D_c$ | 7.95 mm |
| Flute length L_c | 20.5 mm |
| Coating | TiAlN |
| Thread type | MF |
| Thread type | MF-LH |
| Flank angle | 60 degrees |
| Tool material | Solid carbide |
| Thread standard | DIN 13 |
| Shank | DIN 6535 HA to 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 |
| Spacing of the cutters | unequal spacing |
| Colour ring | green |
| Internal/external application | Indvendig |
| Series | Master TM |
| 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 < 55 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 |