

**Garant**
**GARANT Master TM plain shank thread mill with countersink 2.5×D, TiAlN, M: M14**

**Order data**

Order number	139654 M14
GTIN	4045197957870
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**

**Advantage:**

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

**Note:**

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

Form **HB**: order with **No. 139656 + 129100 HB**

Form **HE**: order with **No. 139656 + 129100 HE**

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Form **HE**: order with **No. 139653 + 129100 HE**

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Form **HE**: order with **No. 139654 + 129100 HE**.

Through-coolant: yes

No. of teeth Z: 6

Thread pitch: 2 mm

Nominal  $\varnothing D_c$ : 11.5 mm

Shank length  $L_s$ : 48 mm

Overall length L: 106 mm

Shank  $\varnothing D_s$ : 16 mm  
 maximum countersink  $\varnothing D_1$ : 14.5 mm

## Technical description

Shank length $L_s$	48 mm
Programming value for countersink $l_1$	36.5 mm
Shank $\varnothing D_s$	16 mm
Number of clamping slots	6
maximum countersink $\varnothing D_1$	14.5 mm
Thread pitch	2 mm
No. of teeth $Z$	6
Through-coolant	yes
Feed $f_z$ in steel $< 750 \text{ N/mm}^2$	0.1 mm
Thread depth	28 mm
Overall length $L$	106 mm
Thread size	M14
Nominal $\varnothing D_c$	11.5 mm
Coating	TiAlN
Thread type	M
Thread type	M-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 $2.5 \times D$ 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	Indvendig
Series	GARANT Master TM
Type of product	thread milling cutter

**Services**

Shank grinding Type HB	129100 HB
Shank grinding Type HE	129100 HE