

## Garant

### GARANT Master TM plain shank thread mill with countersink 2.5×D, TiAlN, MF: 12X1



#### Order data

Order number	139683 12X1
GTIN	4045197958051
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:

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

Order **HB** shank: with **No. 139683 + 129100 HB**

Order **HE** shank: with **No. 139683 + 129100 HE**

Through-coolant: yes

No. of teeth Z: 6

Thread pitch: 1 mm

Nominal  $\varnothing D_C$ : 10.4 mm

Shank length  $L_s$ : 45 mm

Overall length L: 94 mm

Shank  $\varnothing D_s$ : 14 mm

maximum countersink  $\varnothing D_1$ : 12.5 mm

#### Technical description

Feed $f_z$ in steel < 750 N/mm <sup>2</sup>	0.09 mm
maximum countersink $\varnothing D_1$	12.5 mm
No. of teeth Z	6
Overall length L	94 mm
Shank $\varnothing D_s$	14 mm
Through-coolant	yes
Shank length $L_s$	45 mm
Thread depth	24 mm
Thread pitch	1 mm
Number of clamping slots	6
Programming value for countersink $l_1$	31.55 mm
Thread size	M12×1
Nominal $\varnothing D_c$	10.4 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 2.5×D for blind holes and through holes
Spacing of the cutters	unequal spacing
Countersink angle	90 degrees
Colour ring	green
Internal/external application	Internal
Series	GARANT Master TM
Type of product	thread milling cutter

## Services

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