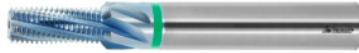


**Garant**
**GARANT Master TM plain shank thread mill with countersink 2×D, TiAlN, UNF: 5/8-18**

**Order data**

Order number	139728 5/8-18
GTIN	4062406058357
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**
- **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:**

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

Form **HB**: order with **No. 139728 + 129100 HB**

Form **HE**: order with **No. 139728 + 129100 HE**

Thread type: UNF

Thread type: UNF-LH

No. of teeth Z: 6

Threads per inch: 18

Nominal Ø D<sub>c</sub>: 13.9 mm

Flute length L<sub>c</sub>: 33.11 mm

Shank length L<sub>s</sub>: 48 mm

Overall length L: 108 mm

Shank Ø D<sub>s</sub>: 18 mm

## Technical description

Shank length L <sub>s</sub>	48 mm
Threads per inch	18
Overall length L	108 mm
Number of clamping slots	6
Shank Ø D <sub>s</sub>	18 mm
Thread type	UNF
Thread type	UNF-LH
No. of teeth Z	6
Thread pitch	1.411 mm
Thread Ø	15.86 mm
Flute length L <sub>c</sub>	33.11 mm
Feed f <sub>z</sub> in steel < 750 N/mm <sup>2</sup>	0.11 mm
Thread size	5/8-18 UNF
Nominal Ø D <sub>c</sub>	13.9 mm
Programming value for countersink L <sub>1</sub>	34.35 mm
Neck Ø D <sub>1</sub>	16.4 mm
Series	Master TM
Coating	TiAlN
Flank angle	60 °
Tool material	solid carbide
Shank	DIN 6535 HA with h6
Through-coolant	yes
Cutting direction	right-hand
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

Countersink angle	90 °
Shank tolerance	h6
Colour ring	green
Internal/external application	Internal
Type of product	thread milling cutter

## User data

	Suitability	V <sub>c</sub>	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 <sup>2</sup>	Suitable	140 m/min	P
Steel < 750 N/mm <sup>2</sup>	Suitable	130 m/min	P
Steel < 900 N/mm <sup>2</sup>	Suitable	120 m/min	P
Steel < 1100 N/mm <sup>2</sup>	Suitable	90 m/min	P
Steel < 1400 N/mm <sup>2</sup>	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 <sup>2</sup>	Suitable	82 m/min	M
INOX > 900 N/mm <sup>2</sup>	Suitable	75 m/min	M
Ti > 850 N/mm <sup>2</sup>	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