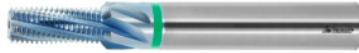


Garant
GARANT Master TM plain shank thread mill with countersink 2×D, TiAlN, UNC: 1/2-13

Order data

Order number	139723 1/2-13
GTIN	4062406058241
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.

Application:

For **UNC unified coarse threads** ASME-B1.1.

Note:

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

Form **HB**: order with **No. 139723 + 129100 HB**

Form **HE**: order with **No. 139723 + 129100 HE**

Thread type: UNC

Thread type: UNC-LH

No. of teeth Z: 6

Threads per inch: 13

Nominal Ø D_c: 10.3 mm

Flute length L_c: 26.32 mm

Shank length L_s: 45 mm

Overall length L: 94 mm

Shank Ø D_s: 14 mm

Technical description

No. of teeth Z	6
Threads per inch	13
Thread type	UNC
Thread type	UNC-LH
Thread Ø	12.7 mm
Shank Ø D _s	14 mm
Thread pitch	1.954 mm
Shank length L _s	45 mm
Overall length L	94 mm
Number of clamping slots	6
Flute length L _c	26.32 mm
Feed f _z in steel < 750 N/mm ²	0.09 mm
Thread size	1/2-13 UNC
Nominal Ø D _c	10.3 mm
Programming value for countersink L ₁	27.77 mm
Neck Ø D ₁	13.2 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 _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 < 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 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~~
Services

Suitable

Shank grinding Type HB

129100 HB

Shank grinding Type HE

129100 HE