

Garant
GARANT Master TM plain shank thread mill with countersink 2×D, AlTiN, UNF: 3/4-16

Order data

Order number	139738 3/4-16
GTIN	4067263129325
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.**
- **The latest generation of AlTiN-based HiPIMS coating.**
- **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:

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

Order **HB** shank: with **No. 139738 + 129100 HB**

Order **HE** shank: with **No. 139738 + 129100 HE**

Technical description

Thread pitch	1.587 mm
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Threads per inch	16
Thread size	3/4-16 UNF
Shank length L_s	62.7 mm
Number of clamping slots	6
Neck $\varnothing D_1$	19.6 mm
No. of teeth Z	6
Thread type	UNF-LH
Thread type	UNF
Nominal $\varnothing D_c$	16.8 mm
Overall length L	120 mm
Programming value for countersink L_1	40.23 mm
Feed f_z in steel < 750 N/mm ²	0.13 mm
Flute length L_c	38.85 mm
Thread \varnothing	19.05 mm
Shank $\varnothing D_s$	20 mm
Series	Master TM
Coating	AlTiN
Flank angle	60 degrees
Tool material	Solid carbide
Shank	DIN 6535 HA to h6
Through-coolant	yes
Cutting direction	right-hand
Application for type of drilling	up to 2xD for blind holes
Application for type of drilling	up to 2xD for through holes
Spacing of the cutters	unequal spacing
Countersink angle	90 degrees
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	suitable		

Services

Shank grinding Type HB

129100 HB

Shank grinding Type HE

129100 HE

