

**Garant**
**GARANT Master TM plain shank thread mill, AlTiN, NPT: 3/8-18**

**Order data**

Order number	139739 3/8-18
GTIN	4067263129356
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.**
- **The latest generation of AlTiN-based HiPIMS coating.**
- **Corrected thread profile for avoidance of profile distortions.**

**Application:**

**Tapered** pipe threads (NPT) to ANSI B1.20.1, for threads with sealants.

**Note:**

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

Order **HB** shank: with **No. 139739 + 129100 HB**.

Order **HE** shank: with **No. 139739 + 129100 HE**.

**Technical description**

Thread pitch	1.411 mm
Overall length L	82 mm
Nominal $\varnothing D_c$	11.11 mm
No. of teeth Z	6
Number of clamping slots	6

Threads per inch	18
Thread size	3/8-18 NPT
Feed $f_z$ in steel < 750 N/mm <sup>2</sup>	0.11 mm
Shank length $L_s$	55 mm
Thread $\varnothing$	17.06 mm
Shank $\varnothing D_s$	12 mm
Flute length $L_c$	13.38 mm
Series	Master TM
Coating	AlTiN
Thread type	NPT
Flank angle	60 degrees
Tool material	Solid carbide
Standard	ANSI B 1.20.1
Taper ratio	1:16
Shank	DIN 6535 HA to h6
Through-coolant	yes
Application for type of drilling	Blind hole
Application for type of drilling	Through hole
Spacing of the cutters	unequal spacing
Cutting direction	right-hand
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 <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	suitable		

### Services

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