

**Garant**
**GARANT Master TM plain shank thread mill, TiAlN, NPT: 1/16-27**

**Order data**

Order number	139729 1/16-27
GTIN	4062406058142
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.**

**Application:**

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

**Note:**

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

Form **HB**: order with **No. 139729 + 129100 HB**

Form **HE**: order with **No. 139729 + 129100 HE**

**Technical description**

Thread pitch	0.941 mm
Overall length L	58 mm
Shank length L <sub>s</sub>	36 mm
Thread Ø	7.9 mm
Shank Ø D <sub>s</sub>	6 mm

Number of clamping slots	4
Threads per inch	27
No. of teeth Z	4
Feed $f_z$ in steel $< 750 \text{ N/mm}^2$	0.08 mm
Flute length $L_c$	8.93 mm
Thread size	1/16-27 NPT
Nominal $\varnothing D_c$	5.39 mm
Series	Master TM
Coating	TiAlN
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 with 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