

Garant
GARANT Master TM plain shank thread mill, TiAlN, NPT: 1/2-14

Order data

Order number	139729 1/2-14
GTIN	4062406058180
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

Threads per inch	14
Number of clamping slots	6
Thread Ø	21.22 mm
Shank length L _s	45 mm
Overall length L	94 mm

Thread pitch	1.814 mm
Shank $\varnothing D_s$	14 mm
No. of teeth Z	6
Feed f_z in steel $< 750 \text{ N/mm}^2$	0.13 mm
Flute length L_c	17.2 mm
Thread size	1/2-14 NPT
Nominal $\varnothing D_c$	12.88 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 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