

Garant**GARANT Master TM solid carbide three-profile thread mill 2×D, AlTiN, G: G1/2****Order data**

Order number	139631 G1/2
GTIN	4069515023696
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 cutting action** 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.**
- **Latest-generation AlTiN-based HIPIMS coating.**
- **Corrected thread profile for avoidance of profile distortions.**

Advantage:

Significantly less radial pressure than with multi-tooth thread mills. Axial cooling grooves on the shank for optimum chip evacuation.

Application:

For **Whitworth parallel pipe threads** DIN-ISO 228/1 (threads that do not form a seal within the connections). **Suitable for internal and external threads.**

Note:

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

HB shank: order with No. **139631 + 129100 HB**.

HE shank: order with No. **139631 + 129100 HE**. Can also be used for thread size G5/8 - G7/8

Technical description

Shank Ø D _s	14 mm
Nominal Ø D _c	13.95 mm
Thread size	G1/2

Data sheet

No. of teeth Z	6
Feed f_z in steel < 1400 N/mm ²	0.1 mm
Shank length L_s	45.9 mm
Feed f_z in CRP	0.12 mm
Thread depth	46.4 mm
Number of clamping slots	6
Through-coolant	yes
Thread pitch	1.814 mm
Overall length L	95 mm
Thread profile	Full profile
Threads per inch	14
Application for type of drilling	up to 2×D for blind holes
Application for type of drilling	up to 2×D for through holes
Flute length L_c	5.44 mm
Series	Master TM
Overhang L_1	46.4 mm
Coating	AlTiN
Thread type	BSP
Thread type	G
Thread type	EG-G
Thread type	EG-G-LH
Flank angle	55 degrees
Tool material	Solid carbide
Shank	DIN 6535 HA to h6
Spacing of the cutters	unequal spacing
Shank tolerance	h6
Colour ring	green
Internal/external application	Internal and external
Type of product	Thread mill

User data

	Suitability	V_c	ISO code
Alu plastics	suitable	200 m/min	N
Aluminium (short chipping)	suitable	190 m/min	N
Alu > 10% Si	suitable	160 m/min	N
Steel < 500 N/mm ²	suitable	125 m/min	P
Steel < 750 N/mm ²	suitable	115 m/min	P
Steel < 900 N/mm ²	suitable	110 m/min	P
Steel < 1100 N/mm ²	suitable	80 m/min	P
Steel < 1400 N/mm ²	suitable	70 m/min	P
Steel < 55 HRC	suitable	45 m/min	H
Steel < 60 HRC	suitable only under restricted conditions	35 m/min	H
INOX < 900 N/mm ²	suitable	75 m/min	M
INOX > 900 N/mm ²	suitable	70 m/min	M
Ti > 850 N/mm ²	suitable	45 m/min	S
CuZn	suitable	175 m/min	N
GRP	suitable	100 m/min	N
CRP	suitable	100 m/min	N
Graphite	suitable	150 m/min	N
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable		
Air	suitable		

Suitable products

<https://www.hoffmann-group.com/GB/en/hom/p/139631-G1/2>