

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

Order number	139631 G1
GTIN	4069515023702
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 up to ≤G2

Technical description

Thread depth	59.2 mm
Shank Ø D _s	16 mm
Feed f _z in CRP	0.14 mm

Data sheet

Feed f_z in steel $< 1400 \text{ N/mm}^2$	0.12 mm
Thread profile	Full profile
Overall length L	112 mm
Nominal $\varnothing D_c$	15.95 mm
No. of teeth Z	6
Through-coolant	yes
Shank length L_s	49.6 mm
Number of clamping slots	6
Thread size	G1
Thread pitch	2.309 mm
Series	Master TM
Threads per inch	11
For use with external threads	up to $2 \times D$ for bolt threads
Application for type of drilling	up to $2 \times D$ for blind holes
Application for type of drilling	up to $2 \times D$ for through holes
Flute length L_c	6.93 mm
Overhang L_1	59.2 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>

