

**Garant****GARANT Master TM plain shank thread mill, TiAlN, G: G3/8****Order data**

Order number	139705 G3/8
GTIN	4045197957719
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:**

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.

Order **HB** shank: with **No. 139705 + 129100 HB**.

Order **HE** shank: with **No. 139705 + 129100 HE**.

**Technical description**

Shank length L <sub>s</sub>	45 mm
Thread pitch	1.337 mm
Number of clamping slots	6
Shank Ø D <sub>s</sub>	14 mm

No. of teeth Z	6
Thread size	G3/8
Thread depth	34.09 mm
Feed $f_z$ in steel < 750 N/mm <sup>2</sup>	0.11 mm
Threads per inch	19
Flute length $L_c$	34.09 mm
Overall length L	94 mm
Series	Master TM
Nominal $\varnothing D_c$	13.95 mm
Application for type of drilling	up to 2×D for blind holes
Application for type of drilling	up to 2×D for through holes
For use with external threads	up to 2×D for bolt threads
Coating	TiAlN
Thread type	G
Thread type	G-LH
Flank angle	55 degrees
Tool material	Solid carbide
Shank	DIN 6535 HA to h6
Through-coolant	yes
Spacing of the cutters	unequal spacing
Colour ring	green
Internal/external application	Internal and external
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