

Garant
GARANT Master TM plain shank thread mill 2×D, TiAlN, UNC: 1/4-20

Order data

Order number	139722 1/4-20
GTIN	4062406057930
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 **UNC unified coarse threads** ASME-B1.1.

Note:

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

Form **HB**: order with **No. 139722 + 129100 HB**

Form **HE**: order with **No. 139722 + 129100 HE**

Thread type: UNC

Thread type: UNC-LH

No. of teeth Z: 4

Threads per inch: 20

Nominal $\varnothing D_c$: 4.7 mm

Flute length L_c : 13.29 mm

Shank length L_s : 36 mm

Overall length L: 64 mm

Shank $\varnothing D_s$: 6 mm

Technical description

Thread pitch	1.27 mm
No. of teeth Z	4
Thread type	UNC
Thread type	UNC-LH
Thread Ø	6.35 mm
Number of clamping slots	4
Threads per inch	20
Shank length L _s	36 mm
Overall length L	64 mm
Shank Ø D _s	6 mm
Flute length L _c	13.29 mm
Feed f _z in steel < 750 N/mm ²	0.05 mm
Thread size	1/4-20 UNC
Nominal Ø D _c	4.7 mm
Series	Master TM
Coating	TiAlN
Flank angle	60 °
Tool material	solid carbide
Shank	DIN 6535 HA with h6
Through-coolant	yes
Cutting direction	right-hand
Application for type of drilling	up to 2×D for blind holes
Application for type of drilling	up to 2×D for through holes
Spacing of the cutters	unequal spacing
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

