

Garant

GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAlN, UNC: 1/4-20



Order data

Order number	139485 1/4-20
GTIN	4062406707064
Item class	111

Description

Version:

The latest generation of **high-performance fluteless taps**, specially developed for **use in steel materials**.

- **Optimised polygon geometry for a lower torque.**
- **Multi-layer HIPIMS coating for high wear resistance.**
- **HSS-E-PM substrate for exceptional process reliability.**

DIN 2174 (\approx DIN 371 \leq 3/8; \approx DIN 376 \geq 7/16).

Form E (lead-in 1.5 – 2 turns). For deep threads with short lead-in. The thread is tapped almost to the bottom of the hole.

Application:

For UNC unified coarse threads ASME–B1.1.

Thread pitch: 1.27 mm

Threads per inch: 20

Thread \varnothing : 6.35 mm

Overall length L: 80 mm

Shank \varnothing D_s: 7 mm

Shank square \square : 5.5 mm

Technical description

Shank square \square	5.5 mm
Thread \varnothing	6.35 mm
Number of clamping slots	5
Thread depth	19.05 mm

Overall length L	80 mm
Shank $\varnothing D_s$	7 mm
Thread pitch	1.27 mm
Number of cutting edges Z	5
Tapping hole \varnothing guide value	5.75 mm
Threads per inch	20
Coating	TiAlN
Thread type	UNC
Flank angle	60°
Tool material	HSS E PM
Standard	DIN 2174
Tolerance class	2BX
Taper lead form	E
Shank	Plain shank with h9
Through-coolant	no
Application for type of drilling	up to 3×D for blind holes
Application for type of drilling	up to 3×D for through holes
Cutting direction	right-hand
Type of product	Fluteless tap

User data

	Suitability	V_c	ISO code
Aluminium (short chipping)	suitable	38 m/min	N
Steel < 500 N/mm ²	suitable	37 m/min	P
Steel < 750 N/mm ²	suitable	35 m/min	P
Steel < 900 N/mm ²	suitable	27 m/min	P
Steel < 1100 N/mm ²	suitable	18 m/min	P
Steel < 1400 N/mm ²	suitable	12 m/min	P

INOX < 900 N/mm ²	suitable	12 m/min	M
INOX > 900 N/mm ²	suitable	7 m/min	M
CuZn	suitable	22 m/min	N
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		