

# GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAIN, UNF: 2-64



### **Order data**

Order number	139495 2-64
GTIN	4062406706920
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 UNF unified fine threads ASME-B1.1.

Thread pitch: 0.399 mm Threads per inch: 64 Thread Ø: 2.18 mm Overall length L: 45 mm Shank Ø D₅: 2.8 mm Shank square □: 2.1 mm

# **Technical description**

Tapping hole ∅ guide value	2 mm
Thread pitch	0.399 mm
Number of cutting edges Z	3
Shank Ø D <sub>s</sub>	2.8 mm

Number of clamping slots	3		
Thread Ø	2.18 mm		
Shank square □	2.1 mm		
Thread depth	6.54 mm		
Overall length L	45 mm		
Threads per inch	64		
Coating	TiAIN		
Thread type	UNF		
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	$\mathbf{V}_{c}$	ISO code
Aluminium (short chipping)	suitable	38 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	37 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	35 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable	27 m/min	Р
Steel < 1100 N/mm <sup>2</sup>	suitable	18 m/min	Р
Steel < 1400 N/mm <sup>2</sup>	suitable	12 m/min	Р

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