## Garant

# GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAIN, UNC: 5/8-11



#### Order data

Order number	139485 5/8-11
GTIN	4062406707118
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 (≈ DIN 371** ≤ 3/8; **≈ DIN 376** ≥ 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: 2.309 mm Threads per inch: 11 Thread  $\emptyset$ : 15.88 mm Overall length L: 110 mm Shank  $\emptyset$  D<sub>s</sub>: 12 mm Shank square  $\Box$ : 9 mm

## **Technical description**

Number of clamping slots	8
Shank Ø D <sub>s</sub>	12 mm
Tapping hole Ø guide value	14.8 mm
Shank square 🗆	9 mm

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Thread pitch	2.309 mm	
Overall length L	110 mm	
Thread Ø	15.88 mm	
Thread depth	47.64 mm	
Number of cutting edges Z	8	
Threads per inch	11	
Coating	TiAIN	
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 $3 \times D$ 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 <sub>c</sub>	ISO code
Aluminium (short chipping)	suitable	38 m/min	Ν
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

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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	Ν
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		