# Garant

# GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAIN, UNC: 5/16-18

Gerard .

## Order data

Order number	139485 5/16-18
GTIN	4062406707071
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: 1.411 mm Threads per inch: 18 Thread  $\emptyset$ : 7.94 mm Overall length L: 90 mm Shank  $\emptyset$  D<sub>s</sub>: 8 mm Shank square  $\Box$ : 6.2 mm

## **Technical description**

Thread Ø	7.94 mm
Shank Ø D <sub>s</sub>	8 mm
Number of cutting edges Z	5
Thread depth	23.28 mm

Overall length L	90 mm		
Shank square 🗆	6.2 mm		
Number of clamping slots	5		
Tapping hole Ø guide value	7.3 mm		
Thread pitch	1.411 mm		
Threads per inch	18		
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		