

Garant

GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAlN, MF: 20X1,5



Order data

Order number	139280 20X1,5
GTIN	4062406383923
Item class	11I

Description

Version:

GARANT Master Form Steel:

The latest generation of **high-performance fluteless taps** are specially developed for **use in steels**.

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

DIN 2174 (≈ DIN 371 ≤ M10; DIN 376 ≥ M12).

Tolerance class: ISO 2X 6HX

Thread pitch: 1.5 mm

Overall length L: 125 mm

Shank Ø D_s: 16 mm

Shank square □: 12 mm

Tapping hole Ø guide value: 19.35 mm

Technical description

Series	GARANT Master
Number of clamping slots	8
Thread depth	60 mm
Shank Ø D _s	16 mm
Shank square □	12 mm

Tapping hole Ø guide value	19.35 mm
Tolerance class	ISO 2X 6HX
Thread pitch	1.5 mm
Thread size	M20×1.5
Overall length L	125 mm
Number of cutting edges Z	8
Thread Ø	20 mm
Coating	TiAlN
Thread type	MF
Flank angle	60°
Tool material	HSS E PM
Standard	DIN 2174
Thread standard	DIN 13
Taper lead form	C
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
Colour ring	without
Type of product	Fluteless tap

User data

	Suitability	V _c	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	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 only under restricted conditions	7 m/min	M
CuZn	suitable only under restricted conditions	22 m/min	N
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		