

Garant

GARANT Master Tap SteelHT machine tap HSS-E-PM Form C 6HX, TiAlN, M: M20



Order data

Order number	135371 M20
GTIN	4062406236878
Item class	111

Description

Version:

High-performance tap, specially developed for use in **steels with high tensile strength** and for **difficult-to-machine materials**. Sturdy design with **optimised guide thread to avoid chips jamming**.

- **HSS-E-PM tool material – for very high cutting edge stability.**
- **Optimised honed cutting edges.**
- **TiAlN coating – for maximum wear protection.**

Recommendation:

For **TOOLOX** and **HARDOX** materials we recommend deviating from the **DIN data** (see table) by **selecting a larger tapping hole \varnothing** .

Note:

For **TOOLOX** and **HARDOX materials**: do not exceed the maximum thread depth $2 \times D!$

Thread type: M

Tool material: HSS E PM

Standard: DIN 376

Tolerance class: ISO 2X 6HX

Thread pitch: 2.5 mm

Overall length L: 140 mm

Shank $\varnothing D_s$: 16 mm

Shank square \square : 12 mm

Tapping hole \varnothing : 17.5 mm

Technical description

Standard	DIN 376
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Number of clamping slots	4
Tool material	HSS E PM
Tolerance class	ISO 2X 6HX
Thread depth	50 mm
Number of cutting edges Z	4
Thread type	M
Shank square □	12 mm
Thread pitch	2.5 mm
Thread Ø	20 mm
Shank Ø D _s	16 mm
Thread size	M20
Tapping hole Ø	17.5 mm
Overall length L	140 mm
Coating	TiAlN
Flank angle	60°
Thread standard	DIN 13
Taper lead form	C
Helix angle	40°
Shank	Plain shank with h9
Through-coolant	no
Application for type of drilling	up to 2.5×D for blind holes
Cutting direction	right-hand
Type of threading tool	Machine tap for dynamic machining
Series	Master Tap
Type of product	Tap

User data

	Suitability	V _c	ISO code
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Steel < 750 N/mm ²	suitable only under restricted conditions	30 m/min	P
Steel < 900 N/mm ²	suitable	20 m/min	P
Steel < 1100 N/mm ²	suitable	15 m/min	P
Steel < 1400 N/mm ²	suitable	12 m/min	P
Steel < 50 HRC	suitable only under restricted conditions		
TOOLOX 33	suitable	15 m/min	H
TOOLOX 44	suitable		
HARDOX 500 < 1600 N/mm ²	suitable only under restricted conditions		
INOX > 900 N/mm ²	suitable		
Ti > 850 N/mm ²	suitable only under restricted conditions		
Oil	suitable		
wet maximum	suitable		