

**Garant**
**Machine tap HSS-E-PM, TiN, M: M20**

**Order data**

Order number	131935 M20
GTIN	4045197532398
Item class	11H

**Description**
**Version:**
**With spiral point.**

 For use also in **HARDOX materials (HARDOX ≤ 500)**.

 For use with **emulsion** (fat content minimum 8%).

**Recommendation:**

 For **TOOLOX** and **HARDOX materials** we recommend **deviating from the DIN data** (see table) by drilling the tapping hole Ø **0.05** to **0.3 mm** larger.

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 Ø D<sub>s</sub>: 16 mm

Shank square □: 12 mm

Tapping hole Ø: 17.5 mm

**Technical description**

Thread pitch	2.5 mm
Thread Ø	20 mm
Number of cutting edges Z	3
Tapping hole Ø	17.5 mm
Number of clamping slots	3
Standard	DIN 376

Shank $\varnothing D_s$	16 mm
Overall length L	140 mm
Shank square $\square$	12 mm
Tolerance class	ISO 2X 6HX
Tool material	HSS E PM
Thread depth	60 mm
Thread type	M
Thread size	M20
Coating	TiN
Flank angle	60°
Thread standard	DIN 13
Taper lead form	B
Shank	Plain shank with h9
Through-coolant	no
Application for type of drilling	up to 3×D for through holes
Cutting direction	right-hand
Type of threading tool	Machine tap for dynamic machining
Colour ring	red
Type of product	Tap

## User data

	Suitability	$V_c$	ISO code
Steel < 1100 N/mm <sup>2</sup>	suitable	9 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	7 m/min	P
TOOLOX 33	suitable	7 m/min	H
TOOLOX 44	suitable	5 m/min	H
HARDOX 500 < 1600 N/mm <sup>2</sup>	suitable	3 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	9 m/min	M

INOX > 900 N/mm <sup>2</sup>	suitable	7 m/min	M
CuZn	suitable only under restricted conditions	8 m/min	N
Oil	suitable		
wet maximum	suitable		