

**Garant**
**Machine taps extra long HSS-E-PM, TiAlN, M: M20**

**Order data**

Order number	134655 M20
GTIN	4045197705204
Item class	11H

**Description**
**Version:**
**With extra long shank.**

 Special **TiAlN coating**, highly suitable for **aluminium alloys**.

**All sizes: Shank to DIN 376 (= shank Ø relieved)**, outstandingly suitable for use up to great depths.

**Advantage:**

 Designed **for tapping threads where access is difficult**.

**Application:**

 Suitable for materials with tensile strength **up to maximum 450N/mm<sup>2</sup>**.

Thread type: M

Tool material: HSS E PM

Standard: Manufacturer's standard

Tolerance class: ISO 2 6H

Thread pitch: 2.5 mm

Overall length L: 280 mm

 Shank Ø D<sub>s</sub>: 16 mm

Shank square □: 12 mm

Tapping hole Ø: 17.5 mm

**Technical description**

Number of clamping slots	4
Thread Ø	20 mm
Thread pitch	2.5 mm
Number of cutting edges Z	4
Tapping hole Ø	17.5 mm

Standard	Manufacturer's standard
Shank $\varnothing D_s$	16 mm
Overall length L	280 mm
Shank square $\square$	12 mm
Tolerance class	ISO 2 6H
Tool material	HSS E PM
Thread depth	60 mm
Thread type	M
Thread size	M20
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 3×D for blind holes
Cutting direction	right-hand
Type of threading tool	Machine tap for dynamic machining
Colour ring	yellow
Type of product	Tap

## User data

	Suitability	$V_c$	ISO code
Alu plastics	suitable	28 m/min	N
Aluminium (short chipping)	suitable	28 m/min	N
Alu > 10% Si	suitable	23 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable only under restricted conditions	27 m/min	P

CuZn	suitable only under restricted conditions	28 m/min	N
Oil	suitable		
wet maximum	suitable		