Garant

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

Order data

Order number	135374 M20
GTIN	4062406237080
Item class	11l

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.**
Tolerance class: ISO 3X/6GX.
Application:
For components which are galvanised or shrink slightly when hardened.
Recommendation:
For **TOOLOX and HARDOX materials we recommend deviating from the DIN data** (see table) by **selecting a larger tapping hole ∅.**
Note:
For **TOOLOX and HARDOX materials:** do not exceed the maximum thread depth 2×D!
Thread type: M
Tool material: HSS E PM
Standard: DIN 376
Tolerance class: ISO 3X 6GX
Thread pitch: 2.5 mm
Overall length L: 140 mm
Shank ∅ D_s: 16 mm
Shank square ☐: 12 mm
Tapping hole ∅: 17.5 mm

Technical description

Tolerance class	ISO 3X 6GX
Thread pitch	2.5 mm
Standard	DIN 376
Overall length L	140 mm
Shank ⌀ D_s	16 mm
Thread ⌀	20 mm
Tool material	HSS E PM
Thread size	M20
Thread type	M
Number of clamping slots	4
Thread depth	50 mm
Number of cutting edges Z	4
Shank square ☐	12 mm
Tapping hole ⌀	17.5 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×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
Steel < 750 N/mm²	suitable only under restricted conditions	30 m/min	P
Steel < 900 N/mm²	suitable	20 m/min	P
Steel < 1100 N/mm²	suitable	15 m/min	P
Steel < 1400 N/mm²	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/mm²	suitable only under restricted conditions		
INOX > 900 N/mm²	suitable		
Ti > 850 N/mm²	suitable only under restricted conditions		
Oil	suitable		
wet maximum	suitable		