

Garant**End cutting thread mill 2.5×D, TiAlN, M: M6****Order data**

Order number	139521 M6
GTIN	4062406565688
Item class	11J

Description**Version:**

Tool for **combined production** of bore, chamfer and thread **in a single work step**. Pre-drilling is no longer required. The innovative centre cutting edge geometry makes this tool a specialist in thread production in **hardened and hard-to-machine materials**. The **TiAlN high-performance coating** ensures the longest possible **tool life**, especially in hardened steels **up to 63 HRC**. All tools have left-hand cutting and are suitable for **right-hand and left-hand threads**.

Note:

Always use with cooling lubricant emulsion. (Fat content minimum 8%). In the case of steels **>45 HRC**: can only be used with **compressed air**! Can also be used for thread size MF7×1 and MF8×1.

Technical description

Overall length L	57 mm
Thread depth	15
Thread size	M6
Number of clamping slots	4
Thread pitch	1 mm
Shank length L _s	36.4 mm
Shank Ø D _s	6 mm
Feed f _z in steel < 65 HRC	0.01 mm
Cutter length l _c	2.8 mm

Programming radius	2.27 mm
Overhang L_1	17.6 mm
Cutting edge $\varnothing D_c$	4.6 mm
Neck $\varnothing D_1$	3.36 mm
Through-coolant	yes
Coating	TiAlN
Thread type	M
Thread type	M-LH
Flank angle	60 degrees
Tool material	Solid carbide
Thread standard	DIN 13
Shank	DIN 6535 HA with h6
Number of cutting edges Z	4
Application for type of drilling	up to $2 \times D$ for blind holes
Application for type of drilling	up to $2.5 \times D$ for through holes
Countersink angle	90 degrees
Cutting direction	right-hand
Shank tolerance	h6
Colour ring	without
Internal/external application	Internal
Type of product	Combination drill / thread mill

User data

	Suitability	V_c	ISO code
Steel < 1100 N/mm ²	suitable	90 m/min	P
Steel < 1400 N/mm ²	suitable	90 m/min	P
Steel < 55 HRC	suitable	45 m/min	H
Steel < 60 HRC	suitable	40 m/min	H

Steel < 65 HRC	suitable only under restricted conditions	35 m/min	H
INOX < 900 N/mm ²	suitable	60 m/min	M
INOX > 900 N/mm ²	suitable	60 m/min	M
Ti > 850 N/mm ²	suitable	45 m/min	S
wet maximum	suitable		
Air Services	suitable		

Shank grinding Type HE	129100 HE
Shank grinding Type HB	129100 HB