

**Garant**
**GARANT Diabolo solid carbide end cutting thread mill 2xD, TiAlN, G: G3/8**

**Order data**

Order number	139527 G3/8
GTIN	4067263118084
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**.

**Application:**

For **Whitworth parallel pipe threads** DIN-ISO 228/1 (threads that do not form a seal within the connections).

**Note:**

**Always use with cooling lubricant emulsion.** (Fat content min 8%). In the case of steels **>45 HRC** can only be used with **compressed air!**

HB and HE shanks are available at the same price as HA.

Order **HB** shank: with **No. 139527 + 129100 HB**.

Order **HE** shank: with **No. 139527 + 129100 HE**.

**Technical description**

Number of clamping slots	4
Feed $f_z$ in steel < 65 HRC	0.01 mm
Shank $\varnothing D_s$	12 mm
Threads per inch	19
Cutting edge $\varnothing D_c$	11.8 mm
Through-coolant	yes

Shank length $L_s$	44.5 mm
Thread depth	37
Overhang $L_1$	37 mm
Programming radius	5.9 mm
Neck $\varnothing D_1$	9.76 mm
Overall length $L$	83 mm
Cutter length $l_c$	4.5 mm
Thread size	G3/8
Thread pitch	1.337 mm
Coating	TiAlN
Thread type	BSP
Thread type	G
Flank angle	55 degrees
Tool material	Solid carbide
Shank	DIN 6535 HA with h6
Number of cutting edges $Z$	4
Application for type of drilling	up to $2 \times D$ for through holes
Application for type of drilling	up to $2 \times D$ for blind holes
Countersink angle	90 degrees
Cutting direction	left-hand
Shank tolerance	h6
Internal/external application	Internal
Type of product	Drill thread milling cutters

## User data

	Suitability	$V_c$	ISO code
Steel < 1100 N/mm <sup>2</sup>	suitable	90 m/min	P
Steel < 1400 N/mm <sup>2</sup>	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 <sup>2</sup>	suitable	60 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	60 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable	45 m/min	S
wet maximum	suitable		
Air	suitable		

**Services**

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