

# GARANT Master Titan HSS-PM roughing end mill HPC, TiAlN, $\varnothing$ k10 DC / R1: 20/2,0mm



#### **Order data**

Order number	192945 20/2,0		
GTIN	4062406300418		
Item class	11Z		

### **Description**

#### **Version:**

Innovative knurled profile and optimised flute geometry for a evacuating a high volume of chips at very high process reliability. Increased tool life due to precise alignment of the throughcoolant with the cutting edges.

#### **Advantage:**

New type of tool material; problem solver under unstable machining conditions.

## **Technical description**

Feed $f_z$ for side milling in titanium > 850 N/mm <sup>2</sup>	0.03 mm		
No. of teeth Z	4		
Flute length L <sub>c</sub>	75 mm		
Direction of infeed	horizontal, oblique and vertical		
Shank	DIN 6535 HB to h6		
Overall length L	141 mm		
Helix angle	40 degrees		
Recess Ø D <sub>1</sub>	19 mm		
Cutting edge $\emptyset$ $D_{c}$	20 mm		
Feed $f_z$ for side milling in INOX > 900 N/mm <sup>2</sup>	0.03 mm		
Shank Ø D <sub>s</sub>	20 mm		



Overhang length $L_1$ incl. recess	89 mm		
Tolerance nominal Ø	k10		
Corner radius R <sub>1</sub>	2 mm		
Series	Master Titan		
Coating	TiAIN		
Tool material	HSS PM		
Standard	DIN 844		
Milling profile	HR		
Helix angle characteristic	unequal spacing		
Spacing of the cutters	unequal spacing		
Cutting width a <sub>e</sub> for milling operation	0.3×D for side milling		
Through-coolant	no		
Machining strategy	HPC		
Colour ring	pink		
Type of product	End / face mill		

## User data

	Suitability	<b>V</b> <sub>c</sub>	ISO code
INOX < 900 N/mm <sup>2</sup>	suitable	30 m/min	Μ
INOX > 900 N/mm <sup>2</sup>	suitable	28 m/min	М
Ti > 850 N/mm <sup>2</sup>	suitable	28 m/min	S
wet maximum	suitable		