

Garant
GARANT Master Titan HSS-PM roughing end mill HPC, TiAlN, Ø k10 DC / R1: 20/4,0mm

Order data

Order number	192945 20/4,0
GTIN	4062406300425
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 through-coolant with the cutting edges.

Advantage:

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

Technical description

Shank Ø D _s	20 mm
Cutting edge Ø D _c	20 mm
Overall length L	141 mm
Recess Ø D ₁	19 mm
Tolerance nominal Ø	k10
Overhang length L ₁ incl. recess	89 mm
No. of teeth Z	4
Direction of infeed	horizontal, oblique and vertical
Feed f _z for side milling in INOX > 900 N/mm ²	0.03 mm
Helix angle	40 degrees
Shank	DIN 6535 HB to h6

Flute length L_c	75 mm
Feed f_z for side milling in titanium $> 850 \text{ N/mm}^2$	0.03 mm
Corner radius R_1	4 mm
Series	Master Titan
Coating	TiAlN
Tool material	HSS PM
Standard	DIN 844
Milling profile	HR
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	$0.3 \times D$ for side milling
Through-coolant	no
Machining strategy	HPC
Colour ring	pink
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
INOX $< 900 \text{ N/mm}^2$	suitable	30 m/min	M
INOX $> 900 \text{ N/mm}^2$	suitable	28 m/min	M
Ti $> 850 \text{ N/mm}^2$	suitable	28 m/min	S
wet maximum	suitable		