

Garant
GARANT Master Steel solid carbide roughing end mill HPC, TiAlN, Ø f8 DC: 16mm

Order data

Order number	203039 16
GTIN	4062406230951
Item class	11X

Description
Version:

For **roughing and finishing**.

Up to 1.5xD into solid material **at very high feed rates** with smooth cutting action.

Advantage:

Optimised flute form, eccentric relief ground, generous chip spaces.

Technical description

Corner chamfer width at 45°	0.1 mm
Shank Ø D _s	16 mm
No. of teeth Z	4
Recess Ø D ₁	15.8 mm
Helix angle	38 degrees
Direction of infeed	horizontal, oblique and vertical
Overall length L	92 mm
Flute length L _c	36 mm
Feed f _z for slot milling in steel < 900 N/mm ²	0.08 mm
Tolerance nominal Ø	f8
Shank	DIN 6535 HB to h6
Feed f _z for side milling in steel < 900 N/mm ²	0.1 mm

Overhang length L_1 incl. recess	42 mm
Cutting edge $\varnothing D_c$	16 mm
Corner chamfer angle	45 degrees
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	DIN 6527
Type	N
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	Full slot cutting depth $1 \times D$
Cutting width a_e for milling operation	$0.03 \times D$ for copy milling
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Steel < 500 N/mm ²	suitable	260 m/min	P
Steel < 750 N/mm ²	suitable	240 m/min	P
Steel < 900 N/mm ²	suitable	190 m/min	P
Steel < 1100 N/mm ²	suitable	180 m/min	P
Steel < 1400 N/mm ²	suitable only under restricted conditions	150 m/min	P
INOX < 900 N/mm ²	suitable	80 m/min	M
INOX > 900 N/mm ²	suitable	70 m/min	M
GG(G)	suitable	250 m/min	K
Uni	suitable		

wet maximum	suitable
wet minimum	suitable only under restricted conditions
dry	suitable
Air	suitable