

Garant
Solid carbide roughing end mill HPC, TiAlN, Ø f8 DC: 20mm

Order data

Order number	203041 20
GTIN	4045197510631
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, wide chip space.

Note:

NEW GENERATION AVAILABLE!

Recommended successor product is No. 203035.

Technical description

Feed f_z for slot milling in steel < 900 N/mm ²	0.1 mm
Feed f_z for side milling in steel < 900 N/mm ²	0.13 mm
Recess Ø D_1	19.8 mm
Cutting edge Ø D_c	20 mm
Corner chamfer width at 45°	0.4 mm
No. of teeth Z	4
Overhang length L_1 incl. recess	54 mm
Shank Ø D_s	20 mm
Overall length L	104 mm
Flute length L_c	41 mm
Direction of infeed	horizontal, oblique and vertical

Shank	DIN 6535 HB to h6
Tolerance nominal \varnothing	f8
Helix angle	38 degrees
Corner chamfer angle	45 degrees
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	0.3×D for side milling
Cutting width a_e for milling operation	Full slot cutting depth 1×D
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	250 m/min	P
Steel < 750 N/mm ²	suitable	200 m/min	P
Steel < 900 N/mm ²	suitable	180 m/min	P
Steel < 1100 N/mm ²	suitable	160 m/min	P
INOX < 900 N/mm ²	suitable	70 m/min	M
INOX > 900 N/mm ²	suitable	50 m/min	M
GG(G)	suitable	120 m/min	K
Uni	suitable		
wet maximum	suitable		

wet minimum	suitable only under restricted conditions
dry	suitable
Air	suitable