

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

Order data

Order number	202982 20
GTIN	4045197459879
Item class	11X

Description
Version:

Significant cutting force reduction due to 45° helix.

Application:

Especially for **MTC (Multi Task Cutting)** use on the new generation of turning / milling centres.

Note:

For materials > 55 HRC we recommend reducing the depth of cut to $a_p=0.25 \times D \dots 0.5 \times D$.

Technical description

Feed f_z for side milling in steel < 60 HRC	0.05 mm
No. of teeth Z	4
Cutting edge Ø D_c	20 mm
Corner chamfer width at 45°	0.25 mm
Overhang length L_1 incl. recess	98 mm
Recess Ø D_1	19 mm
Shank Ø D_s	20 mm
Overall length L	150 mm
Flute length L_c	40 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 6535 HB to h6
Tolerance nominal Ø	f8

Helix angle	45 degrees
Feed f_z for slot milling in steel < 60 HRC	0.05 mm
Corner chamfer angle	45 degrees
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	H
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	$0.15 \times D$ for side milling
Through-coolant	no
Machining strategy	MTC
Colour ring	red
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Steel < 900 N/mm ²	suitable	90 m/min	P
Steel < 1100 N/mm ²	suitable	70 m/min	P
Steel < 1400 N/mm ²	suitable	60 m/min	P
Steel < 55 HRC	suitable	45 m/min	H
Steel < 60 HRC	suitable	25 m/min	H
Steel < 65 HRC	suitable	20 m/min	H
Steel < 67 HRC	suitable only under restricted conditions	15 m/min	H
wet maximum	suitable only under restricted conditions		
wet minimum	suitable only under restricted conditions		

dry	suitable
Air	suitable