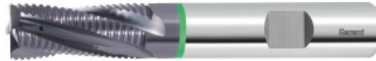


## Garant

### Solid carbide roughing end mill with internal coolant supply HPC, TiAlN, Ø d11 DC: 20mm



#### Order data

Order number	205592 20
GTIN	4045197553195
Item class	11X

#### Description

##### Version:

##### With internal coolant supply.

The coolant is fed directly **to the cutting** edges.

This gives **longer tool-life** and **complete swarf evacuation**.

This is especially **important when milling slots or pockets**.

#### Technical description

Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup>	0.12 mm
Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup>	0.1 mm
Corner chamfer width at 45°	0.5 mm
No. of teeth Z	4
Cutting edge Ø $D_c$	20 mm
Shank Ø $D_s$	20 mm
Overall length L	104 mm
Flute length $L_c$	38 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 6535 HB to h6
Tolerance nominal Ø	d11
Helix angle	20 degrees

Corner chamfer angle	45 degrees
Coating	TiAlN
Tool material	Solid carbide
Standard	DIN 6527
Milling profile	HR
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	yes
Machining strategy	HPC
Colour ring	green
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	280 m/min	N
Alu > 10% Si	suitable only under restricted conditions	200 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	120 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	105 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	100 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	70 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	60 m/min	P
Steel < 55 HRC	suitable only under restricted conditions	35 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	60 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	50 m/min	M
GG(G)	suitable	90 m/min	K
Uni	suitable		
wet maximum	suitable		

Air

suitable