

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

Order data

Order number	205488 20
GTIN	4045197553140
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 $< 900 \text{ N/mm}^2$	0.12 mm
No. of teeth Z	4
Feed f_z for slot milling in steel $< 900 \text{ N/mm}^2$	0.1 mm
Cutting edge $\varnothing D_c$	20 mm
Corner chamfer width at 45°	0.5 mm
Shank $\varnothing D_s$	20 mm
Overall length L	92 mm
Flute length L_c	20 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 6535 HB to h6
Tolerance nominal \varnothing	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	0.5×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 ²	suitable	120 m/min	P
Steel < 750 N/mm ²	suitable	105 m/min	P
Steel < 900 N/mm ²	suitable	100 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 only under restricted conditions	35 m/min	H
INOX < 900 N/mm ²	suitable	60 m/min	M
INOX > 900 N/mm ²	suitable	50 m/min	M
GG(G)	suitable	90 m/min	K
Uni	suitable		
wet maximum	suitable		

Air

suitable