

## Garant

**Solid carbide roughing end mill with internal coolant supply MTC, TiAlN, Ø d11 DC: 10mm**



### Order data

Order number	205716 10
GTIN	4045197362834
Item class	11X

### Description

#### Version:

**Optimised special knuckle profile for roughing.**

Very **high rate of metal removal**. Can be used as a **universal end mill**.

**Special cooling channel system**, to achieve the best possible high performance machining.

#### Application:

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

### Technical description

No. of teeth Z	4
Corner chamfer width at 45°	0.2 mm
Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup>	0.05 mm
Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup>	0.06 mm
Recess Ø D <sub>1</sub>	9.5 mm
Overhang length L <sub>1</sub> incl. recess	32 mm
Cutting edge Ø D <sub>c</sub>	10 mm
Shank Ø D <sub>s</sub>	10 mm
Overall length L	72 mm
Flute length L <sub>c</sub>	20 mm
Direction of infeed	horizontal, oblique and vertical

Shank	DIN 6535 HB to h6
Tolerance nominal $\varnothing$	d11
Helix angle	45 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	MTC
Colour ring	green
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	265 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	195 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	195 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	160 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	140 m/min	P
Steel < 55 HRC	suitable only under restricted conditions	35 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	70 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	50 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable	45 m/min	S
GG(G)	suitable	145 m/min	K

Uni	suitable
wet maximum	suitable
Air	suitable