

Garant

GARANT Master Steel SlotMachine solid carbide roughing end mill with through-coolant HPC, TiAlN, Ø d11 DC: 5mm



Order data

Order number	205551 5
GTIN	4062406111144
Item class	11X

Description

Version:

With a new-type knurled profile, optimised for higher feed rates. Improved cutting edge protection thanks to slight edge honing. Tremendous bending strength due to the use of ultra-fine grain substrate.

Feed rate per tooth up to 0.1 mm up to a depth of 2×D (in the slot milled from solid).

With **internal coolant supply** for reliable swarf evacuation.

Advantage:

The tool geometry produces particularly tightly rolled swarf that is discharged via flat chip breaker recesses. As a result, the tool maintains an extremely stable core. Plunge angle of up to 10° possible thanks to generous recess on the front face.

Application:

For roughing machining, particularly suitable for full-slot machining.

Technical description

No. of teeth Z	5
Helix angle	42 degrees
Feed f_z for slot milling in steel < 900 N/mm ²	0.02 mm
Shank	DIN 6535 HB to h6
Shank Ø D_s	6 mm
Flute length L_c	13 mm
Tolerance nominal Ø	d11

Overhang length L_1 incl. recess	19 mm
Cutting edge $\varnothing D_c$	5 mm
Corner chamfer width at 45°	0.25 mm
Overall length L	57 mm
Direction of infeed	horizontal and oblique
Recess $\varnothing D_1$	4.6 mm
Feed f_z for side milling in steel $< 900 \text{ N/mm}^2$	0.03 mm
Corner chamfer angle	45 degrees
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	DIN 6527
Milling profile	NR
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	$0.4 \times D$ for side milling
Cutting width a_e for milling operation	$0.05 \times D$ for copy milling
Through-coolant	yes
Machining strategy	HPC
Colour ring	green
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Steel $< 500 \text{ N/mm}^2$	suitable	200 m/min	P
Steel $< 750 \text{ N/mm}^2$	suitable	180 m/min	P
Steel $< 900 \text{ N/mm}^2$	suitable	160 m/min	P
Steel $< 1100 \text{ N/mm}^2$	suitable	140 m/min	P
Steel $< 1400 \text{ N/mm}^2$	suitable	110 m/min	P
INOX $< 900 \text{ N/mm}^2$	suitable	50 m/min	M

INOX > 900 N/mm ²	suitable	35 m/min	M
GG(G)	suitable	200 m/min	K
Uni	suitable		
wet maximum	suitable		
Air	suitable		