

Garant
End mill HSS-E-SPM HPC, TiAlN, Ø DC: 4,5 mm

Order data

Order number	191635 4,5
GTIN	4045197547101
Item class	11W

Description
Version:

Special **SPM** substrate with very high cobalt content.

Combines the **hardness of solid carbide** and the **toughness of PM steel**.

Multi-flute end mill with universal geometry.

Can be used as a finishing end mill, semi-roughing or roughing end mill.

Tolerance nominal Ø: k12

No. of teeth Z: 4

Helix angle: 30 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 1835 B to h6

No. of teeth Z: 4

Flute length L_c : 11 mm

Overall length L: 55 mm

Shank Ø D_s : 6 mm

Feed f_z for side milling in steel < 1100 N/mm²: 0.012 mm

Technical description

Cutting edge Ø D_c	4.5 mm
No. of teeth Z	4
Feed f_z for side milling in steel < 1100 N/mm ²	0.012 mm
Shank Ø D_s	6 mm
Overall length L	55 mm
Flute length L_c	11 mm

Direction of infeed	horizontal, oblique and vertical
Shank	DIN 1835 B to h6
Tolerance nominal \varnothing	k12
Helix angle	30 degrees
Corner chamfer angle	90 degrees
Coating	TiAlN
Tool material	HSS E SPM
Standard	DIN 844 B
Type	N
Helix angle characteristic	unequal spacing
Cutting width a_e for milling operation	0.5×D for side milling
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	End mill