

Garant
Roughing end mill HPC HSS-E-SPM, TiAlN, Ø k12 DC: 20mm

Order data

Order number	192855 20
GTIN	4045197108326
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**.

Centre cutting teeth profile for plunging.

Application:

For very high metal removal rates and increased machining volumes on stainless steels.

Technical description

Feed f_z for slot milling in stainless steel $> 900 \text{ N/mm}^2$	0.042 mm
No. of teeth Z	5
Corner chamfer width at 45°	0.3 mm
Cutting edge $\varnothing D_c$	20 mm
Shank $\varnothing D_s$	20 mm
Overall length L	104 mm
Flute length L_c	38 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	45 degrees

Coating	TiAlN
Tool material	HSS E SPM
Standard	DIN 844
Milling profile	HRF
Through-coolant	no
Machining strategy	HPC
Colour ring	blue
Type of product	End / face mill

User data

	Suitability	V _c	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	159 m/min	N
Steel < 500 N/mm ²	suitable	95 m/min	P
Steel < 750 N/mm ²	suitable	74 m/min	P
Steel < 900 N/mm ²	suitable	74 m/min	P
Steel < 1100 N/mm ²	suitable only under restricted conditions	42 m/min	P
INOX < 900 N/mm ²	suitable	26 m/min	M
INOX > 900 N/mm ²	suitable	21 m/min	M
Ti > 850 N/mm ²	suitable	20 m/min	S
Uni	suitable only under restricted conditions		
wet maximum	suitable		
wet minimum	suitable		
dry	suitable only under restricted conditions		