

**Garant**
**Roughing end mill HSS-PM, TiAlN, Ø DC: 16Mmm**

**Order data**

Order number	192860 16M
GTIN	4045197108555
Item class	11W

**Description**
**Version:**
**Relief ground fine pitch knuckle form profile.**

Centre cutting teeth for plunging.

Size 6M to 25M – **MID mills:** Dimensions to **manufacturer's standard**, which is **between** DIN 844 **stub** and DIN 844 **long**.

**Technical description**

Cutting edge $\varnothing D_c$	16 mm
Overhang length $L_1$ incl. recess	59 mm
No. of teeth $Z$	5
Corner chamfer width at $45^\circ$	0.3 mm
Feed $f_z$ for slot milling in steel $< 900 \text{ N/mm}^2$	0.041 mm
Recess $\varnothing D_1$	15.5 mm
Shank $\varnothing D_s$	16 mm
Overall length $L$	108 mm
Flute length $L_c$	48 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 1835 B to h6
Tolerance nominal $\varnothing$	$\pm 0.12$
Helix angle	30 degrees

Corner chamfer angle	45 degrees
Coating	TiAlN
Tool material	HSS PM
Standard	DIN 844
Milling profile	HR
Through-coolant	no
Colour ring	green
Type of product	End / face mill

### User data

	Suitability	V <sub>c</sub>	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	138 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	83 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	64 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	64 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	37 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	32 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	23 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	18 m/min	M
GG(G)	suitable only under restricted conditions	55 m/min	K
CuZn	suitable only under restricted conditions	110 m/min	N
Uni	suitable		
wet maximum	suitable		
dry	suitable		