

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

**Order data**

Order number	192645 16
GTIN	4045197107329
Item class	11W

**Description**
**Version:**
**With relief ground knuckle form profile.**

Up to size 20 with end cutting teeth profile for plunging.

The wide teeth lands permit multiple re-grinding without losing the profile.

**HSS-PM** – For highest demands on metal removal rates.

Sizes 6M to 25M – **MID mills:** dimensions to **factory standard, which is between DIN 844 stub and DIN 844 long.**

Through-coolant: no

Tolerance nominal Ø: js12

No. of teeth Z: 4

Helix angle: 30°

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 1835 B to h6

No. of teeth Z: 4

Flute length  $L_c$ : 32 mm

Overall length L: 92 mm

Shank Ø  $D_s$ : 16 mm

Corner chamfer width at 45°: 0.6 mm

Feed  $f_z$  for slot milling in steel < 750 N/mm<sup>2</sup>: 0.06 mm

**Technical description**

No. of teeth Z	4
Cutting edge Ø $D_c$	16 mm
Corner chamfer width at 45°	0.6 mm

Feed $f_z$ for slot milling in steel $< 750 \text{ N/mm}^2$	0.06 mm
Shank $\varnothing D_s$	16 mm
Overall length L	92 mm
Flute length $L_c$	32 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 1835 B to h6
Tolerance nominal $\varnothing$	js12
Helix angle	$30^\circ$
Corner chamfer angle	$45^\circ$
Coating	TiAlN
Tool material	HSS PM
Standard	DIN 844 B
Milling profile	NR
Through-coolant	no
Colour ring	without
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	138 m/min	N
Steel $< 500 \text{ N/mm}^2$	suitable	83 m/min	P
Steel $< 750 \text{ N/mm}^2$	suitable	64 m/min	P
Steel $< 900 \text{ N/mm}^2$	suitable	64 m/min	P
Steel $< 1100 \text{ N/mm}^2$	suitable	37 m/min	P
Steel $< 1400 \text{ N/mm}^2$	suitable only under restricted conditions	32 m/min	P
INOX $< 900 \text{ N/mm}^2$	suitable	23 m/min	M
INOX $> 900 \text{ N/mm}^2$	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		