

**Garant**
**Roughing end mill HSS-PM, TiAlN, Ø DC: 30mm**

**Order data**

Order number	192920 30
GTIN	4045197108883
Item class	11W

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

Centre cutting teeth for plunging.

For the most demanding metal removal rates.

**Advantage:**

Excellent results when milling dry.

**Technical description**

Cutting edge $\varnothing D_c$	30 mm
Feed $f_z$ for slot milling in steel $< 900 \text{ N/mm}^2$	0.046 mm
No. of teeth Z	5
Corner chamfer width at $45^\circ$	0.5 mm
Shank $\varnothing D_s$	25 mm
Overall length L	166 mm
Flute length $L_c$	90 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 PM
Standard	DIN 844
Milling profile	HR
Spacing of the cutters	unequal spacing
Through-coolant	no
Colour ring	without
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
Alu > 10% Si	suitable only under restricted conditions	110 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		

