

**Garant**
**Roughing end mill HSS-Co8, TiAlN, Ø k12 DC: 13mm**

**Order data**

Order number	192605 13
GTIN	4067263290896
Item class	11W

**Description**
**Version:**

Sizes 6M to 25M – **MID mills**. Dimensions to **factory standard, between** DIN 844 **short** and DIN 844 **long**.

**With relief ground knuckle profile.** The wide teeth lands permit multiple re-grinding without losing the profile.

End face geometry for plunging and unequal spacing of the teeth.

**Technical description**

Helix angle	30 degrees
Shank	DIN 1835 B to h6
No. of teeth Z	4
Feed $f_z$ for slot milling in steel < 750 N/mm <sup>2</sup>	0.021 mm
Flute length $L_c$	26 mm
Corner chamfer width at 45°	0.5 mm
Corner chamfer angle	45 degrees
Tolerance nominal Ø	k12
Cutting edge Ø $D_c$	13 mm
Overall length L	83 mm
Direction of infeed	horizontal, oblique and vertical
Shank Ø $D_s$	12 mm

Coating	TiAlN
Tool material	HSS Co 8
Standard	DIN 844 B
Milling profile	NR
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	120 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	781 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	55 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	55 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	29 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	25 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	17 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	14 m/min	M
GG(G)	suitable only under restricted conditions	46 m/min	K
CuZn	suitable only under restricted conditions	90 m/min	N
Uni	suitable		
wet maximum	suitable		
dry	suitable only under restricted conditions		

