

Garant
Semi-roughing end mill, TiAlN, Ø k12 DC: 22mm

Order data

Order number	191720 22
GTIN	4045197105011
Item class	11W

Description
Version:

Size 10 – 30 centre cutting teeth for plunging.

or a considerable performance improvement with special ground **chip breaker flutes**.

Advantage:

The chip breaker flutes **facilitate chip evacuation** and at the same time ensure a **good component surface finish**.

Technical description

No. of teeth Z	4
Feed f_z for slot milling in steel $< 750 \text{ N/mm}^2$	0.06 mm
Cutting edge Ø D_c	22 mm
Shank Ø 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 Ø	k12
Helix angle	27-30 degrees
Corner chamfer angle	90 degrees
Coating	TiAlN

Tool material	HSS Co 8
Standard	DIN 844 B
Milling profile	NF
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	120 m/min	N
Steel < 500 N/mm ²	suitable	78 m/min	P
Steel < 750 N/mm ²	suitable	55 m/min	P
Steel < 900 N/mm ²	suitable	55 m/min	P
INOX < 900 N/mm ²	suitable	17 m/min	M
INOX > 900 N/mm ²	suitable only under restricted conditions	14 m/min	M
GG(G)	suitable only under restricted conditions	46 m/min	K
CuZn	suitable only under restricted conditions	92 m/min	N
Uni	suitable		
wet maximum	suitable		
dry	suitable only under restricted conditions		