

**Garant**
**Solid carbide torus cutter, TiAlN, Ø e8 DC / R1: 20/1,0 mm**

**Order data**

Order number	206280 20/1,0
GTIN	4045197124142
Item class	11X

**Description**
**Version:**

With **double relief ground side clearance angle**.

Tolerance: Corner radius  $R_1 = \pm 0.005$  mm.

**Application:**

Especially for **high speed machining** in **mould and tool making** for **copy milling**. Excellent results when **milling dry**.

**Note:**

**NEW GENERATION AVAILABLE!**

**Recommended successor product is No. 206333.**

No. of teeth Z: 4

Helix angle: 30 degrees

Shank: DIN 6535 HA to h6

No. of teeth Z: 4

Flute length  $L_c$ : 20 mm

Corner radius  $R_1$ : 1 mm

Overhang length  $L_1$  incl. recess: 55 mm

Recess  $\varnothing D_1$ : 18.5 mm

Overall length L: 104 mm

**Technical description**

Recess $\varnothing D_1$	18.5 mm
Feed $f_z$ for copy milling in steel < 1100 N/mm <sup>2</sup>	0.073 mm
No. of teeth Z	4
Feed $f_z$ for side milling in steel < 1100 N/mm <sup>2</sup>	0.065 mm

Overhang length $L_1$ incl. recess	55 mm
Corner radius $R_1$	1 mm
Cutting edge $\varnothing D_c$	20 mm
Shank $\varnothing D_s$	20 mm
Flute length $L_c$	20 mm
Overall length $L$	104 mm
Shank	DIN 6535 HA to h6
Helix angle	30 degrees
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	H
Tolerance nominal $\varnothing$	e8
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0.05×D for copy milling
Cutting width $a_e$ for milling operation	0.2×D for side milling
Through-coolant	no
Shank tolerance	h6
Colour ring	without
Type of product	End mill

## Services

Shank recess Type FRST	209900 FRST
Shank clamping flats for shrink-fit chucks, with retainer function Shank $\varnothing$ tool 20 mm	SZ2025 20
Shank grinding Type HB	129100 HB