

**Garant**
**Solid carbide milling cutter HPC, ZOx, Ø f8 DC: 20 mm**

**Order data**

Order number	202251 20
GTIN	4045197538628
Item class	11X

**Description**
**Version:**

Sturdy roughing end mill **without** knuckle profile.

With strong core, **special chip breaker recesses** and **large polished flutes**.

**Application:**

For roughing milling with high demands on the component surface.

**Note:**

**NEW GENERATION AVAILABLE!**

**Recommended successor product is No. 202017.**

Tolerance nominal Ø: f8

No. of teeth Z: 3

Helix angle: 45 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HB to h6

Balance quality with shank: G 2.5 with HB

No. of teeth Z: 3

Flute length  $L_c$ : 32 mm

Overhang length  $L_1$  incl. recess: 98 mm

Recess Ø  $D_1$ : 19 mm

Overall length L: 150 mm

Shank Ø  $D_s$ : 20 mm

**Technical description**

Feed $f_z$ for slot milling in short-chipping aluminium	0.12 mm
Cutting edge Ø $D_c$	20 mm
Recess Ø $D_1$	19 mm

Overhang length $L_1$ incl. recess	98 mm
No. of teeth Z	3
Corner chamfer width at 45°	0.2 mm
Shank form	HB
Feed $f_z$ for side milling in short-chipping aluminium	0.16 mm
Shank $\varnothing D_s$	20 mm
Overall length L	150 mm
Flute length $L_c$	32 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 6535 HB to h6
Tolerance nominal $\varnothing$	f8
Balance quality with shank	G 2.5 with HB
Helix angle	45 degrees
Corner chamfer angle	45 degrees
Coating	ZOX
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	W
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width $a_e$ for milling operation	0.3×D for side milling
Cutting width $a_e$ for milling operation	Full slot cutting depth 1×D
Through-coolant	no
Machining strategy	HPC
Colour ring	yellow
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