

Solid carbide torus cutter TPC, DLC, Ø h6 DC / R1: 20/2,0 mm



Order data

Order number	206211 20/2,0
GTIN	4045197812162
Item class	11X

Description

Version:

Eccentric relief ground, additionally **polish ground** in the flutes for **outstanding chip evacuation** in long-chipping aluminium workpieces.

With double chip-breaker for exemplary chip formation.

With the latest generation of **DLC coating sp** 2 .

Application:

Especially for MTC (Multi Task Cutting) use on the new generation of turning / milling centres.

Note:

 $a_{e max}$ = 0.12×D for TPC machining.

h_{max}: The values stated in the table are maximum values.

No. of teeth Z: 3

Helix angle: 45 degrees Shank: DIN 6535 HB to h6

Balance quality with shank: G 2.5 with HB

No. of teeth Z: 3 Flute length L_c: 82 mm Corner radius R₁: 2 mm

Overhang length L₁ incl. recess: 100 mm

Recess Ø D₁: 19 mm Overall length L: 154 mm

Technical description

Corner radius R ₁	2 mm
Shank Ø D _s	20 mm
No. of teeth Z	3



Shank form HB Overhang length L₁ incl. recess 100 mm Overall length L 154 mm Cutting edge Ø Dc 20 mm Flute length Lc 82 mm Average chip thickness hmax for TPC milling in short-chipping aluminium 0.125 mm Balance quality with shank G 2.5 with HB Shank DIN 6535 HB to h6 Helix angle 45 degrees Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Tolerance nominal Ø h6 Helix angle characteristic unequal spacing Direction of infeed horizontal, oblique and vertical Cutting width a, for milling operation 0.12×D Through-coolant no Machining strategy TPC Colour ring yellow Type of product End mill	Recess Ø D ₁	19 mm
Overall length L 154 mm Cutting edge \varnothing Dc 20 mm Flute length Lc 82 mm Average chip thickness h _{max} for TPC milling in shortchipping aluminium 0.125 mm Balance quality with shank G 2.5 with HB Shank DIN 6535 HB to h6 Helix angle 45 degrees Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Tolerance nominal \varnothing h6 Helix angle characteristic unequal spacing Direction of infeed horizontal, oblique and vertical Cutting width a_e for milling operation $0.12 \times D$ Through-coolant no Machining strategy TPC Colour ring yellow	Shank form	НВ
Cutting edge Ø D _c Flute length L _c Average chip thickness h _{max} for TPC milling in short-chipping aluminium Balance quality with shank Shank DIN 6535 HB to h6 Helix angle Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Tolerance nominal Ø Helix angle characteristic Unequal spacing Direction of infeed Cutting width a _e for milling operation Machining strategy TPC Colour ring 20 mm 82 mm 82 mm 82 mm 0.125 mm 0.125 mm 0.125 mm 0.10 635 HB to h6 Manufacturer's standard Manufacturer's standard Manufacturer's standard Manufacturer's standard Morizontal, oblique and vertical	Overhang length L₁ incl. recess	100 mm
Flute length L _c Average chip thickness h _{max} for TPC milling in short-chipping aluminium Balance quality with shank Shank DIN 6535 HB to h6 Helix angle Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Tolerance nominal Ø Helix angle characteristic Direction of infeed Cutting width a _e for milling operation Machining strategy TPC Colour ring S2.5 with HB 82.7 mm 82.7	Overall length L	154 mm
Average chip thickness h _{max} for TPC milling in short-chipping aluminium Balance quality with shank Shank DIN 6535 HB to h6 Helix angle Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Tolerance nominal Ø Helix angle characteristic Direction of infeed Cutting width a _e for milling operation Machining strategy TPC Colour ring we the Manufacturer on the	Cutting edge Ø D _C	20 mm
chipping aluminium Balance quality with shank Shank DIN 6535 HB to h6 Helix angle Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Tolerance nominal Ø Helix angle characteristic unequal spacing Direction of infeed Cutting width a₅ for milling operation Through-coolant Machining strategy TPC Colour ring V DIN 6535 HB to h6 As general expression As general	Flute length L _c	82 mm
Shank DIN 6535 HB to h6 Helix angle Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Tolerance nominal Ø Helix angle characteristic unequal spacing Direction of infeed Cutting width ae for milling operation Machining strategy TPC Colour ring DIN 6535 HB to h6 45 degrees Able of the solid carbide Solid carbide Manufacturer's standard Manufacturer's standard Munufacturer's standard Munufacturer's standard Manufacturer's standard Type W Tolerance nominal Ø 10 10 11 11 12 12 13 14 15 15 16 17 17 17 17 17 17 17 17 17	· · ·	0.125 mm
Helix angle Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Tolerance nominal Ø Helix angle characteristic unequal spacing Direction of infeed Cutting width ae for milling operation Machining strategy TPC Colour ring A 5 degrees DLC DLC Nanufacturer's Standard Manufacturer's standard Manufacturer's standard Munufacturer's standard Manufacturer's standard Type Unequal spacing Direction of infeed Norizontal, oblique and vertical TPC Colour ring	Balance quality with shank	G 2.5 with HB
Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Tolerance nominal Ø h6 Helix angle characteristic unequal spacing Direction of infeed horizontal, oblique and vertical Cutting width ae for milling operation 0.12×D Through-coolant no Machining strategy TPC Colour ring yellow	Shank	DIN 6535 HB to h6
Tool material Solid carbide Standard Manufacturer's standard Type W Tolerance nominal Ø h6 Helix angle characteristic unequal spacing Direction of infeed horizontal, oblique and vertical Cutting width ae for milling operation Through-coolant no Machining strategy TPC Colour ring	Helix angle	45 degrees
StandardManufacturer's standardTypeWTolerance nominal Øh6Helix angle characteristicunequal spacingDirection of infeedhorizontal, oblique and verticalCutting width ae for milling operation0.12×DThrough-coolantnoMachining strategyTPCColour ringyellow	Coating	DLC
Type W Tolerance nominal Ø h6 Helix angle characteristic unequal spacing Direction of infeed horizontal, oblique and vertical Cutting width ae for milling operation 0.12×D Through-coolant no Machining strategy TPC Colour ring yellow	Tool material	Solid carbide
Tolerance nominal Ø Helix angle characteristic Direction of infeed Cutting width a _e for milling operation Through-coolant Machining strategy Tolerance nominal Ø hof unequal spacing horizontal, oblique and vertical 0.12×D Through-coolant no Machining strategy TPC yellow	Standard	Manufacturer's standard
Helix angle characteristic Direction of infeed Cutting width a _e for milling operation Through-coolant Machining strategy Colour ring unequal spacing horizontal, oblique and vertical 0.12×D no TPC	Туре	W
$\begin{array}{ll} \mbox{Direction of infeed} & \mbox{horizontal, oblique and vertical} \\ \mbox{Cutting width a_e for milling operation} & \mbox{0.12}{\times}\mbox{D} \\ \mbox{Through-coolant} & \mbox{no} \\ \mbox{Machining strategy} & \mbox{TPC} \\ \mbox{Colour ring} & \mbox{yellow} \end{array}$	Tolerance nominal Ø	h6
Cutting width a_e for milling operation $0.12 \times D$ Through-coolantnoMachining strategyTPCColour ringyellow	Helix angle characteristic	unequal spacing
Through-coolant no Machining strategy TPC Colour ring yellow	Direction of infeed	horizontal, oblique and vertical
Machining strategy TPC Colour ring yellow	Cutting width a _e for milling operation	0.12×D
Colour ring yellow	Through-coolant	no
	Machining strategy	TPC
Type of product End mill	Colour ring	yellow
	Type of product	End mill

Services

Shank clamping flats for shrink-fit chucks, with retainer function Shank Ø tool 20 mm	SZ2025 20
---	-----------