

**Garant**
**TPC milling head with chip separators 3×D, HB730, Ø D f8: 20mm**

**Order data**

Order number	210344 20
GTIN	4045197722362
Item class	21M

**Description**
**Version:**

**Milling head specially designed for TPC applications.**

**Note:**

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

Cutting data for conventional milling can be found in the machining handbook No. 110020.

$a_{e\ max} = 0.08 \times D$  for TPC machining.

**Technical description**

Head length l	70 mm
Cutter Ø D	20 mm
Flute length $L_2$	60 mm
Average chip thickness $h_{max}$ for TPC milling in steel < 900 N/mm <sup>2</sup>	0.075 mm
Corner chamfer width at 45°	0.4 mm
Arbor size	20 mm
Corner chamfer angle	45 degrees
Number of cutting edges Z	5
Series	TopCut
Grade	HB730
Tool material	Solid carbide

Standard	Manufacturer's standard
Type	N
Helix angle	45 degrees
Helix angle characteristic	unequal spacing
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0,08×D mm
Machining strategy	TPC
Through-coolant	no
suitable arbor	GARANT TopCut
Type of product	Cutter insert for milling

## User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	210 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	170 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	150 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	130 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	110 m/min	P
Steel < 55 HRC	suitable only under restricted conditions	50 m/min	H
Steel < 60 HRC	suitable only under restricted conditions	40 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	80 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	50 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	80 m/min	S
GG(G)	suitable	160 m/min	K
Oil	suitable only under restricted conditions		

wet maximum	suitable
wet minimum	suitable only under restricted conditions
dry	suitable only under restricted conditions
Air	suitable