

Garant
TPC milling head with chip separators 2×D, HB730, Ø D f8: 12mm

Order data

Order number	210343 12
GTIN	4045197721495
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.

$a_{e \max} = 0.1 \times D$ for TPC machining.

Technical description

Cutter Ø D	12 mm
Average chip thickness h_{\max} for TPC milling in steel < 900 N/mm ²	0.045 mm
Flute length L_2	24 mm
Head length I	31 mm
Corner chamfer width at 45°	0.24 mm
Arbor size	12 mm
Corner chamfer angle	45 degrees
Overall length L	36.1 mm
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	$0.1 \times D$ 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 ²	suitable	210 m/min	P
Steel < 750 N/mm ²	suitable	170 m/min	P
Steel < 900 N/mm ²	suitable	150 m/min	P
Steel < 1100 N/mm ²	suitable	130 m/min	P
Steel < 1400 N/mm ²	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 ²	suitable	80 m/min	M
INOX > 900 N/mm ²	suitable only under restricted conditions	50 m/min	M
Ti > 850 N/mm ²	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		