



HAIMER MILL solid carbide torus cutter SAFE-LOCK, AlTiN, Ø f9 DC / R1: 20/2,0mm



Order data

Order number	220298 20/2,0
GTIN	4034221143525
Item class	26X

Description

Version:

With SAFE-LOCK pull-out protection to provide an additional form fit for the tool. In conjunction with SAFE-LOCK tool holders, it secures the tool to prevent it being pulled out.

For **general-purpose use** in steel materials and high-alloy steels, especially stainless steel. With **cylindrical core** for optimum tool stiffness when milling slots. Reliable processes guaranteed when ramping and during circular interpolation milling thanks to **special end face geometry**.

Note:

Tool arbor with the SAFE-LOCK pull-out protection can be found under clamping technology.

Technical description

Feed f_z for side milling in steel < 900 N/mm ²	0.13 mm
Overhang length L_1 incl. recess	52 mm
Feed f_z for slot milling in steel < 900 N/mm ²	0.11 mm
No. of teeth Z	4
Recess Ø D_1	19 mm
Shank Ø D_s	20 mm
Flute length L_c	38 mm
Overall length L	105 mm
Cutting edge Ø D_c	20 mm

Helix angle	32 degrees
Corner radius R ₁	2 mm
Shank	Safe-Lock h6
Coating	AlTiN
Tool material	Solid carbide
Standard	DIN 6527
Type	N
Tolerance nominal Ø	f8
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Direction of infeed	horizontal, oblique and vertical
Cutting width a _e for milling operation	Full slot cutting depth 1×D
Cutting width a _e for milling operation	0.5×D for side milling
Through-coolant	no
Machining strategy	HPC
Type of product	Torus cutter

User data

	Suitability	V _c	ISO code
Alu plastics	suitable only under restricted conditions	480 m/min	N
Aluminium (short chipping)	suitable only under restricted conditions	480 m/min	N
Alu > 10% Si	suitable only under restricted conditions	375 m/min	N
Steel < 500 N/mm ²	Suitable	275 m/min	P
Steel < 750 N/mm ²	Suitable	255 m/min	P
Steel < 900 N/mm ²	Suitable	210 m/min	P
Steel < 1100 N/mm ²	Suitable	190 m/min	P
INOX < 900 N/mm ²	Suitable	95 m/min	M

INOX > 900 N/mm ²	Suitable	75 m/min	M
Ti > 850 N/mm ²	suitable only under restricted conditions	35 m/min	S
GG(G)	suitable only under restricted conditions	155 m/min	K
Uni	Suitable		
Oil	Suitable		
wet maximum	Suitable		
wet minimum	Suitable		
dry	Suitable		
Air	Suitable		