

# HAIMER MILL solid carbide torus cutter, AlTiN, Ø f9 DC / R1: 20/3,0mm



# Order data Order number 220297 20/3,0 GTIN 2050002068643 Item class 26X

# **Description**

### **Version:**

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:** 

For HB use order No. 220297.

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

# **Technical description**

Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup>	< 900 N/mm <sup>2</sup> 0.11 mm	
Recess Ø D <sub>1</sub>	19 mm	
Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup>	0.13 mm	
Overall length L	105 mm	
Shank Ø D₅	20 mm	
No. of teeth Z	4	
Helix angle	32 degrees	
Cutting edge Ø D <sub>c</sub>	20 mm	
Overhang length L₁ incl. recess	52 mm	
Corner radius R <sub>1</sub>	3 mm	
Flute length L <sub>c</sub>	38 mm	



Shank	DIN 6535 HB to h6	
Coating	AlTiN	
Tool material	Solid carbide	
Standard	DIN 6527	
Туре	N	
Tolerance nominal Ø	f9	
Helix angle characteristic	unequal spacing	
Spacing of the cutters	unequal spacing	
Direction of infeed	horizontal, oblique and vertical	
Cutting width a <sub>e</sub> for milling operation	0.05×D for side milling	
Cutting width $a_e$ for milling operation	0.5×D for side milling	
Through-coolant	nt no	
Machining strategy	HPC	
Type of product	Torus cutter	

# **User data**

	Suitability	$\mathbf{V}_{c}$	ISO code
Alu plastics	suitable only under restricted conditions		
Aluminium (short chipping)	suitable only under restricted conditions		
Alu > 10% Si	suitable only under restricted conditions		
Steel < 500 N/mm <sup>2</sup>	suitable		
Steel < 750 N/mm <sup>2</sup>	suitable		
Steel < 900 N/mm <sup>2</sup>	suitable		
Steel < 1100 N/mm <sup>2</sup>	suitable		
INOX < 900 N/mm <sup>2</sup>	suitable		
INOX > 900 N/mm <sup>2</sup>	suitable		

Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	
GG(G)	suitable only under restricted conditions	
Uni	suitable	
Oil	suitable	
wet maximum	suitable	
wet minimum	suitable	
dry	suitable	
Air	suitable	