



## DUO-LOCK HAIMER MILL HPC, AlTiN, Ø f9 D1: 20mm



### Order data

Order number	220312 20
GTIN	4034221103345
Item class	26Y

### Description

#### Version:

**DUO-LOCK HAIMER MILL:** Can be used as a universal tool. Unique end face geometry for ramping and circular interpolation milling. First choice for applications with short overhangs.

**DUO-LOCK HAIMER MILL Power Series:** First choice for applications with long overhangs and unstable clamping conditions. For particularly smooth running on long overhangs it is preferable to use solid carbide extensions.

#### Note:

Standard application values for slots milled from solid at  $a_{pmax} \leq 0.5 \times D$ .

### Technical description

DUO-LOCK interface	DL20
Corner chamfer angle	90 degrees
Overhang $L_1$	15 mm
Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup>	0.09 mm
Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup>	0.05 mm
Flute length $L_2$	15 mm
Cutter Ø D	20 mm
Ø $D_2$	19.3 mm

Tolerance nominal $\varnothing$	f8
Width across flats AF	16 mm
recommended tightening torque	80 Nm
Overall length L	25 mm
Number of cutting edges Z	3
Coating	AlTiN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Spacing of the cutters	unequal spacing
Helix angle	36 degrees
Helix angle characteristic	unequal spacing
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0.05×D for side milling
Cutting width $a_e$ for milling operation	Full slot cutting depth 1×D
Machining strategy	HPC
Through-coolant	no
suitable arbor	with threaded shank
Type of product	Cutter insert for milling

## User data

	Suitability	$V_c$	ISO code
Alu plastics	suitable only under restricted conditions	700 m/min	N
Aluminium (short chipping)	suitable only under restricted conditions	700 m/min	N
Alu > 10% Si	suitable only under restricted conditions	235 m/min	N
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 only under restricted conditions
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions
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