

AlSi10Mg

Material datasheet AlSi10Mg

general properties

properties	unit	value
density laser-melted	g/cm ³	2,67
roughness after sandblasting (Ra/Rz)	µm	7 – 10 / 50 – 60
precision	mm	+/- 0,7 %, min. 0,1 mm
minimal wall thickness	mm	0,4

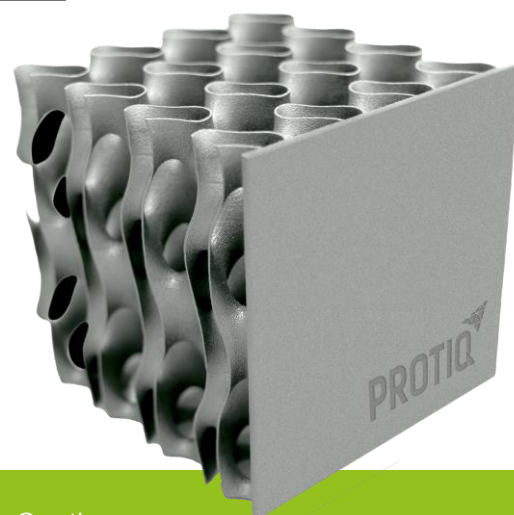


mechanical properties

properties	state	unit	value
tensile strength	„as built“	MPa	410 ± 20
	„after heat treatment“		340 ± 20
yield strength (Rp 0,2%)	„as built“	MPa	250 ± 20
	„after heat treatment“		220 ± 10
elongation at break	„as built“	%	6 ± 2
	„after heat treatment“		7 ± 2
elastic modulus	„as built“	GPa	65 ± 5
	„after heat treatment“		65 ± 5
hardness	„as built“	HBW	120

thermal properties

properties	unit	value
thermal conductivity	W/(m*K)	103 ± 5



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