

MATERIAL DATA SHEET: 316L SS BJ

Material	Composition
Stainless Steel Alloy 316L	Iron bal Nickel 10-14% Chromium 16-18% Molybdenum 2-3%

Material Properties		Test Method
Tensile Strength		ASTM E8
Ultimate Strength	582 Mpa (X Y) 526 Mpa (Z)	
Yield Strength (0.2% offset)	224 Mpa (X Y) 226 Mpa (Z)	
Elastic Modulus	220 Gpa (X Y) 186 Gpa (Z)	
Elongation	55% (X Y) 52% (Z)	
Poisson's ratio	0.27	
Hardness	71 HRB	ASTM E18
Impact	63 J	ASTM E23
Relative Density	98%	
Density	7,9 g/cm ³	
Surface roughness	3.0 µm Ra	

Design Guidelines			
Maximum printable size X x Y x Z	50x50x120 mm	Minimum wall tickness	0.8-1 mm
Construction support required	No	Layer tickness	100 µm
Minimum size details	0.8 mm	Corner radius	0.25 mm
Interlocking parts	No	Minimum space assembly	0.5 mm
Enclosed parts	No	Shrinkage	1-2%