

304L Stainless Steel



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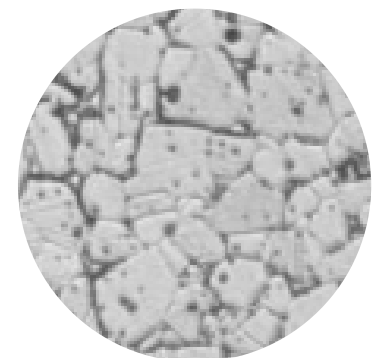
Typical Material Properties

Material Properties	Test Method	304L Stainless Steel
Tensile Strength		
Ultimate Strength	ASTM E8	X & Y: 450 - 570 MPa Z: 450 - 570 MPa
Yield Strength (0.2% offset)		X & Y: 140 - 200 MPa Z: 140 - 200 MPa
Elongation		X & Y: 40 - 60% Z: 40 - 55%
Elastic Modulus		X & Y: 190 - 220 GPa Z: 190 - 200 GPa
Hardness	ASTM E18	67 - 75 HRB
Impact	ASTM E23	35 - 45 J
Relative Density		96 - 99%
Density		7.6 - 7.9 g/cc
Surface Roughness		3 - 12 $\mu\text{m Ra}$



304L Stainless Steel Printed Part

Material Composition			
Iron	bal	Sulfur	0.03% max
Nickel	8-12%	Manganese	2.0% max
Chromium	18-20%	Silicon	1.0% max
Carbon	0.03% max		
Phosphorus	0.045% max		



304L Stainless Steel Microstructure

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