

Products & Sizes

Bar

0.1875" - 0.4375"

316LS/316LVM Chemical Composition

	Element	Min	Max
C	Carbon	-	0.03
P	Phosphorus	-	0.03
Si	Silicon	-	0.75
Ni	Nickel	13.0	15.0
Cu	Copper	-	0.05
Mn	Manganese	-	2.00
S	Sulfur	-	0.01
Cr	Chromium	17.0	19.0
Mo	Molybdenum	2.25	3.0
N	Nitrogen	-	0.10
Fe	Iron	-	Balance

Industry Standards

Industry Applications

- Fracture Fixation Devices
- Bone Plates
- Screws
- Intramedullary Nails
- Surgical Implant Devices
- Surgical Instruments

Physical Properties

Physical Properties of 316LS/316LVM

Property	Value
Specific Gravity	7.95
Density	0.2870 lb/in ³
Mean Specific Heat 32-212°F	1200 Btu/lb°F
Electrical Resistivity 70°F	445.0 Ohm-cir-mil/ft

Mechanical Properties

Mechanical Properties of 316LS/LVM			
Diameter		Ultimate Tensile Strength	
In.	Mm	Ksi	MPa
Up to 0.250	Up to 6.3	175	1207
0.251 - 0.500	6.31-12.7	165	1138
0.501 - 1.000	12.71-25.4	155	1069
1.001 - 1.500	25.4-38.1	125	862
1.501 - 1.750	38.11-44.5	95	655
Over 1.750	Over 44.5	85	586

Mechanical Properties of 316LS/LVM						
Condition	% Cold Worked	0.2% Yield Strength, ksi (MPa)	Ultimate Tensile Strength, ksi (MPa)	% Elongation in 4D	% Reduction of Area	HRC Hardness
Annealed	N/A	36 (248)	85 (586)	57	88	88 HRB
Cold Worked	35	115 (793)	125 (862)	18	72	26
	48	120 (827)	145 (1000)	16	69	32
	52	123 (848)	150 (1034)	16	65	34
	60	128 (883)	160 (1103)	16	62	36
	70	130 (896)	170 (1172)	15	60	38
	80	137 (945)	180 (1241)	13	57	40