

CO-ALLOY L-605 TUBING FOR SURGICAL IMPLANTS

L-605, ASTM F 90, Material Data

Chemical Composition

Carbon	0,05 - 0,15 wt.-%
Silicon	max. 0,4 wt.-%
Manganese	1,0 - 2,0 wt.-%
Phosphorus	max. 0,04 wt.-%
Sulfur	max. 0,03 wt.-%
Chromium	19,0 - 21,0 wt.-%
Nickel	9,0 - 11,0 wt.-%
Iron	max. 3,0 wt.-%
Tungsten	14,0 - 16,0 wt.-%
Cobalt	balance

Physical Properties

Melting point	1410 - 1438° C
Density	9,23 g/cm ³
Modulus of Elasticity	243 x 10 ³ MPa

Mechanical Properties

	cold-worked	annealed
Ultimate Tensile Strength	min. 1100 MPa	min. 900 MPa
Yield Strength	min. 900 MPa	min. 380 MPa
Elongation	min. 7%	min. 30%

Microstructure in fully annealed condition

Austenitic Grain Size	min. 7
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Comments

These values should only be used as guidelines for developing material specifications. Properties strongly depend on processing history. The values listed above are typical for uniaxial tension. Upon request, we can also deliver this material with other properties.