1.4910 AISI 316 LN

Standards

Material No.	EN Designation	AISI/SAE	UNS
1.4910	X3CrNiMoBN17-13-3	316 LN	S31653

Description

AISI 316 LN / 1.4910 is an austenitic chromium-nickel-molybdenum stainless steel in addition with nitrogen and boron.

Special properties

1.4910 / AISI 316 LN is a high temperature resistant version to 1.4429. Excellent weldability. Very good corrosion resistance.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.04	0.75	2.00	0.035	0.015
Cr %	**Mo %**	**Ni %**	**N %**	**B %**
16.0-18.0	2.00-3.00	12.0-14.0	0.10-0.18	0.0015-0.0050

Mechanical Properties 20°C

0.2% Yield strength R_p ≥ N/mm²	Tensile strength R_m N/mm²	Elongation A_5 ≥ %	Resistant on air up to °C	Modulus of elasticity kN/mm²
260	550-750	35	700	200

Physical Properties 20°C

Density g/cm³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm²/m
7.98	450	16	0.77

Suitable welding filler materials

1.4430

Application

Pressure vessels and steam boilers, chemical industry

Available forms for 1.4910 / AISI 316 LN

Bars	Tubes/Pipes	Fittings	Forged / cast parts	Finished part (drawing)
				

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