

Standards

Material No.	EN Designation	AISI/SAE	UNS
1.4919	X6CrNiMoB17-12-2	316 H	S31609

Description

AISI 316 H / 1.4919 is an austenitic chromium-nickel-molybdenum stainless steel in addition with nitrogen and boron.

Special properties

High-temperature-strength quality. Very good resistance to raised temperature.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
0.04-0.08	0.75	2.00	0.035	0.015
Cr %	Mo %	Ni %	N %	B %
16.0-18.0	2.00-2.50	12.0-14.0	≤ 0.10	0.0015-0.0050

Mechanical Properties 20°C

0.2% Yield strength $R_p \geq$ N/mm ²	Tensile strength R_m N/mm ²	Elongation $A_5 \geq$ %	Modulus of elasticity kN/mm ²
205	490-690	35	193

Physical Properties 20°C

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m
7.98	450	16	0.77

Application

Energy plants, nuclear plants

Available forms for 1.4919 / AISI 316 H

Tubes/Pipes

