

Standards

Material No.	EN Designation	AISI/SAE	UNS
1.4435	X2CrNiMo18-14-3	316L	S31603

Description

1.4435 / AISI 316 L is an austenitic chromium-nickel-molybdenum stainless steel with low carbon content.

Special properties

1.4435 is a higher alloyed variant of 1.4404 and is used as a medical grade due to its excellent resistance of all corrossions.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.030	1.00	2.00	0.045	0.015
Cr %	Mo %	Ni %	N %	
17.0-19.0	2.50-3.00	12.5-15.0	≤ 0.11	

Mechanical Properties 20°C

Hardness HB 30 ≤ HB	0.2% Yield strength R _p ≥ N/mm ²	Tensile strength R _m N/mm ²	Elongation A ₅ ≥ %	Modulus of elasticity kN/mm ²
215	200	500-700	40/30	200

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
8	500	15	0.75

Suitable welding filler materials

1.4430; 1.4576

Application

Cellulose industry, textile industry

Available forms for 1.4435 / AISI 316 L

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