

## 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	

## 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 corrosions.

## Steel Grade

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

## Mechanical Properties 20 C

Hardness HB 30 ≤ HB	0.2% Yield strength R <sub>p</sub> ≥ N/mm <sup>2</sup>	Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Elongation A <sub>5</sub> ≥ %	Modulus of elasticity kN/mm <sup>2</sup>
215	200	500-700	40/30	200

## Physical Properties 20°C

Density g/cm <sup>3</sup>	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm <sup>2</sup> /m
7.98	500	15	0.75

## Suitable Welding Filler Materials

1.4430 / 1.4576

## Application

Cellulose industry, textile industry

## Available Forms for AISI316L

Sheets/Coils	Bars	Tubes / Pipes	Wires	Fittings	Forged / cast parts	Finished part (drawing)
--------------	------	---------------	-------	----------	---------------------	-------------------------