



Grade	Code	AISI	Austenitic Stainless Steel
1.4404	X2CrNiMo17-12-2	316L	

Steel Properties

1.4404 is an acid-resisting austenitic stainless steel with 17% Cr, 12% Ni and 2,0% Mo. Due to its Mo content, this material has a significantly improved corrosion resistance compared to stainless steels. 1.4404 is resistant to reducing action of organic and inorganic acids as well as against halogen-containing media. Furthermore, this steel is less susceptible to pitting. The low carbon content also improves the resistance to intergranular corrosion and allows use at higher temperatures up to 450 ° C in continuous operation.

Chemical Composition

C	P	Si	Mn	S	Cr	Mo	Ni	Cu	W
0,03 max.	0,045 max.	1,00 max.	2,00 max.	0,015 max.	16,50 – 18,50	2,00 – 2,50	10,00 – 13,00	-	-

Mechanical Properties

Condition	Rp0.2, Mpa	Rm, Mpa	Elongation [%]	Hardness [HB]
	≥ 200	500 – 700	≥ 40	< 215

Suitable For

AISI 316L is widely used in the oil, nitrogen, shipbuilding, chemical, construction, refinery, medical, cellulose, cryogenic, automotive, as well as food processing industries in the form of plates, tapes, pipes, sleeves, fittings, forgings, bars, for parts of gas installations, heat exchangers, railings, ship equipment and public transport vehicles, valves, tanks, pumps, radiators, food processing machines in dairy, catering, meat plants, vegetable and fruit processing plants, distillers, chimneys, steam systems, pipelines, pressure equipment, crystallizers, cisterns, silos, swimming pools, boiler parts, condensers, autoclaves, reactors or condensing equipment.

Remarks

Specification

AISI 316L, 1.4401, X2CrNiMo17-12-2