



Grade	Code	AISI	Austenitic Stainless Steel
1.4571	X6CrNiMoTi17-12-2	316Ti	

Steel Properties

1.4571 is a stainless, austenitic chromium-nickel-molybdenum steel stabilized with titanium. AISI 316Ti is characterized by its good corrosion resistance in most natural waters (urban and industrial), provided that the concentrations of chloride, hydrochloric and hydrochloric acid are not too high. Intercrystalline corrosion resistance is superior to titanium un-stabilized steels because the titanium addition prevents the precipitation of chromium carbides in the grain boundaries.

Chemical Composition (1.4571)

C %	P %	Si %	Mn %	S %	Cr %	Mo %	Ni %	Ti %
0,08 max.	0,045 max.	1,00 max.	2,00 max.	0,03 max.	16,50 – 18,50	2,00 – 2,50	10,00 – 13,00	<0,70

Mechanical Properties

Rp0.2, Mpa	Rm, Mpa	Elongation [%]	Hardness [HB]
≥ 210	510 – 700	≥ 40	< 215

Suitable For

AISI 316Ti is used in shipbuilding, chemical, dyeing, brewing, off-shore, pharmaceutical, textile, petrochemical, plastics and paper industries, in the production of chemical tanks, heat exchangers, fittings and installations for the production of chemical reagents, components - bolts, nuts working in contact with salts, parts and components of ships and ships, medical implants, surgical implants, springs, in construction for elements of balustrades, frames, ornaments, welded fittings, installations, parts of machines producing rubber.

Remarks

When high temperature strengths are required, the 1.4571 is used as an alternative than for example the material 1.4404.

Specification

AISI 316Ti, 1.4571, X6CrNiMoTi17-12-2