



Grade	Code	AISI	Austenitic Stainless Steel
1.4301	X5CrNi18-10	304	

Steel Properties

The most popular, basic and at the same time proven grade of chromium-nickel stainless steel in the known base combination 18/8, characterized by excellent intergranular, stress and pitting corrosion resistance. AISI 304 steel is characterized by full austenitic structure, low carbon content, very good impact strength, formability and ductility, excellent weldability, non-magnetic properties and susceptibility to bending and machining.

Chemical Composition (1.4301)

C %	P %	Si %	Mn %	S %	Cr %	Mo %	Ni %	Cu %	W %
0,07 max.	0,045 max.	1,00 max.	2,00 max.	0,015 max.	17,50 – 19,50	-	8,00 – 10,5	-	-

Mechanical Properties

Rp0.2, Mpa	Rm, Mpa	Elongation [%]	Hardness [HB]
≥ 200	520 – 700	≥ 40	< 215

Suitable For

AISI 304 is used in the production of building architecture finishes, structures, gas and chemical drainage systems, household appliances and consumer electronics, other everyday use equipment, agricultural machinery, industrial pipelines, heat exchangers, silos, distillation boilers, pump parts, mixers, paint and pharmaceutical industry equipment, dishes and cutlery, knives, discs, hooks, as well as furnaces in meat processing, exhaust systems, rotors, medical equipment, separators, tanks and tanks for chemicals, valves, other fittings (flanges, nuts, bolts, elbows, arches, tees), compressors, bearings, rings, radiators, apparatus or equipment in the food and chemical industry, springs, shafts, lightly loaded gears, filters and sieves, and even automotive parts.

Remarks

Specification

AISI 304, 1.4301, X5CrNi18-10