

Standards

Material No.	EN Designation	AISI/SAE	UNS
1.4301	X5CrNi18-10	304	S30400

Description

1.4301 / AISI 304 is the standard austenitic chromium-nickel stainless steel.

Special properties

High corrosion resistance. Easy formability. Not resistant to intergranular corrosion

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.07	1.00	2.00	0.045	0.015
Cr %	Ni %	N %		
17.5-19.5	8.00-10.5	≤ 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	190	500-700	45/35	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
7.9	500	15	0.73

Suitable welding filler materials

1.4302; 1.4316; 1.4551; 1.4301

Application

Chemical and petrochemical industry, oil industry, equipment for foodstuff industry

Available forms for 1.4301 / AISI 304

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