

1.4301

Material No.	1.4301
EN symbol (short)	X5CrNi18-10
AISI /SAE	304
UNS	S 30400
AFNOR	Z7CN 18-09
B.S.	304 S15 – 304 S31
alloy	—
Registered work's label	—
Standards	EN 10088-3

DESCRIPTION

The stainless austenitic chromium-nickel steel 1.4301 shows good corrosion resistance (particularly in natural environmental media and in the absence of considerable chlorine and salt concentrations and sea water) and weldability. Application with acids have to be checked individually. However, after welding 1.4301 is not stable to intergranular corrosion. Good polishing and deep drawing property. It is used in the crude oil industry, chemical industry, petrochemical industry, automobile industry.

Our product range in 1.4301 are tubes and pipes, fittings and flanges, accessories

CHEMICAL COMPOSITION ¹

C ≤ %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %	Cr %	Mo %	Ni %	V %
0,07	1,0	2,0	0,045	0,015	17,0-19,5		8,0-10,5	
Nb %	Ti	Al	Co ≤ %	Cu ≤ %	N ≤ %	Fe	Ce %	Y ≤ %
					0,11			

¹ in accordance with Key to Steel 2001

SPECIAL CHARACTERISTICS

Temperature range	Density kg/dm ³	Hardness (HB)
Due to an inclination to precipitate chromium carbides, application temperatures of 450°C-850°C have to be tested carefully (DIN EN 10088-3)	7,9	160-190

WELDING FILLER

1.4316 (308L), 1.4302, 1.4551

MAIN FIELDS OF APPLICATION (depending on the specific conditions of use)

crude oil industry, chemical industry, petrochemical industry, construction industry, food industry

(all aforementioned specifications serve as a general orientation and have to be reviewed depending on the specific conditions of use)