



## TYPE 301 STAINLESS STEEL STRIP

Stainless steel grade 301 is a commonly available austenitic stainless with good corrosion resistance and elevated gcarbon to allow for cold working to a variety of tempers. It can be obtained in the 1/4 hard, 1/2 hard, and full hard.

Automobile molding and trim, wheel covers, conveyor belts, kitchen equipment, roof drainage systems, hose clamps, springs, truck and trailer bodies, railway and subway cars are some of the major applications for this versatile grade. By varying the chemical composition within the limits set by the ASTM specifications and by temper rolling, a broad range of magnetic and mechanical properties can be obtained for a variety of applications.

Chemical Compositon%	
Carbon(C)	≤0.15
Manganese(Mn)	≤2.0
Sulphur(S)	≤0.03
Phosphorus(P)	≤0.035
Silicon(Si)	≤1.0
Chromium(Cr)	16.0~18.0
Nickl(Ni)	6.0~8.0

## Stainless Steel Grade Comparison:

NATION	CHINA	JAPAN	USA	GERMANY	ENGLAND
STANDARD	GB	JIS	ASTM	DIN	BS
NO.	1Cr17Ni7	SUS 301	301	X12CrNi177	-

## Mechanical Behavior:

301 stainless steel has higher tensile strength than other austenitic stainless steels in the processing state. 301 stainless steel Strip ASTM A1666 and A167 standards.

The following are the experimental data of the lowest mechanical properties carried out at room temperature.

Hardness	0.2% Yield Strength, Min Ksi (Mpa)		Tensile Strength, Min Ksi (Mpa)		Elong. In 2"(50mm)%, Min
1/4 Hard	75	(517)	125	(862)	25
Half Hard	112	(763)	153	(1043)	18
3/4 Hard	125	(931)	176	(1208)	12
Full Hard	140	(965)	186	(1279)	8

## Features:

- Good resistance in mildly corrosive conditions
- 301 has similar weldability to the most common stainless alloys
- Heat resistance up to 1600°F(871°C)