

Grade 302 Stainless Steel UNS S30200

**DESCRIPTION**

302 stainless steel is a slightly higher carbon version than 304 stainless steel. It is widely found in strip and wire forms. It is a standard specification for chromium and chromium-nickel stainless steel sheet, plate, and strip used for pressure vessels and for general applications.

**FEATURES**

- Standard general purpose
- Stable properties
- Low Carbon

**CHEMICAL COMPOSITION**

- Carbon (C): 0.1500%
- Chromium (Cr): 17.0000 - 19.0000%
- Iron (Fe): 68.0250 - 75.0000%
- Manganese (Mn): 2.0000%
- Nickel (Ni): 8.0000 - 10.0000%
- Phosphorus (P): 0.0450%
- Silicon (Si): 0.7500%
- Sulfur (Sulphur) (S): 0.0300%

**SPECIFICATIONS**

- ASTM A666

**PHYSICAL PROPERTIES**

- Density: 0.285 (Lbs. per cubic inch @ 68°F (annealed))
- Modulus: 28.000 (Elastic modulus in tension x 10<sup>6</sup> P.S.I.)
- Electrical Conductivity: 2.500 (% IACS at 68°F (annealed))
- Thermal Conductivity: 9.400 (BTU per foot per hour per °F at 68°F (annealed))
- Thermal Expansion: 9.500 (Inches per inch x 10<sup>-6</sup> from 68°F to 572°F)

**MECHANICAL PROPERTIES**

Temper		Tensile Strength	Yield Offset	Elongation	Hardness
		<i>x 1000 P.S.I.</i>	<i>0.2% offset x 1000 P.S.I.</i>	<i>% in 2 Inches</i>	<i>.020 Gauge and Above</i>
Ann 060		75 Min.	30 Nom.	40 Nom.	B 92 Max
1/4H H01		125 Min.	75 Min.	10 Min.	-
1/2H H02		150 Min.	110 Min.	9 Min.	-
3/4H H03		175 Min.	135 Min.	5 Min.	-
Hard H04		185 Min.	140 Min.	3 Min.	-

Hardness Legend B : Rockwell (100 kgf Steel Sphere)

NOTE: The information contained herein are intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. It is given without obligation or liability. Contact us for the complete material property datasheets

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