

Products & Sizes

Coil	Sheet
0.040" & 0.063"	0.040" & 0.063"

800H Chemical Composition

	Element	Min	Max
C	Carbon	-	0.08
Mn	Manganese	-	1.0
P	Phosphorus	-	0.02
S	Sulfur	-	0.01
Si	Silicon	-	0.35
Cr	Chromium	-	21.0
Ni	Nickel	-	32.0
Ti	Titanium	-	0.40
Al	Aluminum	-	0.40
Cu	Copper	-	0.30

Industry Standards

Industry Applications

- Heat Exchanger
- Dampers
- Pressure Vessels
- Reforming Components
- Industrial Heating

Physical Properties

Property	Value
Density	0.29 lb/in ³
Magnetic Permeability	< 1.02
Specific Heat	0.12 Btu/lb°F
Electrical Resistivity	99 microhm-cm at 70°F (21°C)

Coefficient of Thermal Expansion				
Temperature, °F	70-200	70-1000	70-1200	70-1400
in/in°F x 10 ⁻⁶	7.9	9.4	9.6	9.9

Thermal Conductivity			
Temperature, °F	70	70-800	70-1800
Btu-ft/ft ² -hr-°F	6.7	10.6	17.8

100 Hour Still Air Continuous Oxidation Tests					
Temperature, °F	1700	1800	1900	2000	2100
Sample Weight Gain (mg/cm ²)	0.77	1.8	2.09	2.1	5.06

Mechanical Properties

Temperature, °F	70	1000	1200	1400	1500
0.2% Yield Strength, ksi	43	31.7	29	22.6	14.2
Ultimate Tensile Strength, ksi	87.7	72	54	32.1	24.8
Elongation	44%	39%	56%	85%	91%