

### **AVAILABILITY**

Weld Pipe 1/2"- 24"  
 Seamless Pipe 1/2"- 8"  
 Butt-Weld Fittings 1/2"- 24"  
 Flanges 1/2"- 24"  
 Bar 1"- 8"

Tubing 1/2" - 1"  
 Pressure Fittings 1/2" - 2"

### **SPECIFICATIONS**

ASTM A312, A403, A182  
 ASME SA312, SA403, SA182

### **CHEMICAL COMPOSITION %**

C	Cr	Mn	Mo	Ni	P	S	Si
Max		Max			Max	Max	Max
0.035	18.0-20.0	2.0	3.0-4.0	11.0-15.0	0.04	0.03	0.75

### **DESCRIPTION**

317L is a molybdenum bearing austenitic chromium nickel steel similar to type 316 except the alloy content in 317L is somewhat higher. It has superior corrosion resistance in special applications where it is desired to reduce contamination to a minimum. 317L was developed primarily to resist more effectively the attack of sulfurous acid compounds. However, its proven ability to combat corrosion has widened its use considerably and is now being used for many other industrial applications. The low carbon content of 317L provides immunity to intergranular corrosion in applications where heavy cross-sections cannot be annealed after welding or where low temperature stress relieving treatments are desired.

### **DESIGN FEATURES**

- A molybdenum bearing austenitic chromium nickel steel with an alloy content somewhat higher than the 316 grades.
- Superior corrosion resistance in difficult environments.
- Higher creep, stress-to-rupture and tensile strengths than other stainless steels.

- Reduced intergranular precipitation of chromium carbides during welding and stress relieving as well as minimized possibility of corrosion failure from intergranular attack due to low carbon content.
- Resistance to pitting and crevice corrosion making 317L a successful life-cost product in a variety of highly corrosive environments.

### **TYPICAL APPLICATIONS**

Flue gas desulfurization scrubber systems  
 Chemical and petro-chemical processing equipment  
 Pulp and paper plants  
 Food processing equipment  
 Textile equipment

### **TENSILE REQUIREMENTS**

Tensile Strength	Yield Strength
(KSI)	(KSI)
75	30

KSI can be converted to MPA (Megapascals) by multiplying by 6.895.