

# 317L STAINLESS STEEL TUBING



Similar in composition to 316L and 304L, alloy 317L is an austenitic molybdenum, chromium, nickel stainless alloy. 317L has higher creep, stress to rupture, and tensile strength than its 316L and 304L counterparts and due to the higher moly content, 317L provides enhanced resistance to pitting and stress corrosion cracking particularly in chloride or halide rich environments. This is a great solution to demanding applications such as those that can be found offshore and in chemical processing plants.

## PRODUCTION SPECIFICATIONS

ASME SA213 / ASTM A213 / NACE MRO175

UNS S30400 / UNS S30403

### CHEMICAL COMPOSITION % (MAX.)

C	Carbon	0.035
Ma	Manganese	2.00
P	Phosphorous	0.045
S	Sulfur	0.030
Si	Silicon	1.00
Ni	Nickel	8.0-12.0
Cr	Chromium	18.0-20.0
Mo	Molybdenum	n/a

## DIMENSIONAL TOLERANCES

Outside Diameter (OD)	OD Tolerance	Wall Tolerance
Up to .5"	+/- .005"	+/- 15%
.5" - 1.5" excl	+/- .005"	+/- 10%

## SIZE RANGE

Outside Diameter (OD)	Wall Thickness
1/16" - 4"	.010 " - .375"

## MECHANICAL PROPERTIES

Yield Strength (minimum in KSI)	30
Tensile Strength (minimum in KSI)	.010 " - .375"
Elongation (minimum in 2 inches)	35%

## FABRICATION

The low carbon content provides resistance to intergranular corrosion and superior weldability over 316. 317L can be hardened by cold working as opposed to heat treating.

OD	Wall	ID	Wt/Ft
<b>1/8"</b> <b>(.125")</b>	.028 .035	.069 .055	.0290 .0330
<b>1/4"</b> <b>(.250")</b>	.035 .049 .065	.180 .152 .120	.0804 .1052 .1284
<b>3/8"</b> <b>(.375")</b>	.035 .049 .065 .083	.305 .277 .245 .209	.1271 .1706 .2152 .2588
<b>1/2"</b> <b>(.500")</b>	.035 .049 .065 .083	.430 .402 .370 .083	.1738 .2360 .3020 .3696
<b>5/8"</b> <b>(.625")</b>	.049 .065	.527 .495	.3014 .3888
<b>3/4"</b> <b>(.750")</b>	.065 .083 .095 .109 .120	.620 .584 .560 .532 .510	.4755 .5913 .6646 .7460 .8074
<b>1"</b> <b>(1.000")</b>	.065 .083 .095 .109 .120	.870 .834 .810 .782 .760	.6491 .8129 .9182 1.037 1.128

## TYPICAL APPLICATIONS

Offshore Oil and Gas  
Chemical and Petro-Chemical  
Pulp & Paper  
Food Processing  
Textile Equipment

