316L Stainless Steel Pipe
ASTM A312/A312M

Characteristics

316 / 316L stainless steel pipe is used for applications that require the high strength, toughness and workability, coupled with increased corrosion resistance. The alloy contains higher percentages of molybdenum and nickel than 304 stainless, increasing the corrosion resistance and making it an ideal material for applications in aggressive environments. 316L contains higher levels of carbon than 316 stainless, reducing its weldability.

Applications

316/316L Seamless pipe is used for pressure operations to move liquids or gases in water treatment, waste treatment, petrochemical, chemical and pharmaceutical industries. Structural applications include handrails, poles and support pipe for salt water and corrosive environments. It is not used as often as welded pipe due to its reduced weldability compared to 304 stainless unless its superior corrosion resistance outweighs it decreased weldability.

Typical Chemical Properties

Carbon, Max %	0.03
Manganese, Max %	2.00
Phosphorus, Max %	0.045
Sulphur, Max %	0.03
Chromium, Max%	18.0
Nickel, Min%	14.0
Molybdenum, Max%	3.0

Typical Mechanical Properties

Tensile Strength ksi	83
Yield 2% Offset ksi	38
Elongation in 2” (50.80mm)	50