Seamless Ferritic and Austenitic Alloy Steel Tubes for Boiler, Superheater and Heat Exchanger

Standard & Material

ASTM A213/A213M ASME SA213 TP316L UNS S31603

It covers seamless ferritic and austenitic steel tubes for boiler, superheater and heat exchanger. The tubing sizes and thicknesses are 1⁄8 inch [3.2mm] in inside diameter to 5 inch [127mm] in outside diameter and 0.015 to 0.500 inch [0.40 to 12.7mm], inclusive, in minimum wall thickness or, if specified in the order, average wall thickness. Tubing having other diameters may be furnished, provided such tubes comply with all other requirements of ASTM A213/A213M ASME SA213.

Chemistry Composition

C, % 0.035 max
Mn, % 2.00 max
P, % 0.045 max
S, % 0.030 max
Si, % 1.00 max
Ni, % 10.0-14.0
Cr, % 16.0-18.0
Mo, % 2.00-3.00

Mechanical Properties

Tensile Strength, MPa 485 min
Yield Strength, MPa 170 min
Elongation, % 35 min
Hardness, HBW 192 or HV 200 or HRB 90 max

Wall Thickness: min wall thickness or average wall thickness
Developed Length: max 30 meters each length, +10mm/-0mm

Manufacture: the tubes are made by cold finished or hot finished process.
Delivery condition: pickled, bright annealing (BA), or polishing.
Heat Treatment: the tubes are heat treated as solution treatment, and the min temperature is not less than 1040°C, and the tubes are individually quenched in water or rapidly cooled (direct quenched).
Inspection & Test: chemistry composition analysis, tensile test, flattening test, flaring test, hardness test, NDT, surface inspection and dimension check.

Further Process: U bending tubes, fin tubes, studded tubes

Add: 24F, International Financial Center, Free Trade Zone, Zhangjiagang City, Jiangsu Province, P.R.China
Tel/Whatsapp/Wechat: (0086)150 5151 5161
Email: sales@tubemfg.com