

Seamless Cold-Drawn Carbon Steel Feedwater Heater Tubes

Standard & Material

ASTM A556/A556M ASME SA556 C2

It covers minimum wall thickness, seamless cold-drawn carbon steel tubes including bending into the form of U-tubes, if specified, for use in tubular feedwater heaters. The tubing sizes covered shall be 5/8 inch to 1-1/4 inch [15.9mm to 31.8mm] outside diameter, inclusive, with minimum wall thicknesses equal to or greater than 0.045 inch [1.1mm].

Chemistry Composition

C, % 0.30 max

Mn, % 0.29-1.06

P, % 0.035 max

S, % 0.035 max

Si, % 0.10 min

Mechanical Properties

Tensile Strength, MPa 480 min

Yield Strength, MPa 280 min

Elongation, % 30 min

Hardness, HRB 89 max



Wall Thickness: min wall thickness or average wall thickness

Developed Length: max 30 meters each length, +10mm/-0mm

Manufacture: tubes shall be made by the seamless process and shall be cold drawn.

Heat Treatment: cold-drawn tubes shall be heat treated after the final cold-draw pass at a temperature of 640°C or higher to ensure ductility satisfactory for rolling into tube sheets and to meet mechanical properties as specified. If stress-relief anneal of the U-bends is specified, the annealing shall consist of heating the bent portion within a range of 585 to 640°C.

Inspection & Test: chemistry composition analysis, tensile test, flattening test, flaring test, hardness test, NDT, surface inspection and dimension check.

Further Process: U bending tubes