

Seamless Cold-Drawn Low-Carbon Steel Heat-Exchanger and Condenser Tubes

Standard & Material

ASTM A179/A179M ASME SA179

It covers seamless cold drawn low carbon steel tubes, for tubular heat exchanger, condensers and other similar heat transfer equipment. The dimensions of tubes covers the OD from 1/8 inch [3.2mm] to 3 inch [76.2mm]. Other diameters and thickness smaller than the specified sizes also applicable to ASTM A179/A179M ASME SA179, but mechanical properties is not applicable for the size smaller than 1/8 inch and 3.2mm, or thickness smaller than 0.015 inch and 0.4mm.

Chemistry Composition

C, % 0.06-0.18

Mn, % 0.27-0.63

P, % 0.035 max

S, % 0.035 max

Mechanical Properties

Tensile Strength, MPa 325 min

Yield Strength, MPa 180 min

Elongation, % 35 min

Hardness, HRB 72 max



Wall Thickness: min wall thickness or average wall thickness

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

Manufacture: the tubes made by cold drawn process.

Heat Treatment: the tubes are heat treated after the final cold draw pass at a temperature of 650°C or higher.

Delivery Condition: Black, Nitrogen Protection, Bright Annealing.

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, high flux tubing