

ASTM A500 Steel, grade A, Round Structural Tubing

Categories: [Metal](#); [Ferrous Metal](#); [ASTM Steel](#); [Carbon Steel](#); [Low Carbon Steel](#)

Material Notes: The Cu content of 0.18% is a minimum content when copper steel is specified.

Key Words: copper steels, copper-steel, UNS K03000, ASTM A501

Vendors: [Click here to view all available suppliers for this material.](#)

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Physical Properties	Metric	English	Comments
Density	7.85 g/cc	0.284 lb/in ³	Typical of ASTM Steel
Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	310 MPa	45000 psi	
Tensile Strength, Yield	230 MPa	33400 psi	
Elongation at Break	25.0 %	25.0 % in 50 mm (specified wall thickness 3.05 mm and larger)	
Bulk Modulus	140 GPa	20300 ksi	Typical for steel
Shear Modulus	80.0 GPa	11600 ksi	Typical for steel
Material Components Properties	Metric	English	Comments
Carbon, C	<= 0.30 %	<= 0.30 %	
Copper, Cu	0.18 %	0.18 %	
Iron, Fe	99.0 %	99.0 %	
Phosphorous, P	<= 0.050 %	<= 0.050 %	
Sulfur, S	<= 0.0630 %	<= 0.0630 %	

References for this datasheet.

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