

ASTM A500 Steel, grade B, shaped 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-steels, UNS K03000, ASTM A501**Vendors:** [Click here to view all available suppliers for this material.](#)Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

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	400 MPa	58000 psi	
Tensile Strength, Yield	315 MPa	45700 psi	
Elongation at Break	23.0 %	23.0 %	
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.

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's disclaimer and terms of use regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.

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