



## 932 Standard ASTM B505 Alloy Tubes • Solids

**Bronze Family:** Leaded Tin Bronze  
**Size Range:** 415 Standard Sizes  
**Solids:** 1/2" to 12"  
**Tubes:** 3/4" to 16"  
**Rectangles:** 1/2" to 16" width thickness to 11"  
**Standard Lengths:** 105"  
**Similar or Equivalent Specification:**

**Typical Uses:** Most commonly used bearing alloys, found in bearings operating at moderate loads and moderate-to-high speeds, as in electric motors and appliances, Alloy C93200 is considered the workhorse alloy of the series. Automotive fittings, fasteners, washers, industrial pump impellers, machine tool bearings, bearings for cranes, trunnion bearings, roll neck bearings, rolling mill bearings, linkage bushings for presses, fuel pump bushings, water pump bushings, diesel engine wrist pin bushings, forging press toggle lever bearings, hydraulic press stuffing box, hydrogen press main spindle bearings, fittings, pump fixtures, insert bearings, machine parts, bearings, thrust washers, washers, pumps, bushings, general purpose bushings

CDA	ASTM	ASARCON	SAE	AMS	FEDERAL	INGOT	MILITARY	OTHER DESIGNATIONS
C93200 B144-3B	B505	77 J461 J462	660	n/a	QQC390 E7 QQ-B-1005, Comp 12	315	MIL-B-1155, Comp 12 Bearing Bronze	

## 954 Standard ASTM B505 Alloy Tubes • Solids • Rectangles

**Bronze Family:** Aluminum Bronze  
**Size Range:** 249 Standard Sizes  
**Solids:** 1/2" to 15"  
**Tubes:** 1 1/4" to 9"  
**Rectangles:** 1/2" to 15" width thickness to 4"  
**Standard Lengths:** 144"  
**Similar or Equivalent Specification:**

**Typical Uses:** The aluminum bronzes are characterized by high strength and excellent corrosion resistance. Alloys containing more than 9.5% Al can be heat treated, some to tensile strengths exceeding 95 ksi (655 MPa). Uses include a variety of heavy duty mechanical and structural products including gears, worm drives, valve guides and seats. Excellent heavy duty bearing alloys, but does not tolerate misalignment or dirty lubricants, and generally should be used against hardened steel shafts, with both shaft and bearing machined to fine surface finishes. Also utilized in the metal forming industry as die component parts.

CDA	ASTM	ASARCON	SAE	AMS	FEDERAL	INGOT	MILITARY	OTHER DESIGNATIONS
C95400	B505	n/a	n/a	n/a	QQC390 G5 QQ-B-671, Class 3	415	MIL-B-16033, Class 3	Aluminum Bronze 9C, Consult Mill

## 959 Standard ASTM B505 Alloy Rectangles

**Bronze Family:** Aluminum Bronze  
**Size Range:** 21 Standard Sizes  
**Solids:** 1 1/2" to 15"  
**Tubes:** 1 1/2" to 8"  
**Rectangles:** 50mm to 160mm  
**Standard Lengths:** 144"  
**Similar or Equivalent Specification:**

**Typical Uses:** The aluminum bronzes are characterized by high strength and excellent corrosion resistance. Extra hard aluminum bronze alloy with a minimum Brinell hardness of 241 (3000 kg load). Excellent heavy duty bearing alloy, but does not tolerate misalignment or dirty lubricants, and generally should be used against hardened steel shafts, with both shaft and bearing machined to fine surface finishes. Primary application is in the metal forming industry as die.

CDA	ASTM	ASARCON	SAE	AMS	FEDERAL	INGOT	MILITARY	OTHER DESIGNATIONS
C959	B505	n/a	n/a	n/a	n/a	n/a	n/a	Consult Mill

## 955 Standard ASTM B505 Alloy Tubes • Solids

**Bronze Family:** Aluminum Bronze  
**Size Range:** 10 Standard Sizes  
**Solids:** 1/2" to 15"  
**Tubes:** Special only  
**Rectangles:** Special only  
**Standard Lengths:** 144"  
**Similar or Equivalent Specification:**

**Typical Uses:** The aluminum bronzes are characterized by high strength and excellent corrosion resistance. Alloys containing more than 9.5% Al can be heat treated, some to tensile strengths exceeding 120 ksi (827 MPa). Uses include a variety of heavy duty mechanical and structural products including gears, worm drives, valve guides and seats. Excellent heavy duty bearing alloys, but does not tolerate misalignment or dirty lubricants, and generally should be used against hardened steel shafts, with both shaft and bearing machined to fine surface finishes. Also used in a variety of aerospace applications.

CDA	ASTM	ASARCON	SAE	AMS	FEDERAL	INGOT	MILITARY	OTHER DESIGNATIONS
C95500	B505	n/a	n/a	n/a	QQC390 G3	415	MIL-B-16033, Comp 4	Aluminum Bronze 9D

## 863 Standard ASTM B505 Alloy Manganese Bronze High Tensile

**Bronze Family:** Manganese Bronze  
**Size Range:** 38 Standard Sizes  
**Solids:** 1" to 6"  
**Tubes:** 1 1/2" to 7"  
**Rectangles:** Special only  
**Standard Lengths:** 144"  
**Similar or Equivalent Specification:**

**Typical Uses:** Alloys with high mechanical strength, good corrosion resistance and favorable castability. Can be machined, but with the exception of C86400, are less readily machined than leaded compositions. Alloy C86300 can attain tensile strengths exceeding 115 ksi (793 Mpa). Used for mechanical devices: gears, levers, brackets, valve and pump components for fresh and seawater service. washers, pumps, bushings, general purpose bushings

CDA	ASTM	ASARCON	SAE	AMS	FEDERAL	INGOT	MILITARY	OTHER DESIGNATIONS
C95500	B505	n/a	430B J461 J462	n/a	QQ390 C7	424	MIL-C-2222 Comp, 8	High Strength Yellow Brass 110,000

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