

# AMS 4880-C95510

Cast

**Product Description:** Nickel Aluminum Bronze

**Solids:** ½" to 9" 0.D.

**Tubes:** 11/8" to 13" 0.D.

Rectangles: Up to 15"

Standard Lengths: 24"

Shape/Form: semi-finished, mill stock or near-net shapes, anode, bar stock, billet/bloom, squares, hex, plate, profile or

structural shape, flats/rectangular bar

## Typical Uses

Industrial landing gear bushings and bearings, bushings, hydraulic seal components, bearings requiring abrasion

resistance, good ductility, retention of hardness at moderate temperatures

### Similar or Equivalent Specification

| CDA    | ASTM          | Asarcon | SAE | AMS  | Federal | Military | Other |
|--------|---------------|---------|-----|------|---------|----------|-------|
| C95510 | B505<br>B505M |         |     | 4880 |         |          |       |

#### Chemical Composition

| Cu%          | Sn%  | Zn%  | Fe%           | Ni%¹          | AI%            | Mn%  |
|--------------|------|------|---------------|---------------|----------------|------|
| 78.00<br>min | 0.20 | 0.30 | 2.00-<br>3.50 | 4.50-<br>5.50 | 9.70-<br>10.90 | 1.50 |

Chemical Composition according to AMS 4880

<sup>1</sup>Ni value includes Co.

 $Note: Cu + Sum \ of \ Named \ Elements, 99.8\% \ min. \ Single \ values, unless \ otherwise \ noted, represent \ maximums.$ 

## Machinability

| Copper Alloy UNS No. | <b>Machinability Rating</b> | Density (lb/cu in at 68 °F) |
|----------------------|-----------------------------|-----------------------------|
| C95510               | 50                          | 0.272                       |



# Mechanical Properties

#### AMS 4880-C95510 continued

| Tensile Strength, min |     | Yield Strength, at .2%<br>Offset, min |     | Elongation, in 4D, Brinell Hardness<br>min |                | Remarks                     |
|-----------------------|-----|---------------------------------------|-----|--|----------------|-----------------------------|
| ksi                   | MPa | ksi                                   | MPa | %  | min to max BHN |                             |
| 105.0                 | 724 | 62.5                                  | 431 | 9  | 192 to 248     | castings <4.0, Heat Treated |
| 95.0                  | 655 | 56.0                                  | 386 | 9  | 192 to 248     | castings 4.0+, Heat Treated |

Mechanical Properties according to AMS 4880

