

# C95900

Cast • GreenAlloys™

|                             |   |
|-----------------------------|---|
| <b>Product Description:</b> | Aluminum Bronze   |
| <b>Solids:</b>              | 1" to 5" O.D.   |
| <b>Tubes:</b>               | Consult Mill  |
| <b>Rectangles:</b>          | Up to 7"  |
| <b>Standard Lengths:</b>    | 144"  |
| <b>Shape/Form:</b>          | semi-finished, mill stock or near-net shapes, anode, bar stock, billet/bloom, squares, hex, plate, profile or structural shape, flats/rectangular bar                                     |
| <b>Compliance:</b>          | C95900 is compliant with key legislation including (1) Federal Safe Drinking Water Act 1974 – SDWA, (2) Federal Reduction of Lead in Drinking Water Act of 2011 and (3) California AB1953 |

## Typical Uses

**Industrial**                      gears, worm drives

## Similar or Equivalent Specification

| CDA    | ASTM          | SAE | AMS | Federal | Military | Other |
|--------|---------------|-----|-----|---------|----------|-------|
| C95900 | B505<br>B505M |     |     |         |          |       |

## Chemical Composition

| Cu%  | Fe%           | Ni% <sup>1</sup> | Al%             | Mn%  |
|------|---------------|------------------|-----------------|------|
| Rem. | 3.00-<br>5.00 | 0.50             | 12.00-<br>13.50 | 1.50 |

Chemical Composition according to ASTM B505/B505M-18

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

Note: Cu + Sum of Named Elements, 99.5% min. Single values represent maximums.

## Machinability

| Copper Alloy UNS No. | Machinability Rating | Density (lb/in <sup>3</sup> at 68 °F) |
|----------------------|----------------------|---------------------------------------|
| C95900               | 10                   | 0.255                                 |

## Mechanical Properties

| Tensile Strength, min |     | Yield Strength, at 0.5% Extension Under Load, min |     | Elongation, in 2 in. or 50 mm min | Brinell Hardness (3000 kg load) | Remarks |
|-----------------------|-----|---|-----|-----------------------------------|---------------------------------|---------|
| ksi                   | MPa | ksi   | MPa | %                                 | minimum BHN                     |         |
|                       |     |   |     |                                   | 241                             |         |

Mechanical Properties according to ASTM B505/B505M-18

## Thermal Properties

| Treatment          | Min* | Max* | Value* | Time** |
|--------------------|------|------|--------|--------|
| Stress Relief      |      |      | 600    |        |
| Solution Treatment |      |      |        | 0      |
| Annealing          | 1100 | 1300 |        | 1      |

Thermal Properties provided by CDA

\*Temperature is measured in Fahrenheit. \*\*For Stress Relief, Solution Treatment and Annealing - Time is measured in hours/inch of thickness. For Precipitation Heat Treatment - Time is measured in hours.