

C954 ALUMINUM BRONZE

ASTM B271 ASTM B505 ASTM B148 QQ-C-390

| UNS No. | Aluminum | Copper | Iron | Manganese | Nickel |
|---------|-----------|----------|---------|-----------|--------|
| C44300 | 10.0-11.5 | 83.0 min | 3.0-5.0 | 0.5 | 1.5 |

C95400 Aluminum Bronze is a high-strength alloy known for its exceptional corrosion resistance and wear properties. Composed primarily of copper, aluminum, and iron, this alloy is often utilized in demanding marine environments due to its ability to withstand saltwater corrosion. Typical applications include marine hardware, propeller shafts, and pump components, where durability and strength are crucial. Additionally, C954 is used in industrial settings for bearings, bushings, and gears, benefiting from its low friction characteristics and fatigue resistance. Its versatility makes it a preferred choice in various sectors, including aerospace, oil and gas, and heavy machinery, ensuring reliable performance in challenging conditions.

Fabrication Properties

| Density @ 68° F | 0.269 lb/in ³ | |
|-------------------------------------|--------------------------|--|
| Melting Range | 1900° F | |
| Machinability rating (C36000 = 100) | 60 | |
| Brazing | Good | |
| Soldering | Good | |
| Gas-shielded arc welding | Good | |
| Oxy-acetylene welding | No recommended | |
| Coated metal-arc welding | Good | |

Mechanical Properties

| | Tensile | Yield | Elongation | Brinell Hardness |
|------|----------|----------|------------|---------------------|
| B271 | 75K min. | 30K min. | 12% min. | 150 min |
| B505 | 85K min. | 32K min. | 12% min. | |
| B148 | 75K min. | 30K min. | 12& min. | 150 min. |



