



James Coppel Lee

UNS C95500 (ALUM BRONZE)

SAND CASTINGS

ABOUT

C95500 has high strength with excellent corrosion resistance for marine conditions.

Is suitable for components of heavy load at slow speeds.

Has very good resistance to wear, fatigue and deformation.

Has very good acid resistance.

Has good anti- galling properties.

EQUIVALENT TO

Britain

USA

UNS C95500

Japan

Germany

CuAl11Fe4Ni4

NOMINAL CHEMICAL ANALYSIS

CHEMICAL COMPOSITION (Maximum % Unless Otherwise Listed)									OTHER ELEMENTS (*NOTES)
Copper Cu	Alum Al	Nickel Ni	Iron Fe	Manganese Mn					
78 min	10.0 – 11.5	3.0 – 5.5	3.0 – 5.0	3.5					*Ni max. incl. Co.

TYPICAL MECHANICAL PROPERTIES / SAND CAST

TENSILE		YEILD .2% PROOF		ELONGATION (5-65/50% MIN.)		HARDNESS	
MPa	620 - 689	MPa	275 - 303	MIN	6	RB	87
KSi	90 - 100	KSi	40 - 44	TYPICAL	12	HB	

Compressive Strength 0.1% Permanent Set	100 MPa (15,000 psi)
Specific Gravity	7.6
Machinability Rating (Free Machining Brass=100)	50
Max. Operating Temperature	260oC (500oF)
Stress Relieving Temperature	316oC (600oF)
Time at Temperature	1 hour per 25mm of section thickness

.2% PROOF (MPa)

APPLICATIONS

- Heavy Load Bearings
- Wear Plates
- Pumps
- Marine, Chemical , Aircraft Parts
- Valves
- Rock Drill Parts
- Crusher Bearings
- Hose Nozzles
- Irrigation Equipment
- Rollers
- Washers
- Wear Rings