

Product Information Sheet

ISSUE A

ALLOY 464LL

A. W. Fraser Alloy 464LL is a low lead variant of the standard American type naval brass conforming to the requirements of ASTM B21 alloy C46400. It is also known as "Tobin Bronze"

464LL has been developed for use in applications where a "lead free" alloy is required having less than 0.03% lead. Alloy 464LL has a deliberate addition of tin, to give improved resistance to corrosion and dezincification, particularly in salt water, and has moderate ductility.

The composition of A. W. Fraser alloy 464LL is strictly controlled as are the extrusion and finishing operations to achieve a constant standard of quality, properties and structure. All extrusions are manufactured from continuous cast billet stock ensuring uniform dispersion of tin particles and freedom from porosity.

Alloy 464LL may be susceptible to dezincification under certain conditions and is classified a category III alloy.

ALLOY 464LL - NAVAL BRASS

SUMMARY OF PROPERTIES

Chemical Composition - percent [Typical]

Element		
Copper	Cu	61.0
Tin	Sn	0.8
Lead	Pb	<0.03
Iron	Fe	0.1
Zinc	Zn	Balance
Total Impurities		0.4 maximum

Mechanical Properties [Typical]

Yield Strength
Ultimate Tensile Strength
Elongation
Typical Hardness
Specific Gravity
Machinability
Cold Working
Hot Working

Drawn

140 MPa (20,000 psi)
380 MPa (55,000 psi)
25%
110 VPN
8.4
Moderate
Fair
Good

Comparative Specifications

BS2874 - CZ112; AS1567 - C46400; UNS C46400; ASTM B21 - C46400, JIS 3250 C4641B