Product Information Sheet

ISSUE D

ALLOY 844

A. W. Fraser Alloy 844 is a general purpose leaded semi-red brass (also known as valve metal) conforming to the requirements of UNS C84400.

844 has excellent machining properties and is widely used in the pumping industry for bowl bearings and threaded lineshaft/tube bearing and for plumbing supplies and fixtures, and low pressure valves and fittings having good corrosion resistance.

The composition of A. W. Fraser alloy 844 is strictly controlled as are the casting conditions. 844 products are manufactured using the latest continuous casting technology.

ALLOY 844 - SEMI-RED BRASS SUMMARY OF PROPERTIES

Chemical Composition - percent

Element			Nominal
Tin	Sn	2.3 - 3.5	3.0
Lead	Pb	6.0 - 8.0	7.0
Zinc	Zn	7.0 - 10.0	8.5
Nickel	Ni	1.0 maximum	
Iron	Fe	0.40 maximum	
Aluminium	Al	0.005 maximum	
Antimony	Sb	0.25 maximum	
Copper	Cu	Balance	

Mechanical Properties [Typical]	**Continuous Cast**
Yield Strength	110 MPa (15,500 psi)
Ultimate Tensile Strength	225 MPa (32,500 psi)
Elongation	20%
Hardness	60 BHN
Specific Gravity	8.7
Machinability Rating (Free Machining Brass=100)	90
Max. Operating Temperature	230^{O}C (446^{O}F)

Comparative Specifications

ASTM B505, B271 - C84400; JIS 5121- CAC401 (BC1)*; BS 1400 LG1*; DIN 1705 CuSn2ZnPb*