

Product Information Sheet

ISSUE C

ALLOY 952

A. W. Fraser Alloy 952 is an aluminium bronze conforming to the requirements of UNS C95200.

Alloy 952 is a medium strength aluminium bronze having good ductility and machinability and good general corrosion resistance, making it suitable for pump and valve components. Under certain conditions, notably in crevices and under stagnant non aerated conditions, this alloy may suffer dealuminification.

Alloy 952 is suitable for light duty gears where loading is negligible.

The composition of A. W. Fraser alloy 952 is strictly controlled as are the casting conditions. Alloy 952 products are manufactured using the latest continuous and centrifugal casting technology.

ALLOY 952 - ALUMINIUM BRONZE	SUMMARY OF PROPERTIES
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Chemical Composition - percent

Element	Nominal
Aluminium Al	8.5 - 9.5 9.0
Iron Fe	2.5 - 4.0 3.0
Nickel Ni	0.5 maximum
Copper Cu	Balance

Total Impurities (Including Ni) 1.0

Mechanical Properties [Typical]

	Continuous Cast	Centrifugal Cast
Yield Strength	200 MPa (29,000 psi)	190 MPa (27,500 psi)
Ultimate Tensile Strength	500 MPa (72,500 psi)	470 MPa (68,000 psi)
Elongation	25%	25%
Typical Hardness	140 BHN	140 BHN
Compressive Strength 0.1% Permanent Set	190 MPa (27,500 psi)	
Specific Gravity	7.6	
Machinability Rating (Free Machining Brass=100)	26	
Max. Operating Temperature	260°C (500°F)	
Stress Relieving Temperature	316°C (600°F)	
Time at Temperature	1 hour per 25mm of section thickness	

Comparative Specifications

BS1400 - AB1*; AS1565 C95210*; ASTM B505, B271 - C95200; SAE 68-A;
JIS H5121 - CAC701C (A1BC1)*; ISO 1338 CuAl10Fe3

* Similar but not identical