

# Product Information Sheet

ISSUE A

## ALLOY 857

A. W. Fraser Alloy 857 is a leaded yellow brass conforming to the requirements of UNS C85700.

Alloy 857 has good machinability and adequate corrosion resistance making it suitable for bushings and hardware fittings requiring low to moderate strength.

The composition of A. W. Fraser alloy 857 is strictly controlled as are the casting conditions. Alloy 857 products are manufactured using the latest continuous casting technology.

### ALLOY 857 - LEADED YELLOW BRASS

### SUMMARY OF PROPERTIES

#### Chemical Composition - percent

Element		Nominal	
Copper	Cu	58.0 - 64.0	60.5
Tin	Sn	0.5 - 1.5	1.0
Lead	Pb	0.8 - 1.5	1.0
Nickel	Ni	1.0 maximum	<0.2
Iron	Fe	0.7 maximum	0.4
Aluminium	Al	0.8 maximum	<0.1
Zinc	Zn	Balance	

#### Mechanical Properties [Typical]

Yield Strength	120 MPa (17,000 psi)
Ultimate Tensile Strength	300 MPa (43,500 psi)
Elongation	20%
Typical Hardness	75 HB (500Kg)
Specific Gravity	8.41
Machinability Rating (Free Machining Brass=100)	80
Max. Operating Temperature	250°C (482°F)

#### Continuous Cast

#### Comparative Specifications

ASTM B584 - C85700; BS 1400 - DCB3\*; JIS 5120 - CAC203 (YbsC3)\*; AS1565 - C85710\*

\* Similar but not identical