

Product Information Sheet

ISSUE A

ALLOY 674

A. W. Fraser Alloy 674 is a high strength material meeting the requirements of UNS C67400 and intended for use in applications requiring a combination of outstanding wear characteristics and high strength. It is widely used for bearings and/ or corrosion service - bushings, gears, worm gears, shafts etc.

This alloy is available in an extruded and drawn form.

All extrusions are manufactured from continuous cast billet stock ensuring uniform dispersion of manganese silicide particles and freedom from porosity.

ALLOY 674 - Manganese Silicon Bronze

SUMMARY OF PROPERTIES

Chemical Composition - percent [Typical]

Element		
Copper	Cu	59
Manganese	Mn	2.4
Silicon	Si	1.1
Aluminium	Al	1.2
Iron	Fe	<0.35
Tin	Sn	<0.2
Lead	Pb	<0.50
Zinc	Zn	Balance

Mechanical Properties [Typical]

Yield Strength
Ultimate Tensile Strength
Elongation
Hardness
Specific Gravity
Machinability

Drawn

345 MPa (50,000 psi) min.
590 MPa (86,000 psi) min.
12% min.
80 Rockwell B min. (146 BHN 3000 kg)
8.1
Good

Note: Mechanical properties will vary depending on diameter or cross section area of extrusion.