

BRONZE AB2



AB2 is a very strong nickel aluminium bronze alloy. Its general properties are that it has good castability, high strength and has an outstanding corrosion resistance due to a tough oxide film. Aluminium bronze can also be heat treated to further increase its seawater corrosion properties

and thus it is particularly useful for seawater service. Shock and wear resistance is also excellent and it is also easy to machine.

AB2 is weldable and also has very good levels of thermal and electrical conductivity. Additionally AB2 retains its strength and ductility at low temperatures.

Common applications of AB2 are in marine environments with the material being used for seawater valves and ship components and in industrial environments with the material commonly being used for valve bodies, gears and propeller blades among many other things.

Chemical & Physical Properties

Chemical Composition

Copper	(Cu)	79% min
Tin	(Sn)	0.10% max
Zinc	(Zn)	0.50% max
Nickel	(Ni)	4.00 – 5.00%
Aluminium	(Al)	8.50 – 9.50%
Iron	(Fe)	3.50 – 4.50%
Manganese	(Mn)	0.80 – 1.50%
Lead	(Pb)	0.05% max

Typical Mechanical Properties – for guidance only

Mechanical Properties			
0.2% Proof Stress MPa	Tensile Strength MPa	Elongation%	Hardness HB
240 – 260	590 – 655	18 – 25	150 – 170