







Copper Alloys

BSB 25 DTD498 Bar & Forgings

Datasheet Updated 05 August 2021

SPECIFICATIONS

Aerospace

BSB 25 DTD498

A copper bronze alloy containing nickel and silicon for very high integrity components.

CHEMICAL COMPOSITION

Element	% Present
Nickel (Ni)	2.00 - 3.50
Silicon (Si)	0.40 - 0.80
Copper (Cu)	Balance

ALLOY DESIGNATIONS

- BS B25
- BS 2B 25
- BS 3B 25
- C18000
- C64700
- CW111C
- CuNi2Si

SUPPLIED FORMS

- Bar
- Forgings
- Rod

APPLICATIONS

- Offshore & marine: Non-magnetic naval architecture and high strength fasteners (nonmagnetic and cryogenic)
- Aerospace: Bearing cages, aircraft undercarriage components, fasteners and bearings
- Industrial: Fasteners, engine valve guides and seats, pump and valve components, high performance bearings, bushes, gears safety tools, mechanical seals, electrical contacts, resistance welding electrodes and brake pads

CHARACTERISTICS

- Excellent electrical and thermal conductivity
- Low magnetic permeability
- Resistance to corrosion and hydrogen embrittlement
- · High mechanical strength
- Good fatigue strength
- · Readily machinable
- Good wear resistance
- Good galling resistance

MECHANICAL PROPERTIES

Property	Value
Elongation A50 mm	15 %
Hardness Rockwell C	159-207 HRC
Tensile Strength	586 MPa









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