

CZ114 (CW721R)

Technical Datasheet



Service. Quality. Value.

High Tensile Brass

Applications

- Decorative metalwork
- Gas valves
- Marine components
- High strength components
- Safety tools
- Heavy duty electrical connectors

Product Description

CZ114 is specifically developed for applications where higher strength and corrosion resistance is required. Often referred to as a manganese bronze, CZ114 has increased levels of aluminium, tin, manganese and iron content which improves the overall strength and corrosion resistance of the material. The added iron content also acts as a grain refiner. Whilst the material has a poor cold working rating, hot working is excellent. The recommended hot working temperature for this alloy is between 625 and 760C.

Alloy Attributes

- Good corrosion resistance
- Non-sparking
- Excellent hot forming properties
- High strength

Related Material Specifications

Corresponds to UNS C67500. Also known as manganese bronze.

Corrosion Resistance

Very good particularly in marine and mildly acidic environments.

Availability

Bar

Weldability

Soldering and brazing is rated as excellent.

Chemical Composition (weight %)

Weight (%)	Cu	Mn	Pb	Al	Fe	Sn	Ni	Sn	Other
min.	57.0	0.80	0.80	0.30	0.20	0.20		Balance	
max.	59.0	1.80	1.60	1.30	1.20	1.00	0.30	Balance	0.30

Mechanical Properties

	Min.	Max.
Proof Stress	180 MPa	270 MPa
Tensile Strength	440 MPa	500 MPa
Hardness Brinell	100 HB	140 HB

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

UK Service Centres:

Smiths Belfast 02895 908 897
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Smiths Birmingham 0121 728 4940
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Quality & Testing:



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