

Copper Alloys

CW114C (C111) Bar

Datasheet Updated
05 August 2021

RANGE

Product Form	Size Range
Round Bar (Hard)	1/2" - 1"

SPECIFICATIONS

Commercial	C111
EN	CW114C

A free machining sulphur copper with a machinability rating of approximately 80%.

CHEMICAL COMPOSITION

Element	% Present
Sulphur (S)	0.20 - 0.70
Copper (Cu)	Balance

ALLOY DESIGNATIONS

- BS2874 C111
- C14700
- BS EN12164 CW114C
- CuSP

SUPPLIED FORMS

- Bar

APPLICATIONS

- Gas valve nozzles
- Cable glands & fasteners
- Circuit breaker terminals
- Electrical contacts
- Clamps

CHARACTERISTICS

- Excellent electrical conductivity
- Retains high levels of thermal conductivity
- Free machinability
- Freedom from hydrogen embrittlement
- Very good thermal conductivity
- High corrosion resistance
- Cost effective material since it can be machined at very high speeds without excessive tooling wear
- Higher machining speeds when compared with pure copper (up to 4 times quicker)

MECHANICAL PROPERTIES

Property	Value
Tensile Strength	250-360 N/mm ²
Elongation A	7-2 %
Hardness Vickers	65-130 HV

DISCLAIMER

This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon. Please note that the 'Datasheet Update' date shown above is no guarantee of accuracy or whether the datasheet is up to date.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources. Material supplied by the Company may vary significantly from this data but will conform to all relevant and applicable standards. As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied. Advice given by the Company to any third party is given for that party's assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.

