

COPPER ALLOY

Copper: CW004A**DSM 2.3.1****Copper: CW004A:**

The most widely used pure, high conductive (thermal & electrical) grade of copper. It is the base material from which common brasses and bronzes are produced.

Definition:

A choice material for the manufacture of conductors and many other current carrying applications.

Features:

It is tough, ductile & malleable and offers very good corrosion resistance. in most environments such as industrial and marine.

Note: It is corroded by oxidising acids, halogens, sulphides & ammonia based solutions.

ASM (DEK) Applications:

Bus bar

These values are representative and should not be considered as definitive. For critical applications, refer to material data-sheet.

TYPICAL MECHANICAL PROPERTIES @25°C	
DENSITY:	8920 Kg/m ³
YOUNGS MODULUS:	118 GPa
POISSONS RATIO:	0.33
YIELD STRENGTH	69 MPa
TENSILE STRENGTH	280 MPa

Issue	01	02	03	04	05	06	07	08	09
DCR	7135	44721							



COPPER ALLOY**Copper: CW004A****DSM 2.3.1****Key Features:**

METHOD	RESULT
Machining	Reasonable
Cold Working_ Ambient	Excellent
Hot Forming	Excellent
Brazing & soldering	Good & Excellent
Welding – (Mig & others)	Fair & Not recommended.
Corrosion Resistance (uncoated)	Atmosphere: Excellent Marine: Excellent

Supplied Forms

- Round
- Flat
- ½ hard sheet

Issue	01	02	03	04	05	06	07	08	09
DCR	7135	44721							

COPPER ALLOY**Copper: CW004A****DSM 2.3.1**

CHEMICAL COMPOSITION					
Copper (Cu)	99.90 %	Oxygen (O ₂)	3.5 /4.5 %	Total Impurities	0,03% max

CURRENT INTERNATIONAL SPECIFICATION COMPARISON	
BRITISH: EN 13601	CW004A
GERMAN: DIN	2.0060
EUROPEAN: EN	Cu-ETP
AMERICAN: UNS	C11000
JAPANESE GRADE	JIS C1100
CHINESE GRADE	----

REPLACES

BS 1433	DESCRIPTION
C101	Copper for electrical use, rod & bar

Alternatives:

Alternative materials are allowed only with the express written permission of ASMPT. Please email details of your request to engineering_enquiries@asmpt.com

Issue	01	02	03	04	05	06	07	08	09
DCR	7135	44721							