

CA104

ALUMINIUM BRONZE

PRODUCT DESCRIPTION

One of the most commonly used aluminium bronzes, **CA104** has excellent resistance to corrosion in chloride environments and salt water erosion. The alloy is also known for its excellent shock and wear resistance as well as its high strength. CA104 also has the ability to retain its properties at cryogenic temperatures. This grade is the wrought version of 10/5/5 aluminium bronze. It is often compared with BS1400 AB2 when a cast alternative is acceptable. Weldability of the alloy is also good.

KEY FEATURES

- Good resistance to shock loading
- Excellent corrosion / erosion resistance
- Good weldability
- Good galling resistance

APPLICATIONS

- Marine hardware, engine components, thrust washers
- Heavy duty bushes and bearings, worm gears
- Valve seats, pump components



AVAILABILITY

Round bar, hexagon, flat bar

MATERIAL SPECIFICATIONS

CW307G | BS B23 | DTD197A

MACHINABILITY

Good / fair

CHEMICAL COMPOSITION (weight %)

	Cu	Al	Ni	Fe	Mn	Total Impurities
Min	Rem	8.50	4.00	4.00		
Max	Rem	11.00	5.50	5.00	0.50	0.50

MECHANICAL PROPERTIES

	6-18mm incl.	>18-80mm incl.	>80-100mm	>100mm (4")
Diameter				
UTS	700 N/mm ²	700 N/mm ²	695 N/mm ²	650 N/mm ²
0.2% Proof Strength	400 N/mm ²	385 N/mm ²	385 N/mm ²	320 N/mm ²
0.1% Proof Strength	385 N/mm ²	385 N/mm ²	385 N/mm ²	310 N/mm ²
Elongation	15%	15%	15%	15%
Hardness	188-268 or 179-255			