THAMES STOCKHOLDERS
A Division of SMITHS

CZ121 (CW614N)

FREE-MACHINING BRASS ALLOY

Product Overview

CZ121 (CW614N) is a 3% lead content free-machining brass that offers the highest machinability of any copper alloy.

The lead content is dispersed finely throughout the material – this acts as a combination of lubricant and chip breaker, which gives the alloy its free machining properties. CZ121 has a machinability rating of 100% and is the standard by which all other copper-based alloys are compared and rated. The material can be easily soldered or brazed, combining good strength with corrosion resistance.

We offer stock availability in bar, hexagon, flat bar, square bar and hollow bar.

Key Features

- Highest machining rating of any copper alloy (100%)
- Free machining brass
- Good strength and corrosion resistance
- Lead content acts as a lubricant and chip breaker

Applications

- Machined components, fasteners
- Extruded sections, window frames
- Switch blocks, plug pins

Material Specifications: 2.0401, C38500, CuZn39Pb3, CuZn40Pb3 (FR), CW614N, NF A51-105

* Chemical Composition (weight, %)

	Cu	Pb	Fe	Zn	Al	Ni	Sn	Total Impurities
Min.	57.0	2.50						
Max.	59.0	3.50	0.30	Rem	0.05	0.30	0.30	0.20

* Properties as per BS EN 12164

* Mechanical Properties

Tensile, R360	
Tensile Strength	360 MPa min
Proof Strength	350 MPa max
Elongation	20% min
Hardness, H090	
Brinell	90 - 125 HBW

* Properties as per BS EN 12164

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