



## Quick Facts

- Copper Nickel Alloy
- Good corrosion resistance in high velocity seawater
- Commonly referred to as 70/30 due to the approximate copper to nickel ratio

## Typical Applications

Submarine pipework, fittings, flanges and valves

## Stock Range

We stock a comprehensive range of round bar sizes between 45 – 254mm dia. We can also supply flat bar, rings, blocks and slabs. We are always looking at widening our stock range so if your requirements lie outside this range, please ask.

All of our material is supplied fully ultrasonically tested.

Primarily manufactured in Europe and USA

## Industry Specifications

- UNS C71500
- BS 2874 CN107
- NES 780 Part 2 Issue 2 Grade 1
- DEF Stan 02-780 Part 2 Issue 2 Grade 1

Material may also be supplied to Customer specifications, subject to enquiry

## Chemical Analysis

Typical analysis:

	<b>C</b>	<b>Mn</b>	<b>Si</b>	<b>S</b>	<b>Ni</b>	<b>Cu</b>	<b>Fe</b>	<b>-</b>
Min	-	0.5	-	-	30.5	66.5	0.6	%
Max	-	1.5	-	-	32.0	-	1.0	%



## Mechanical Properties

Typical properties in the annealed condition:

Tensile PSI (MPA) min	Yield (0.2% offset), PSI (MPA) Min	Elongation in 2" or 4D min%	Hardness (Brinell)
46,000 (320)	16,700 (115)	32	Approx. 75

## Physical Properties

Typical properties at room temperature

Melting Range	1170°C - 1240°C (2138°F - 2264°F)
Room Temp Density	8.94 g/cm <sup>3</sup> (0.197 lb/in <sup>3</sup> )
Thermal Conductivity	29 W/m°C
Mean Coefficient of thermal expansion in the annealed condition 0-360°C	16 µm/m•°C
Magnetic Permeability @ 200 oersted	1.01

All material we supply has full traceability with inspection certification in accordance with BS EN 10402 3.1. We can supply material with BS EN 10402 3.2 inspection certification on request. We have onsite PCN and SNT Level III inspectors who can test material to your requirements. All information included in this sheet is intended as a guide only and is correct to the best of our knowledge.