

CW352H (BS EN 12163)

Smiths Advanced Metals

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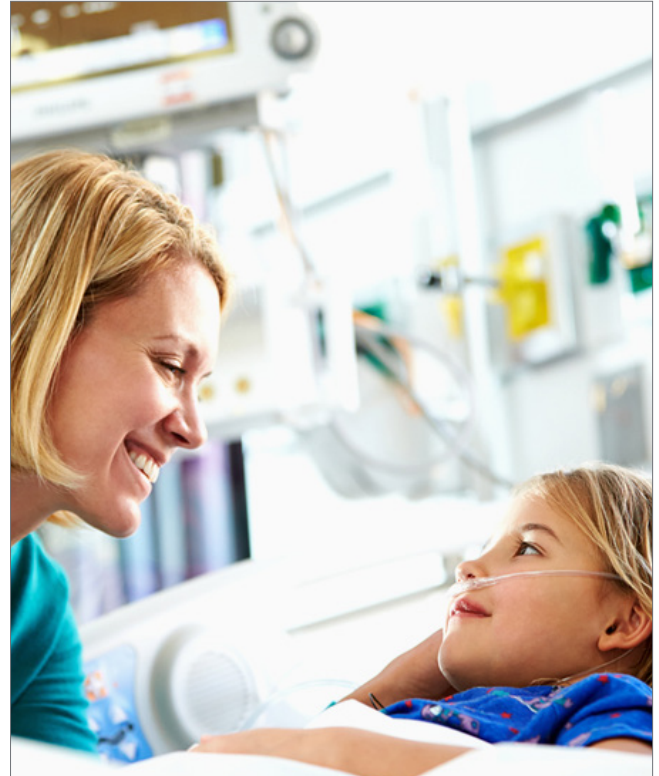
For marine & hygienic environments

CW352H is a Euro Norm copper nickel alloy that we stock in solid round bars. The chemical and mechanical properties of the alloy are to BS EN 12163.

Our stocked solid round bar products come in various diameters, available in closer increments. Stocking bars in this way are attractive because often, we have material stock available in sizes which negate the need for you to machine the material down. Ultimately, procuring materials to your size requirements saves you time and money.

CW352H is essentially an alternative specification for 90/10 copper-nickel alloy comprising 90% copper (Cu) and 10% nickel (Ni). Trace elements, including iron and manganese, are included in the production mix.

CW325H offers a balance of performance characteristics, making the engineering raw material highly suitable for applications in the oil, gas, petrochemical and marine hardware sectors. CW354H offers slightly better tensile strength compared to CW325H.



Benefits

- High toughness and ductility
- Excellent corrosion resistance
- Resistant to hydrogen embrittlement

Key Applications

- Heat exchangers
- Valve and pump bodies
- Hygienic environments

*Chemical Composition (weight %)

	Cu	Ni	Mn	Fe	C	S	P	Pb	Co	Sn	Zn	Others
min.	Bal	9.00	0.50	1.00								
max.	Bal	11.00	1.00	2.00	0.05	0.05	0.02	0.02	0.10	0.03	0.50	0.20

* Properties as per BS EN 12163

*Physical & Mechanical Properties

Density	8.90 gm/cm ³ @ 20°C
Melting Point	1100 - 1145°C
Specific Heat Capacity	0.09 cal/g°C @ 20°C
Electrical Conductivity	5.8 microhm mm ² or 10% IACS

* Properties as per BS EN 12163

Performance

CW352H benefits from excellent corrosion resistance and also good resistance to hydrogen embrittlement.

With moderate strength, high toughness and high ductility, the material is highly effective at resisting corrosion in saltwater environments. Excellent anti-microbial characteristics also result in an alloy popular in hygienic environments such as hospitals and clean rooms.

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