

# CuNi 70/30

CuNi 70/30 (UNS C71500) is a wrought alloy with 70% copper and 30% nickel. It shows moderate strength and good resistance to all forms of corrosive attack in fresh water and sea water, including general attack, pitting and stress corrosion, and surface fouling from marine organisms.

### **Chemical Composition, %**

element	Cu	Ni	Fe	Mn	Zn	Pb
min.	hal	29.0	0.4			
max.	bal.	33.0	1.0	1.0	1.0	0.05

Chemical Composition according to ASTM. Some compositional limits of other specifications may vary slightly.

#### **Designation and standards**

National	Material	Chemical	Forgings	Rod and	Plate and	Strip	Seamless
Standards	designation	composition	Forgings	bar	sheet		tube
ASTM ASME	UNS C71500			B151			
				SB151	B122		B359
			B283	B124	SB122	B122	SB359
	UN3 C/1300		SB283	SB124	B171	SB122	B466
				B122	SB171		Sb466
				SB122			
DIN	2.0882 CuNi30Mn1Fe	DIN 17664		DIN 17672-1	DIN 17670-1 DIN 17675-1		DIN 17671-1
						DIN 17670-1	DIN 17679
							DIN 1785
GB/T	BFe30-0.7						
	CW354H	GB/T 5231	GB/T 20078				GB/T 8890
	B30						

Density 8.94g/cm<sup>3</sup>

#### **Corrosion resistance**

- excellent general corrosion resistance to seawater and other chloride solutions
- more resistance to impingement attack caused by high velocities than other copper alloys
- good resistance to fouling by marine organisms

## **Applications**

Typical applications are:

- condenser and saltwater piping for surface vessels and submarines
- feed water heaters and evaporators in power stations in the high temperature up to approx. 370°C