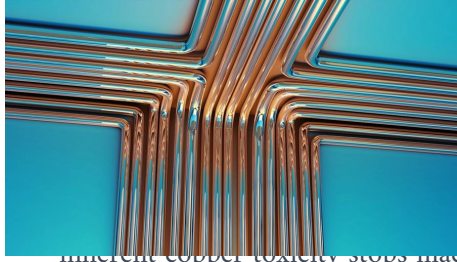


Cupro Nickel

Advanced Materials. Engineered for Performance.



10 Seamless Pipes

W352H / CuNi10Fe1Mn | DIN: 2.0872
| Navy: MIL-T-16420K

Cupro Nickel is a copper with 10% nickel and a controlled cuprous oxide film in seawater, and the inherent copper toxicity stops macrofouling — barnacles and mussels do not settle, so cooling lines stay clean without chlorination. Specified for ship and platform seawater systems, firewater ring mains and condenser tubing where the velocity stays below about 3.5 m/s.

حالة المخزون: Mill indent • مدة التوريد: 4 - 8 weeks

المزايا الرئيسية

- Protective oxide film gives long life in flowing seawater
- Natural biofouling resistance — no barnacle or mussel settlement
- Immune to chloride stress corrosion cracking
- Easy to weld and form, no post-weld heat treatment required
- Navy, DNV and Lloyd's approved supply available

الأشكال والمقاسات المتوفرة

الشكل	نطاق المقاسات
الأنابيب غير الملحومة و الأنابيب الملحومة	1/8" - 12" NB seamless, 6 - 108 mm OD tube, 0.8 - 6 mm wall
الأنابيب الملحومة	4" - 36" OD welded pipe to ASTM B467
الألواح	3 - 50 mm thk condenser plate and tube sheet (ASTM B171)
الصفائح واللفات	0.6 - 3 mm thk sheet and coil
الفلنجات	1/2" - 24", 150# - 300#, slip-on and weld neck
الوصلات	1/2" - 24" butt weld elbows, tees, reducers and stub ends
القضبان الدائرية	10 - 200 mm dia rod and bar

التركيب الكيميائي (%)

العنصر	الحد الأدنى	الحد الأقصى
Cu	Remainder	-
Ni	9.0	11.0
Fe	1.0	1.8
Mn	0.5	1.0
Pb	-	0.02

الخصائص الميكانيكية

الخاصية	القيمة	الوحدة
Yield Strength (0.2%)	105 min (annealed)	MPa
Tensile Strength	275 min (annealed)	MPa
Elongation	30 min	%
Hardness	60 - 90	HV

الخصائص الفيزيائية

الخاصية	القيمة	الوحدة
Density	8.94	g/cm3
Thermal Conductivity	40 - 50	W/m.K
Max Service Temperature	300	C
Max seawater velocity	3.0 - 3.5	m/s

المواصفات القياسية

ASTM B466 (seamless pipe and tube), ASTM B467 (welded pipe), ASTM B111 (condenser tube), ASTM B171 (condenser plate and tube sheet), EN 12449 / EN 12451, MIL-T-16420K, EEMUA 144 / 146, DNV and Lloyd's Register approval, EN 10204 3.1 / 3.2

الدرجات المكافئة

C70600, CuNi10Fe1Mn, CW352H, 2.0872, 90/10 Cupro Nickel

القطاعات التي نخدمها

Marine, Offshore, Shipbuilding, Desalination, Water & Desalination, Power Generation, Oil & Gas, Defence

التطبيقات النموذجية

- Ship and platform seawater cooling systems
- Firewater ring mains and deluge lines
- Condenser and heat exchanger tubing
- Desalination brine and seawater piping
- Offshore splash zone and ballast piping
- Boat and yacht hull sheathing



صحيفة البيانات المحدثة