



C443 ADMIRALTY BRASS

ASTM B111 ASTM B171 ASTM B395

UNS No.	Copper	Tin	Lead	Iron	Arsenic	Zinc
C44300	70.0-73.0	0.9-1.2	0.07 max	0.06 max	0.02-0.06	remainder

C44300 Admiralty Brass, also sometimes referred to as Arsenical Brass, is copper that is alloyed with tin and zinc. Brass 443 tubes have long been used in heat exchangers and condensers because of C443's good corrosion resistance and excellent heat transfer characteristics. Inhibited 44300 Admiralty Brass has found use in fresh, brackish and salt water applications, as well as oil and gas systems where the corrosive resistant properties are valued. With the combination of corrosion resistance, heat transfer rates and lower cost, when compared to C706 90/10 Copper Nickel, Arsenical C44300 brass can be found in use as Bourdon tubes, distiller tubes, evaporator tubes, oil well pump liners, ferrules and condenser plates. C443 has also found use in architectural applications where a brassy finish is desired.

Density @ 68° F	0.308 lb/in ³
Melting Range	1650-1720° F
Hot Formability	Fair
Cold Formability	Excellent
Machinability rating (C360 = 100)	30
Brazing	Excellent
Soldering	Excellent
Gas-shielded arc welding	Fair
Oxy-acetylene welding	Good
Carbon-arc welding	Not recommended
Coated metal-arc welding	Not recommended
Resistant welding: spot and seam	Good
Resistance Welding: butt	Good

Temper	Designation	Tensile, min ksi (MPa)	Yield, min ksi (MPa)
O61	Annealed	45 (310)	15 (105)