



C36500 LEADED MUNTZ

ASTM B171 / ASME SB-171

UNS No.	Copper & Silver	Tin	Lead	Iron	Zinc
C36500	59.0-61.0	0.~25 max	0.25-0.70	0.15 max	remainder

C36500 Leaded Muntz is copper, alloyed with zinc, tin and lead. Muntz metal has strength and corrosion resistance similar to C46400 Naval Brass but the higher lead content results in better machinability. C36500 Muntz metal found historical prominence in the shipbuilding industry, primarily as a hull liner. C36500 Leaded Muntz was adopted by the pressure vessel industry and is still, for many manufactures, the preferred alloy for tubesheets and condenser/cooler plates. Because of its warm reddish gold hue and corrosion resistance C36500 Muntz also has numerous decorative and architectural applications.

Fabrication Properties

Density @ 68° F	0.304 lb/in ³
Melting Range	1625-1650° F
Hot Formability	Good
Cold Formability	Limited
Machinability rating (C3600 = 100)	60
Brazing	Good
Soldering	Excellent
Gas-shielded arc welding	Fair
Oxy-acetylene welding	Fair
Carbon-arc welding	Not recommended
Coated metal-arc welding	Not recommended
Resistant welding: spot and seam	Not recommended
Resistance welding: butt	Fair

ASTM B171/ASME SB-171 Properties for M20 & O25 tempers

Thickness, in.	Tensile, min ksi (MPa)	Yield, 0.5% Offset, min (MPa)	Elongation in 2", min, %
3 and under	50 (345)	20 (140)	35
over 3 to 5	50 (345)	18 (125)	35
Thickness Tolerances*			
	<=36 in.	>36 to 60 in.	>60 to 96 in.
>.25 to .50	.025	.027	.029
>.50 to .75	.028	.030	.032
>.75 to 1.0	.033	.035	.037
>1.0 to 1.5	.038	.040	.042
>1.5 to 1.75	.043	.045	.047
>1.75 to 2.00	.050	.055	.062
>2.00 to 5.00	.058	.062	.065

