

SEA-CURE® Vibration Resistance

Minimum Walls for Various Condenser Candidates for
Similar Support Spacing

ALLOY	MODULUS	WALL
Admiralty	16 x 10 ⁶ psi	.049"
90/10 Cu/Ni	18.0	.043"
70/30 Cu/Ni	22.0	.034"
Type 439	29.0	.025"
Type 304 / Type 316	28.3	.026"
N08367	28.2	.027"
SEA-CURE® / S44660	31.5	.023"
Ti Grade 2	14.9	.053"

Coit

$$L = 9.5 [(E I) / \rho v^2 D]^{1/4}$$

$$I = \text{Pi} / 64 (D^4 - \text{ID}^4)$$

Where:

L = Span Where Vibration Initiates

E = Modulus of Elasticity (psi)

I = Moment of Inertia (in⁴)

ρ = Turbine Exhaust Density (lb/ft³)

v = Average Exhaust Steam Velocity at Condenser Inlet

D = Tube Outside Diameter

ID = Tube Inside Diameter

SEA-CURE® – Tantamount to Titanium

