

# Wieland

## Pressure Testing Calculation

$$P = \frac{2 \cdot f \cdot t}{D}$$

P = Maximum working pressure (MPa)

f = Safe working stress in tube wall (MPa)

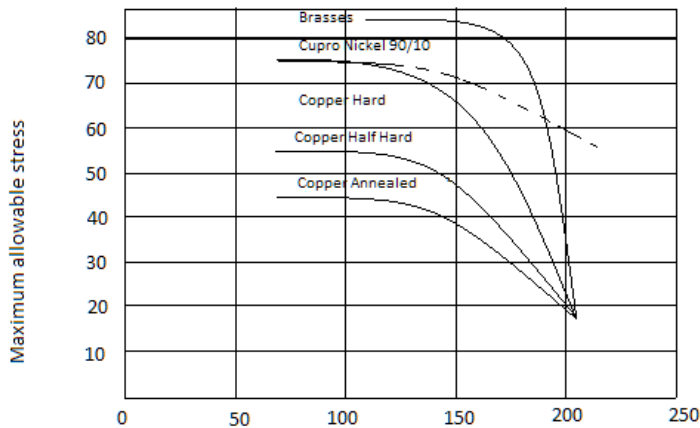
t = Tube wall thickness in millimeters

D = Tube outside diameter in millimeters

**Note :** f is equal to 1. H/H ( half hard ) tube constant is 55  
2. H ( hard ) tube constant is 72

Working Pressure ( Temperatures exceeding 65°C )

For working temperature exceeding 65°C the safe working stress can be determined from the chart below



Then multiply the the answer by 1.5 to obtain the MPa required to test the final product.

eg : 15 mm OD, wall 0.5 , Class 0 , Hard drawn

$$P = \frac{2 \times 72 \times 0.5}{15}$$

$$P = 4.8$$

$$4.8 \times 1.5 = 7.2 \text{ ( 15 mm should be tested to 7.2 MPa to insure no faults in the fields )}$$