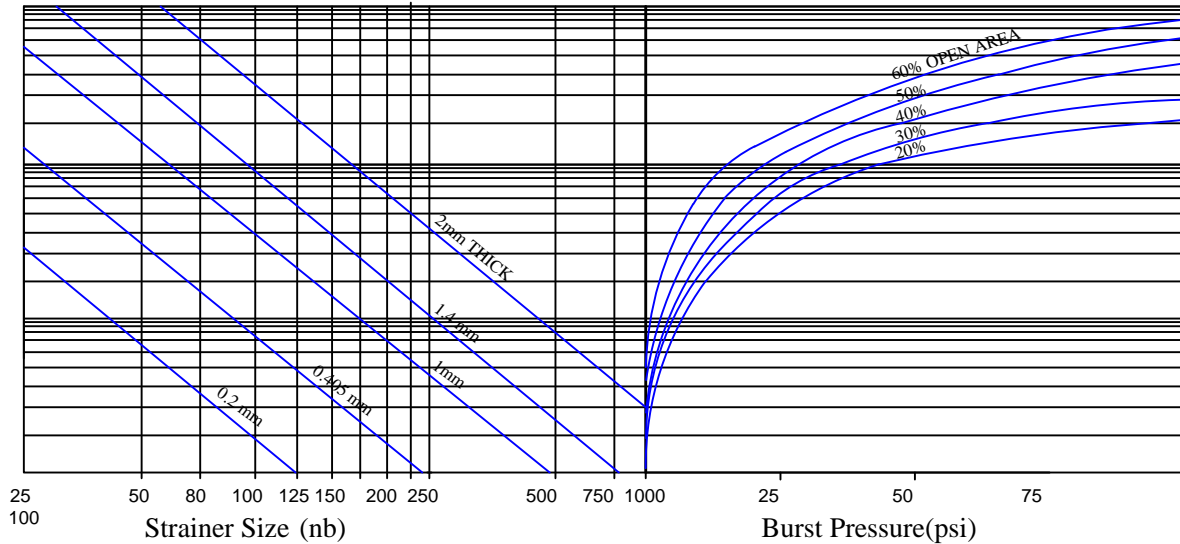




Burst Pressure Calculation For Basket, Tee and Duplex Strainer

To find the burst pressure strainer size is located and drawn to the respective thickness as straight line and a horizontal line is plotted to the open area and the respective open area is identified for the vertical line towards bottom is Burst Pressure.



Burst Pressure

$$(Pb) = 3.333 \sigma \times i^2$$

Where,

σ - Allowable Stress of perforated sheet

$$i = \frac{t}{d}$$

t - Thickness of Perforated Sheet

d - Diameter of hole.

Example: Basket Strainer of 400 NB size with 4.8 mm hole dia 3 mm thick having 50% opening area of screen perforation. Finding the burst pressure.

Having the values given the burst pressure for Basket strainer is calculated,

$$Pb = 21 \text{ psi}$$