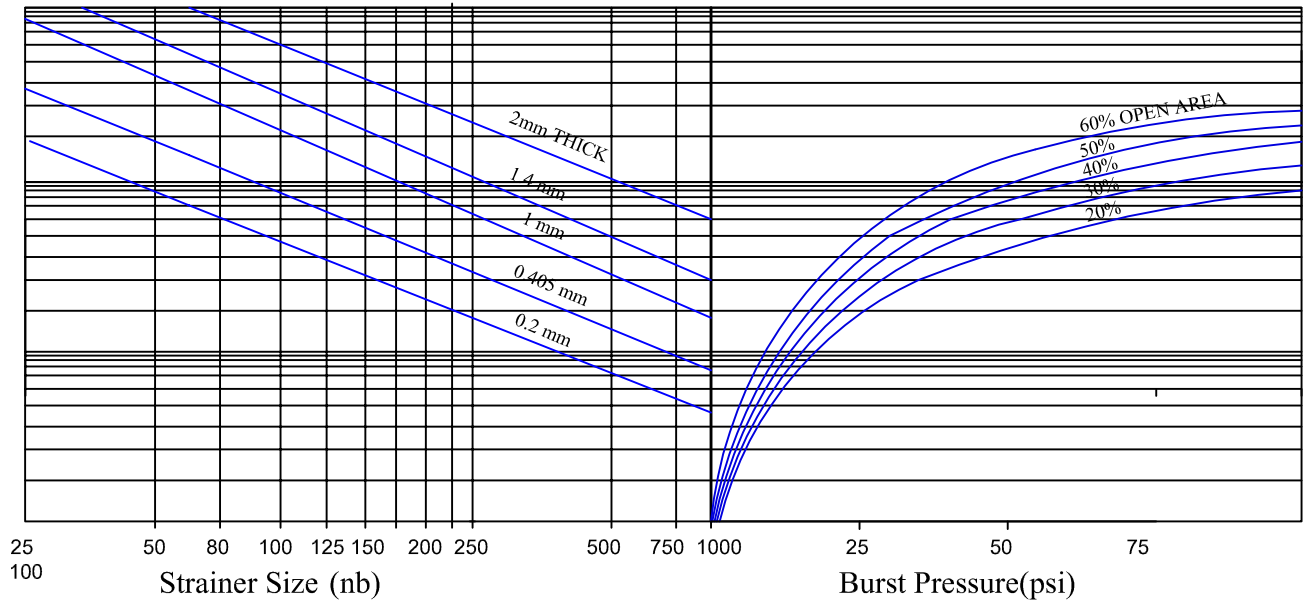




Burst Pressure Calculation For Y Strainer

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

$$(P_b) = \frac{\sigma \times t}{r - 0.4 t} \quad \text{N/m}^2$$

Where,

σ - Allowable Stress of perforated sheet

t - Thickness of Perforated sheet

d - Diameter of hole.

Example: Y Strainer of 80 NB size with 3.2mm hole dia 0.75mm thick having 40% opening area of screen perforation. Finding the burst pressure.

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

$$P_b = 86 \text{ psi}$$