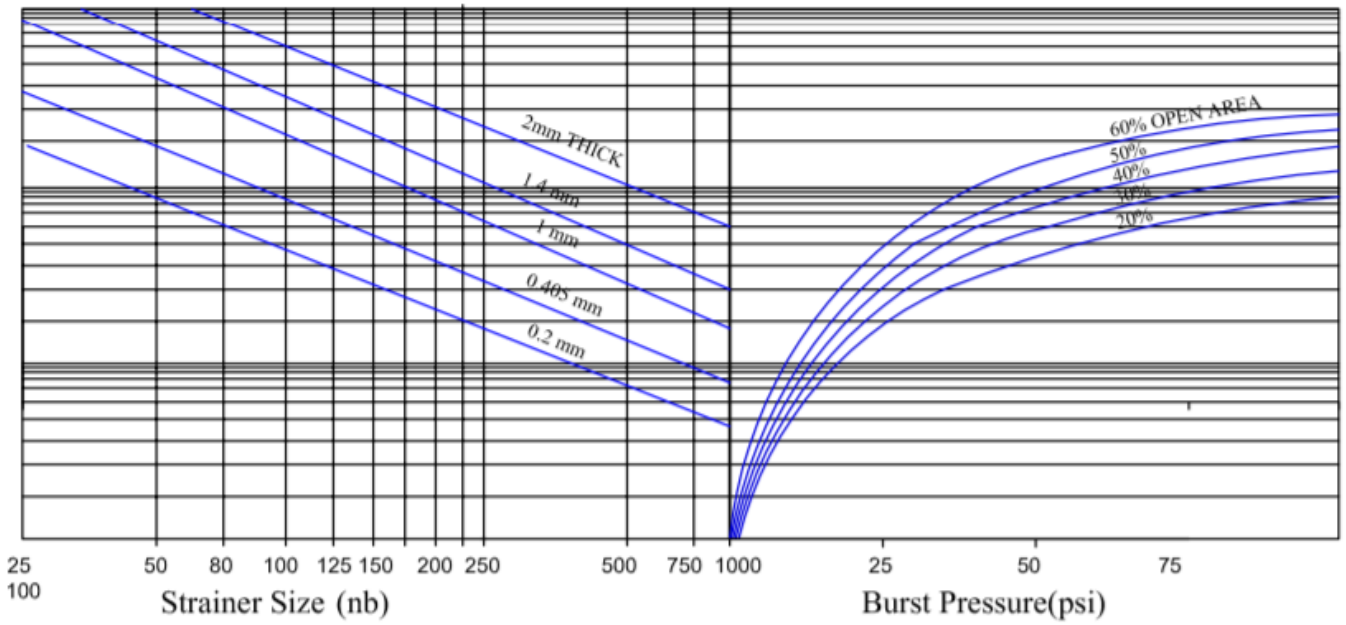
FLOMETRIQ FILTRATION AND INSTRUMENTATION (P) LTD

Engineering Flow...

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 ploted to the open area and the respective open area is identified for the vertical line towards bottom is Burst Pressure.



Burst Pressure $(Pb) = \frac{\sigma \times t}{r - 0.4\,t}$ N/m^2

Where,

σ - Allowable Stree of perforated sheet
i = t/d
t - Thickness of Perforated sheet
d - Diameter of hole

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

Having the values given the burst pressure for Y Strainer is calculated

Pb=86 psi

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