IANC-2025 DESIGN-A-THON

Idea-thon / Technical Challenge

FORBES MARSHALL

Common condensate return line

Steam line

- **Problem statement:**

  - Develop a condensate pumping method against a back pressure by using motive force of high pressure steam without cavitation or water hammer.

  - Design Conditions:

    - Steam & Condensate in Phase Equilibrium

    - Motive Steam Pressure = 10 bar(g)

    - Back pressure for Condensate = 2 bar(g)

  - An estimate of Specific Steam Consumption (kg/hr of steam per kl condensate) will be an added advantage