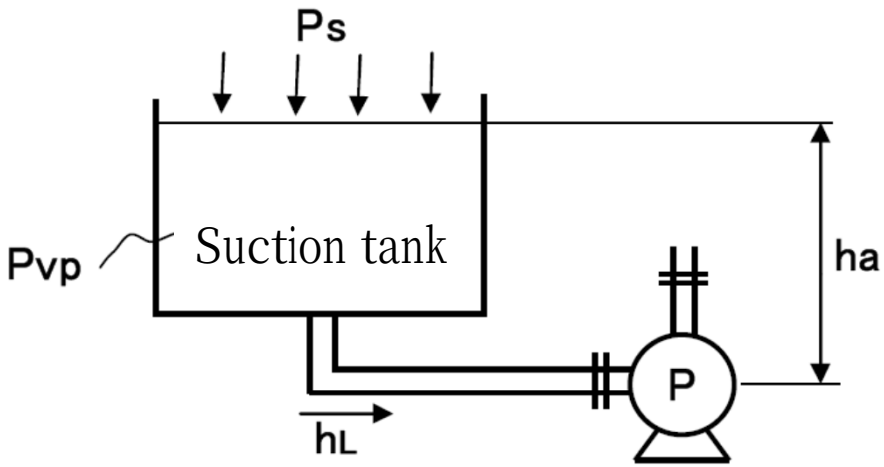
NPSHA (positive suction press.)

$$NPSHA = \frac{10}{\gamma} \cdot Ps - \frac{10}{\gamma} \cdot Pvp + ha - h_L$$

1 MPa = 10.1972 kg/cm^2

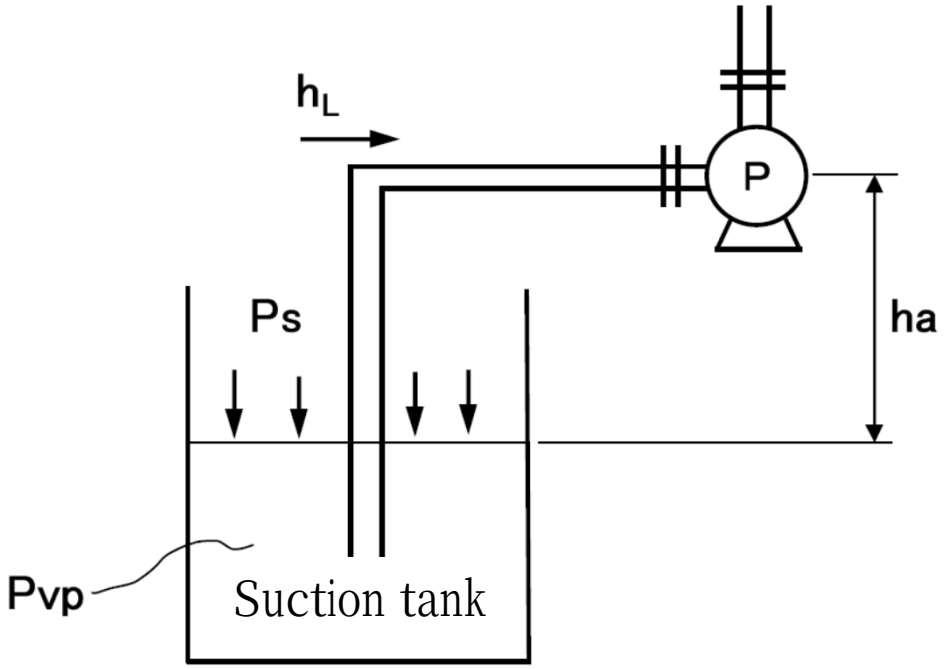


Ps: Surface press. (kg/cm^{2}a.)
Pvp: Saturated vapor press. (kg/cm^{2}a.)
ha: Height (m)
hL: Press.loss (m)
γ: Density (g/cm^3)

NPSHA (negative suction press.)

$$NPSHA = \frac{10}{\gamma} \cdot Ps - \frac{10}{\gamma} \cdot Pvp - ha - h_L$$

1 MPa = 10.1972 kg/cm^2

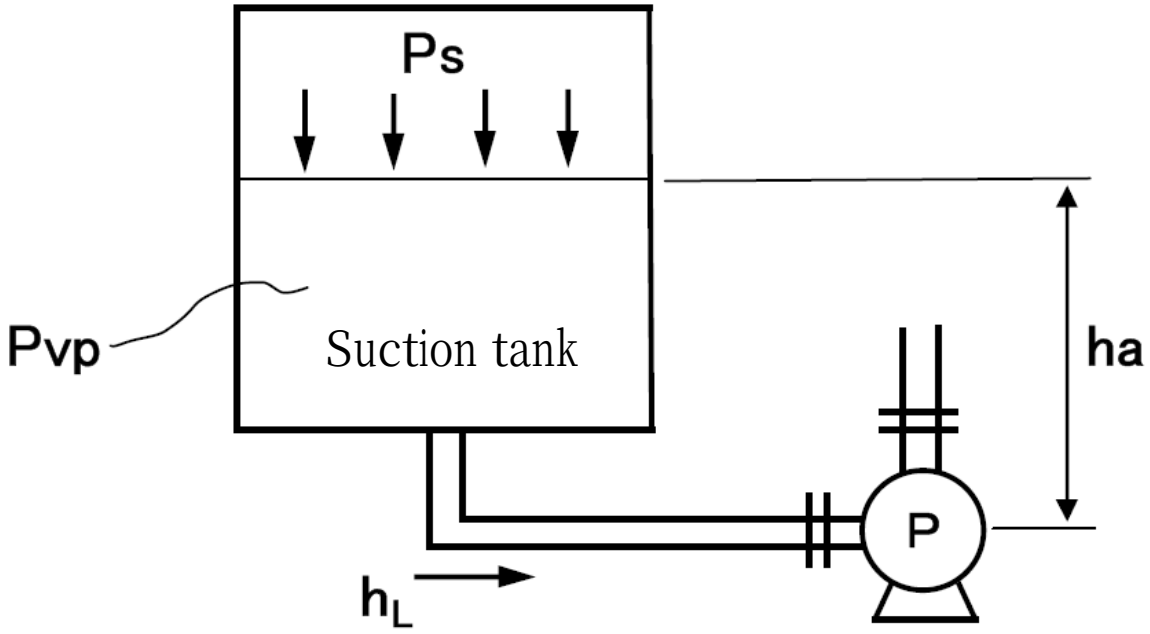


Ps: Surface press. (kg/cm^{2}a.)
Pvp: Saturated vapor press. (kg/cm^{2}a.)
ha: Height (m)
h_L: Press.loss (m)
γ: Density (g/cm^3)

NPSHA (closed suction tank)

$$NPSHA = \frac{10}{\gamma} \cdot Ps - \frac{10}{\gamma} \cdot Pvp + ha - h_L = ha - h_L$$

1 MPa = 10.1972 kg/cm^2



Ps : Surface press. (kg/cm^{2}a.)
Pvp : Saturated vapor press. (kg/cm^{2}a.)
ha : Height (m)
h_L : Press.loss (m)
γ : Density (g/cm^3)