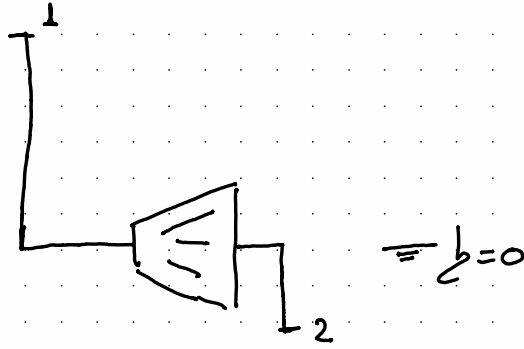


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$$b_1 = 100 \text{ m}$$

$$b_2 = -3 \text{ m}$$

$$P_1 = 207 \text{ kPa}$$

$$P_2 = 124 \text{ kPa}$$

$$P_{\text{turbina}} = 100 \text{ MW}$$

$$\omega = ?$$

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$$\sigma_1 A_1 = \sigma_2 A_2 ; \phi_1 = \phi_2 ; A_1 = A_2$$

$$\sigma_1 = \sigma_2$$

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$$b_1 \cdot \rho + \frac{v^2}{2} + \frac{P_1}{\rho} + E_{\text{gárgola}} = b_2 \cdot \rho + \frac{v^2}{2} + \frac{P_2}{\rho} + E_{\text{pot}}$$

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$$100 \cdot 9.8 + \frac{207 \cdot 10^3}{1000} + \phi = -3 \cdot 9.8 + \frac{124 \cdot 10^3}{1000} + E_{\text{turbina}}$$

$$E_{\text{turbina}} = 1092 \text{ J/Kg}$$

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$$E_{\text{turbina}}$$

$$\boxed{G} \quad P \left( \frac{J}{s} \right) = \sum \left( \frac{I}{kG} \right) \cdot \omega \left( \frac{kG}{s} \right)$$

$$1 \cdot 10^6 \frac{J}{s} = 1092 \frac{I}{kG} \cdot \omega$$

$$\omega = 915 \frac{kG}{s}$$