

9-121

$$h_1 = 300.19 \text{ kJ/kg}$$

$$h_3 = 1277.79$$

$$Pr_1 = 1.386$$

$$Pr_3 = 238$$

$$Pr_2 = (3)(1.386) = 4.158$$

$$r_{bw} = \frac{411.26 - 300.19}{1277.79 - 946.35}$$

$$h_2 = 411.26 \text{ kJ/kg}$$

$$= 0.335$$

$$Pr_2 = \frac{238}{3} = 79.33$$

$$h_2 = 946.35$$

$$\eta = \frac{2(1277.79 - 946.35) - 2(411.26 - 300.19)}{(1277.79 - 946.35)(411.26 - 300.19)}$$

$$= 0.368$$