

## Non-adiabatic turbine

How is the power output affected by a non-adiabatic turbine in a simple Rankine cycle?

Answer: B.

Explanation:  $\dot{Q}_{out}$  increases, therefore the efficiency of the cycle will decrease.  $\eta = \frac{W_{net}}{\dot{Q}_{in}} = 1 - \frac{\dot{Q}_{out}}{\dot{Q}_{in}}$