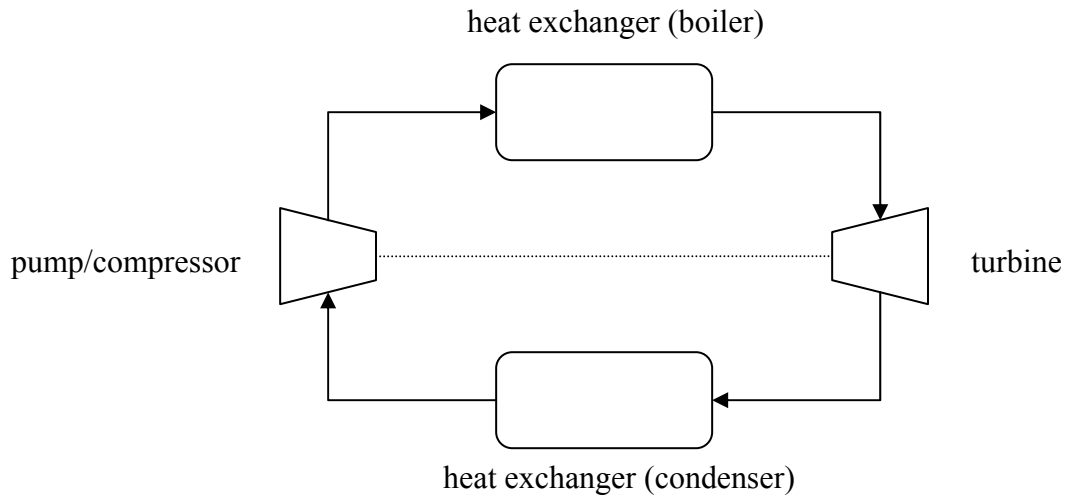


1. Rankine Cycle Analysis Steam is the working fluid in an ideal Rankine cycle. Saturated vapor enters the turbine at 8.0 MPa and saturated liquid exits the condenser at a pressure of 0.008 MPa. The net power output of the cycle is 100 MW. Determine for the cycle:



Schematic of a typical Rankine cycle

- a) the process path on a $T-s$ diagram
- b) analysis of individual components
- c) the thermal efficiency (37.1%)

