

## Example 8.1

### Result

(a) Rankine Cycle

Thermal Efficiency

0.397

(b) Practical cycle with 0.75 efficiency

Thermal Efficiency

0.2961

(c) By rating of Power Cycle

Steam Rate

84.74

kg/s

Heat Transfer rate in boiler

270.2

MW

Heat Transfer rate in condenser

- 190.2

MW