Assignment

1. Determine the following for a Linde – Hampson system with Air as working fluid when the system is operated between 1.013 bar (1 atm) and 202.6 bar (200 atm) at 300 K. The effectiveness of HX is 100%.

- Ideal Work requirement
- Liquid yield
- Work/unit mass compressed
- Work/unit mass liquefied
- FOM

Assignment

2. Determine the following for a Linde – Hampson system with Oxygen as working fluid when the system is operated between 1.013 bar (1 atm) and 202.6 bar (200 atm) at 300 K. The effectiveness of HX is 100%.

- Ideal Work requirement
- Liquid yield
- Work/unit mass compressed
- Work/unit mass liquefied
- FOM

Assignment

3. Repeat the Problem 1 and Problem 2 the Linde – Hampson system when the heat exchanger effectiveness is 90%. Compare and comment on the results.