Assignment

• An $\alpha$ – type Stirling Nitrogen liquefier is capable of producing 15 liter per hour of $\text{LN}_2$. Speed of the prime mover is 1440 rpm and the maximum allowable pressure in the system is 35 bar. Use the Schmidt’s analysis to design the system, if the working gas is Helium. Use $X = 0.5$ for the design procedure.

• Use the standard $T$ – $s$ diagrams for entropy and enthalpy values.