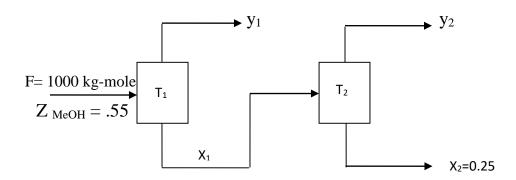
Two flash distillation chambers are connected together as shown in the diagram. Both are at 1 atm pressure. The feed to the first drum is a binary mixture of methanol and water having 55 mole% methanol. Feed flow rate is 1000 kg-moles/hr. The second drum operates with a vapor to feed ratio of 0.7 and the liquid product is 25 mole % methanol. Equilibrium diagrams are given.



- a. What are y_1 , y_2 , x_1 , T_1 and T_2 ?
- b. What is the fraction vaporized in the first drum?

