

多重流動式太陽能空氣加熱器效能之解析

The efficiency of the plate type solar air heater, which was constructed by two glasses plates, absorption plate and bottom plate, was investigated under the effects of flow type, solar radiation and air mass flow rate. From energy balance, the temperature of exit air was obtained prior, then the efficiency of solar air heater was found. The efficiency increases with the increase in air flow rate or the decrease in solar radiation. The flow arrangement from top channel to bottom channel and then the medium channel has the highest efficiency.