

Combination of electric air heater and refrigeration system to reduce energy consumption: a simulation of thermodynamic system

Engkos Achmad Kosasih, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=9999920530364&lokasi=lokal>

Abstrak

This study is about the analysis of thermodynamic system of a refrigeration system with two condensers coupled in series to the electric air heater system. The condenser produces waste heat reaches 90oC and the heat is accumulated into a space heater up to 140oC. That means: the heater works only up to 50oC, so the temperature of the air is high and dry, but has a very low RCES (Ratio of Specific Energy Consumption) in dew point 20oC, which is indicate that the system is very significant.