A fault diagnosis expert system for building cooling tower

ABSTRACT

In many high-rise building and offices, air conditioning plays an important role in giving maximum comfort to the occupant as well as giving a comfortable working environment. This project describes the use of an expert system shell for building cooling tower. In air conditioning field, services and maintenances of cooling tower is expensive as depending heavily on human experts. Hence, the main objective of the developed system is to diagnose the problem for cooling tower. With the aid of expert system, process of diagnosis problem of cooling tower will be more standardized and more precise compared to the conventional way. The limited values for this developed expert system are based on the building cooling tower design and expert's experiences. A case study was conducted to verify the capability of the developed system.

Keyword: Cooling tower; Expert system; Fault diagnosis