ABSTRACT

Coefficience of Performance or abbrivatedly as COP is the ability of a refrigeration machine for do a refrigeration. There are many factors that can depends COP of a refrigeration system. Such the pressure that has in many components of refrigeration system such compressor, condenssor, and evaporator where the value of the pressure can be changed become the value of enthalpy and entrophy from Thermodynamics refrigeration table. An ideal refrigeration machine must have COP value following the Indonesian National Standard System (SNI).Where in the last data in 2020, an ideal refrigeration system must have COP value at least at three, according to data of SNI 03-6390-2020. For the usage in industrial sectors or for a skyscraper, a refrigeration system must have good performancy for make a skyscraper or a products production has a good refrigeration. A refrigeration system should for do a maintenance frequently. So the refrigeration system can produce a good COP value and also can be used for a long time.

Key Words : Chiller, Coefficient of Performance (COP), Enthalpy, Enthrophy, Pressure