Prediction of Cooling Tower Thermal Characteristics using Newly Developed Software for a Chemical Industry

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Abstract : This paper deals with development of a new software that will help to predict the Thermal Performance of a cross flow-cooling tower which is situated in a medium scale industry in Thoothukudi, Tamilnadu, INDIA. From this software, the industry persons can predict the outlet water temperature, effectiveness of the cooling tower, percentage of water loss from the input parameters like L/G ratio, Relative humidity; inlet water temperature and inlet air-dry bulb temperature. The methodology for developing software for cooling tower, which can be fit in any industry, is discussed here.

Keywords: Thermal Performance, Cross flow cooling tower, Software, Industrial application.

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