IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 2, Issue 3, June 2022

Implementation of Multimodal Evaporator for Water filtration at Alkyl Amine Plant Pune

Pravin Petkar^a, Amit Sukhdeve^b, Gourav Gajbhiye^b, Pratik Bhoyar^b, Arpit Thakre^b, A. Kolhatkar^b

^aAssistant Professor, Mechanical Engineering Department

^bStudents, Mechanical Engineering Department,

Jhulelal Institute of Technology, Nagpur, Maharashtra

Abstract: This paper present the development of a model and an algorithm to design a multiple effect evaporator system. Also, it is required to make to evaluate the amount of steam saved by the use of vapour compression. The use of vapour compression allows us to use the energy in the vapour leaving the last effect. Since evaporators are energy intensive system, use of vapour compression can considerably reduce steam consumption, but at the cost of electrical energy needed to run the compressor. If a single evaporator is used for the concentration of any solution, it is called a single effect evaporator system and if more than one evaporator is used in series for the concentration of any solution, it is called a multiple effect evaporator system. Paper aims to compare and review available model of evaporator and make modification in multi effective purpose which used in industry.

DOI: 10.48175/IJARSCT-4947C

Keywords: Evaporator, development, consumption, energy

