

## **RATING OF HEAT EXCHANGER FOR REACTOR PLANT**

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### **ABSTRACT**

This research presents a technique to rating of heat exchanger for reactor plant operation. Appropriate design models specific to exchanger's studies were invoked and applied to fruition. The linear thermodynamic models and physical process data from Refinery to predict the performance of the heat exchanger unit by determining the size of heat exchanger, heat load, log-mean temperature, heat transfer coefficient and capacity ratio to get an exchanger effectiveness of 74.1%. Evaluation of surface area, heat transfer coefficient, quantity of heat, log-mean temperature and outer diameter of the heat exchanger in other to optimize the fractional conversion of the feed components.

**Keywords:** Rating, heat exchanger, kinetics, reactor plant, heat transfer, Coefficient.