



Heat Transfer Application in Process Industry

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Product Description

Heat transmission is very common and familiarly occurs in our daily life, so much that we tend to accept the process for granted and only think of its glaring manifestations and effects. We use our physical intuition to interpret thermal phenomena, and our reactions to hot and cold substances or the environment becomes voluntary. However, when heat transmission is considered from a quantitative point of view, it becomes quite clear that mechanism of heat transfer and their operations in a given system are not so trivial. Though there is evidence of use of fire by cave men about half a million years ago, yet only in relatively recent times the people have understood that heat is a form of energy in transit and that temperature is a measure of that energy present in a body. The importance of intelligent and judicious use of heat energy has been understood only recently when people have realized that source of heat energy such as coal, gas, and oil are not sufficient to sustain the economic development of the modern society. Energy saved is energy generated. Process industries being leading consumers of heat energy, it is imperative on the part of the Managers of Process industries, to take all possible steps to minimize the wasteful use of this scarce resource. The text is intended to provide a good understanding of the basic concepts of heat transfer and enhance the skills of the operators and engineers running not only process industries using heat transfer equipment. It is targeted towards the working professionals who are diploma holders in engineering and graduates in science/engineering manning process industries. Emphasizing focuses upon, the ability to run heat transfer equipments efficiently, by bringing heat loss to unavoidable level.

Table of Contents

Foreword Preface Chapter 1: Basic of Heat Transfer. **Chapter 2:** Convective Heat Transfer. **Chapter 3:** Design and Analysis of Heat Exchangers. **Chapter 4:** Pinch Technology. **Chapter 5:** Case Study on Heat Loss Through Pipe. **Chapter 6:** Case Study of Heat Exchange Network Without Phase Change. **Chapter 7:** Case Study of a Fired Heater Involving Phase Change. **Chapter 8:** Case Study of an Air Preheater. **Chapter 9:** Improving Performance of a Distillation Column by Providing Pump Around Heat. **Chapter 10:** Energy Saved is Energy Generated. **Chapter 11:** Heat Transfer With Chemical Reactions. **Chapter 12:** Case Study on Temperature Peaking Effect.



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