

CHAPTER 1 INTRODUCTION



In the soap process or saponification that use the oil as the base material will produce the glycerine as a by-product that is wide-used in many field such as the phamaceutically industry. One step for recovery the glycerine from the treated lye is to evaporate the water and concentrated it to crude glycerine (80 % glycerol) . Operation which caused the glycerine was lost in the evaporator unit which is operated under vacuum.This problem had happened in the chain factory of Colgate Palmolive in many country and they try to reduce this severed loss .

Because of the lack of the proper control system ,separation and others factor that cause it to be happended . So,this thesis will study in that way with the on-line experiment so that we can use the knowledge and experience in manufacturing to solve the problem ,improve the exist process and finally can reduce the cost of the product ,build a good relationship between the company and university ,and reduce asking the aid from other country .

Objective

1. To study the vapour-liquid separation in evaporator of glycerine recovery process to reduce the glycerine loss .
2. To study the control system of the evaporator.
3. to optimize the operating condition of the treated lye evaporator .

Usefulness

1. Reduce the glycerine loss in treated lye evaporator .
2. Apply the method or modify the procedure for improving the other process that use the evaporator or vapor-liquid separation.
3. Build up the good relation between the company and the university so as to bring the developed technology in an university to apply in the manufacturing process.