

**COMPUTER CONTROL OF BATCH PROCESS PLANT
(PLANT INVESTIGATION)**

**Final fulfilment for the award of the
Degree in Electrical Engineering of
INSTITUT TEKNOLOGI MARA**



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DECEMBER 1995

ABSTRACT

This project looks up mostly in which more enhanced computer control can be provided in the batch process plant. . The competitive pressures in batch processing plant production and difficulties in planning and control all call for improved design of batch plants and provide an incentive for application of computer-aided methods. The selected plant is a Non-interacting Liquid Level Control of Three Tank System (High Order Lag Process) where commonly used in plant system in process industries. The plant system is simulated by using stepper motor where the motion or rotation can be controlled through the compatible stepper driver and logic circuit. This project successfully gives the understanding of batch process plant especially where load (printer plotter) is moved in linear motion as a piston valve motion in the real plant.

ACKNOWLEDGEMENT

In the name of Allah, the Beneficent and the Merciful, I would like to express my deepest gratitude to my project advisor, Dr. Yusof bin Md. Salleh who deserves most credit for his continuous inspiration and guidance in giving ideas and assistance in this project.

My gratitude also goes to Encik Uzir bin Kamaluddin, Encik Ahmad Jamal bin Salim and Puan Lee Yoot Kuan for their guidance and willingness in sharing knowledge, ideas, and sources of information towards the accomplishment of this project.

Special thank for project co-ordinator, Encik Ismail Musirin for his continuous information and support. Also thanks to my classmates and friends for their suggestions and contribution to this project.

Mohd. Fareh bin Mohamed Zaid

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Shah Alam

Selangor

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CHAPTER 1

1. INTRODUCTION

Process industry in our time has experienced plenty of changes in its technology to improve the productions especially in chemical and food industries by reducing the plant operating as well as by improving the production efficiency[1]. The process industry has been divided into two main categories[4] :

- a) Continuous process
- b) Batch process

1.1 Concept of Continuous and Batch Process

Continuous process is often regarded as the mass production side of industry. A product is made by passing it through different pieces of specialized equipment, operates in a single steady state and performs one dedicated processing function as shown in figure 1.

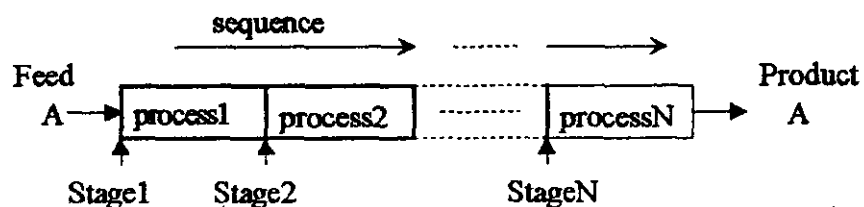


Figure 1 : Sequence of Continuous Process