THREE TANKS WATER LEVEL MONITORING SYSTEM

(HARDWARE DEVELOPMENT)

Thesis is presented in partial fulfilment for the award of the
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INSTITUT TEKNOLOGI MARA

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ABSTRACT

Measuring or monitoring of the level of material contained in storage and processing vessels, such as tanks is one of the most common procedures of industrial instrumentation. Recently, the technologies developed specially in computers enable us to provide an incentive for the application of computer-aided methods in monitoring the level. The main objective of this project is to develop the hardware components that can be used in monitoring the water level in three tanks water system by using computer without affecting the plant control system. This pilot plant gives a closer looks and understanding about the real monitoring process.

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CHAPTER 1

1.1   INTRODUCTION

Type of process in batch industry can be devided into three that are;

a)   **Batch Process.** Batch process is referred to the process of a discrete

   quantity of material according to some prescribed sequence of operation.

   The operation and activities are regarded as discrete event **dynamical**

   system, which characterized by the starting and ending of discrete

   processing activities.

   More manpower need to be used in the real life process plant as it is

   normally multipurpose, a time variant process and very complex

   operation.

b)   **Continuos Process.** Continuos process is often regarded as the mass side

   of the industry. A product is made by passing it through different process

   of specialized equipment each of which ideally operates in steady state

   and performed one dedicated processing function. This process is marked

   by a flow of essential material from the beginning to the end of the

   operating interval. Therefore, this kind of process is representing an open