

**A  
Project Report  
On**

**“INDUSTRIAL BOILER CONTROLLER USING  
AUTOMATIC SECURITY SYSTEM”**

Submitted in partial fulfillment of the 8<sup>th</sup> semester Bachelor of  
Engineering in Instrumentation Technology of  
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## **ABSTRACT**

Most of the industrial plants have a control room where a SCADA system is installed. This system enables a site operator to monitor and control processes that are distributed among various sites. Such systems reduce cycle time, improve quality and increase profit margin. So in order to automate all the manufacturing process a system is needed to monitor and configure different components. The main aim of this project is to develop a SCADA system for monitoring of temperature and controlling of a water level according to the temperature.

In this system we will use temperature sensor, which sense the temperature of the furnace. It is conditioned to particular value, if that value increases to first level (i.e. 40 C) then the microcontroller gets that information and controls water level by turning on one water pump and when temperature value increases upon second level (i.e. 80 c) then microcontroller will turn on second water pump. Again Motor pumps will off when the temperature reduces the certain levels.

Here we are using LM35 for measuring the temperature and the output of LM35 is given to ADC for converting analog output of LM35 into digital data. That ADC output is given to microcontroller for monitoring purpose. When temperature increases beyond certain limit then we are going to on the water pumps. Here we are using LCD for displaying the temperature value.