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An Automted Stopwatch for Conveyor Belt Driven Ovens

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An Automated Stopwatch for Conveyor Belt Driven Ovens

Final Project Report
12/7/2007
Jared Strautman

Submitted to:

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ABSTRACT

The design presented in this report is an automatic stopwatch for conveyor ovens. It will be used at Lincoln Food Service Products LLP in the research and development laboratory. The stopwatch incorporates many components that compliment each other to create an easy to use and highly accurate tool. This project will be developed from conceptual phase all the way to completing a prototype unit. The concept of an automatic stopwatch is nothing new; however, one with the capability to start and stop automatically with the correct stimulus is not available.

All components of the design are covered in the various sections of this report including hardware and software portions. There are three key elements used in the design. First are the sensors, which are used to start and stop the timer. Second is the microcontroller that is the “brain” of the circuit. Third is the screen that displays information to the user such as time, and software version number.

About nine months went into the development of this design. I used much of my own time and resources working on the project. Some time and equipment were used at Lincoln where I am employed.

Keywords: automatic, stopwatch, sensors, conveyor oven, microcontroller, display, prototype, hardware, software

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