

FINAL PROJECT

PROTOTYPE-CONTROLLED PAINT DRYER BASED ATMEGA 16

by :

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ABSTRACT

Processing require a good paint so that quality can be maintained. One painting products that are susceptible to physical damage is the drying process. The purpose of the manufacture of a controlled prototype-based paint dryer ATmega 16 tools to ease the process of drying paint with a relatively fast and space is not very wide but with the object of sufficient capacity. This tool will show the air temperature during the drying process.

The design of this system using a design method that consists of several stages, namely, (1) identification of needs, (2) Needs Analysis, (3) Concept Design, (4) Preparation, (5) Testing Tools, and (6) study analysis. The system is composed of hardware and software. The hardware consists of: Power Supply circuit as a power voltage of 5 VDC to 12 VDC to the system and the voltage relay driver is in the end for the activation of the heater and blower, LM35 sensor circuit modules, minimum system microcontroller ATmega controller 16 as a series of input, output and display circuit output using the LCD, relay driver circuit. Software using the programming language C Language.

Judging from the test results, it can control the system in time to finish the drying process in a prototype room and display it on LCD. Quality and quality is strongly influenced by the drying of paint and paint raw materials combination process. This tool is also capable of drying an object with a size of 10 x 8 cm with a relatively fast and obtain good results 75% and 25% unfavorable outcome.

Keyword: Paint, LM35 Sensor Module, Microcontroller