

ABSTRACT

Wet sterilizer on the previous state can not be used for the sterilization process, so it is only stored in the Laboratory of Surgical and anesthesia, Engineering Campus Elektromedik Surabaya. Therefore made modifications equipped with automatic charging and discharging, and timer settings are displayed on the display devices.

This tool domodifikasi using Microcontroller IC, and the addition of setting a timer with display 7 segment display, as well as the water level indicator and heater indicator that these modifications facilitate the use and monitoring at the time of sterilization work.

Based on the measurement results are compared with the calibrator temperature at 100 °C, mistake or error factor in getting 0,5%. As for the error of time when 30 minutes is 0,24% and for 60 minutes at 0,05%. Wet sterilization uses a voltage of 5V to run all the systems, Vref of 1,4V, VREs of 0,01 V / bit, valve open with logic 0, the heater will work with providing a logic 0, and the use of 7 seven segments to display the temperature and the timer. With the addition, it can be easier for the user to monitor the process and to use this tool. And judging from the results of the analysis of wet sterilizer is feasible to use.

Keywords: *Heater, Timer, Microcontroller, sterilizer*