

ABSTRACT

Speed and accuracy in taking action is important in the management of patients. The more quickly and precisely in the management of patients will reduce the negative effects arising from the illness suffered by the patient. However, in practice the decision to perform the treatment of patients with fast action is influenced by many factors. One of the factors that influence is a tool that is used to treat patients.

Medical devices that get attention here is on a ventilator. Dimaksud breathing apparatus which is a set of oxygen with oxygen regulator is used to regulate the dispensing of oxygen. The volume of oxygen that comes out is set based on the patient's respiratory condition often called respiratory rate. Standard normal human respiratory rate is 17-20 per minute breathing. If out of range of the possibility of respiratory distress requiring supplemental oxygen for breathing launch.

The output of this system has been able to be made automatic oxygen regulator that can display on the LCD respiratory rate and oxygen is able to control spending. Accuracy achieved in this system in the calculation of respiratory rate is 92.73%.

Keywords: respiratory rate, oxygen regulators.