

## **ABSTRAK**

*Laminar Air Flow is a protector cabinet to mix the medicine in order to not be inhaled by the operator. This device is usually used to mix the cancer medicine. The work principle of this Laminar Air Flow is by air circulation which filtered tightly before being wasted or recirculated to keep the sterilization in surrounding room of the place where the Laminar Air Flow being operated. The operation of this modul is waiting for delay time 5 minutes dan sterilization time 30 minutes.*

*In this Laminar Air Flow, value of the air flow tends to change at any time. Many factors can cause air flow's change. The placement of the sensor that didn't presice with the fan and the condition of the box that didn't vacumm.*

*Laminar Air Flow which made by the author, used speed 100 fpm. Another thing that the device was equipped with safety look door to more kept the operator's safety also the surrounding environment.*

*In this modul production, the author made Laminar Air Flow Class II type B3 is equiped with timer display based on microcontroller AT89S51 with flow rate 100 fpm with delay time 5 minutes and sterilization time 30 minutes. The average error flow rate which was got based on measure used tachometer and it was got in to the pattern as big as 1,298 % and average error timer delay 0,066 %. Average steril timer 0,23 % on conventional time.*

*This Laminar Air Flow Class II type B3 is equiped with timer display based on microcontroller AT89S51 still good for use because error value still under 2% and can work good for.*

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*Keyword : air flow, timer*