

## ABSTRACT

*Simulation take otomatis blood sample is a tool for medical to use proses take blood sample in hospitals. How to take blood sample still manual with syringe and vacuumtainer tube(holder), in other side if the operator not quickly on take blood sample than, the blood will coagulated, damaged dan can not be to use again as analysis sample.*

*This tool included the new tool because not there is yet in world of health, but already ever made by the senior and there are different now this tool completed with the choose hypodermic needle size there are two kind is a 20 and 21gauge with showing LCD for the show all of how to use tool from begin volume choose, pause, reset, clear and than posisi awal and timer in setting 5ml is a 39second and for volume 10ml need time 73second in proses blood take and also LED indicator when to mark flame at voltage from 12v or decrease become 11v. This tool may be not perfect yet but writer will trying to maximal may be for to make this tool the best*

*The principle this tool is the nurse not necessary to draw out syringe for take the blood sample because syringe already drawed out by tool mechanic which to use engine motor (gearbox) as moved control,with the result that syringe as object which draw out and blood sample inside to the tube of syringe pass through on interval a straight.*

*For the more judgment in the front then writer will make thesis autometric take blood sample Mikrokontroler AT89S51 basic mikrokontroler at89s51basic completed volume setting and choose size hypodermic needle, however on the making of this thesis writer benefitted mikrokontroler at89s51 system as basic from this tool.*

*From measuring result which already doing to volume choose 5ml, 10ml and size hypodermic needle 20 and 21gauge,there is error false as big as 3.25%.*

*After that making of tool doing proses and literature study, planning, trying, testing and encode for processing, acquisition that to use relay as driver engine motor effectivest from ic L293 or L298(ic driver engine motor)because decrease more ampere which inside to engine motor and making principle engine motor become slowly.*

---

*keyword : autometric take blood sample Mikrokontroler AT89S51 basic,Gearbox motor And Moving mechanic.*