

SANITARY NAPKIN DISPOSAL MACHINE

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ABSTRACT

Nowadays women are leading there countries like, now not only in India but all over in world women are participating in areas such as education, sports, politics, media, art and culture, service sectors science and technologies etc. During the time of work the health and hygiene these terms are also important especially in during menstruation. In this duration women has to change sanitary napkins in every 5-6 hours. Use of napkin is necessary but it creates lots of plastic hazards in environment. If the use of napkin is necessity then the disposal of napkin is compulsory. So the solution for this problem is installing disposal machine. We can contribute into making ecofriendly environment by installing disposal machine in school and colleges, industries and in rural areas. This system is used to dispose menstrual waste to burn using electric fire based burners. This machine will be designed for solve the problem of improper disposing of the sanitary napkins which cause the environment and to human health. To

Keywords:- Sanitary napkin, Sanitary Napkin disposal, Incinerator, design, analysis

I. INTRODUCTION:

We need to educate and guide women, girls regarding the disposal of sanitary pads in a proper way. This will help to maintain hygiene and give guidance regarding unwanted diseases. It's important to protect our environment, proper care and initiative must be taken by every women to dispose used sanitary napkins carefully. In the long run, hygiene and knowledge regarding this is possible only through the education. In both rural and urban areas, spreading these things are only possible through women to another women as they can demonstrate and teach them the process of disposing the sanitary napkin. Poor menstrual management and improper disposal of sanitary wastes lead to various health complication. As the disposed sanitary napkins carry infection bacteria like E-coli, salmonella, staphylococcus, HIV and many more. When this disposed carelessly in open, can pollute water and soil and release harmful toxins when burned.

1.1 OBJETIVE

- The main objective of this research is to build a smart sanitary napkin disposal machine which could be help to reduce the problem of disposing sanitary waste.
- It also help to reduce spreading infection which caused by unhygienic disposal sanitary pads. Also reduce environmental pollution which caused by non-biodegradable sanitary napkins and reduce clogging of drainage system.

II. LITERATURE REVIEW

- At school, due to lack of sanitary facilities girls throw their soiled pads wrapped or unwrapped in the toilet corners. Whether at home or public places, dispose their used napkins by flushing them and this leads to the blockage of the sewage system.
- 20 lakhs girls and women of reproductive age, most of whom experience menstruation every month.
- 34% of school girls missing school days during their menstruation.
- More than 60 thousands pads are disposed monthly, this include large amount of sanitary napkins which are not biodegradable.
- 63 % girls do not change their absorbent in school

III. PROPOSED SYSTEM:

Hardware specification

- Fabrication :
Outdoor box, Indoor box, Heater box, Smoke controller-exist fan, smoke control filter, 12v adapter, Door nobe, Maniti block
- Electronics material:
Transformer 12012 2A, DB 107, Diode 107, Regulator 7805, Capacitor 2200mf 25v, 100mf 25v, IC-peak control system f886, Resistor 1K, Present 10K, Bugger 12v, IC base 28pin, Display 16x2, Transistor 547, Connector 2pin 3pin, Limit switch,L 90- relay
- Electrical material:
20000W GCoil, MSB 16A, 3pin top 16inch, 1.2 ml wire cable 4m, Topline wire 1mm & 2.5mm

Software specification

- MTLAB
- Pick dubbing

3.1 Block diagram

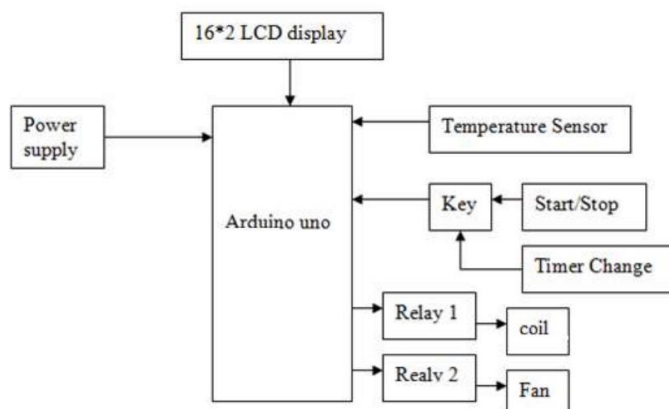


Fig.1 Block diagram

3.2 Flow chart

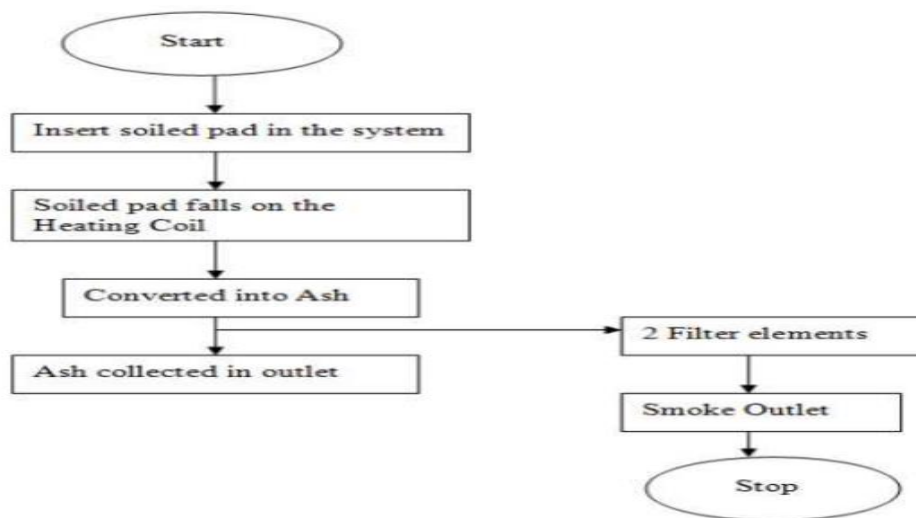


Fig.2 Flow chart

IV. WORKING:

The disposal machine will be start when we open the door for inserting sanitary napkin and on display screen we receive the message i.e. the door is open. But when we open door only machine get starts. After inserting napkin into the machine after closing the door the heating coil will be start heating. It take approximately 6 minutes duration for burning a sanitary napkin. In case of adding extra napkin for disposal process we need to open the door carefully and insert the napkin inside the machine; its take the same time with addition of 30 seconds to repeat the burning process. It creates little amount of smoke during burning process. As a final result the ashes will be get collected in white form in tray.

Hardware picture



Fig.3 Front view



Fig.4 Side view

V. RESULT AND DISCUSSION

In the result when we insert the napkin into the disposal machine its start the process of burning. Once machine reach at the desired temperature burning process completed in set time.



Fig.5 Result

VI. CONCLUSION AND FUTURE SCOPE

This system is a solution for destroying sanitary napkin in a hygienic way. On the industrial level incineration process requires high temperature ranging. This project is built on education level, so there will be few limitations we had to follow regarding safety purpose. Our system operates maximum temperature of 600° and generates some amount of smoke. If we implemented this project at the industrial level with very high temperatures, it will be reduce the duration of burning the napkin and generate very low smoke.

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