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FLOOR CLEANER MACHINE

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Abstract— Floor cleaning machines are commonly used in developing countries since many years Automated because of high cost of labor, time, efforts and affordability. The concept is not popular in developing or emerging economic countries. Reasons for non-popularity are cost of machine and operational charges in terms of power tariff. This article is based upon on our innovative project to design, development and manufacturing of semi-automatic floor cleaning machine which will work on solar energy, battery or electricity. A semi-automatic floor cleaning machine is developed by keeping basic consideration for less energy consumption, machine as well as operational cost reduction, reduce the human effort, environment friendly and easy to handle. Base of the project was to use renewable energy which is abundant in most of the countries, will have less environmental impact and easy to construct for commercial scale in future.

Keywords— Autonomous roaming, Manual control, Power status indications, Power controls, Power efficient.

I. INTRODUCTION

CLEANING:

Cleaning is the essential need of the current generation. Basically in household floors the floor has to be cleaned regularly. Different techniques are used to clean the different types of surfaces. The reasons for floor cleaning are Injuries due to slips on the floors are cause of accidental injuries or death. Bad practice in floor cleaning is a major cause of accidents. To beautify the floor. Debris and obstructions are to be removed. Allergens and dusts are to be removed. Surface wear to be avoided.

To make the environment sanitary (kitchens). Traction should be maintained at optimum level, so that no slip will occur.

Floor cleaning is achieved by different technique which might be of different kinds. Different types of floor need different type of treatment. The floor should be totally dry after the cleaning process. Otherwise it may result in hazard. On some floors sawdust is used to absorb all kinds of

liquids. This ensures that there will no need of preventing them from spill of. The sawdust has to be swept and replaced every day. This process is still used in butchers but it was common in bars in the past. In some places tea leaves are also used to collect dirt from carpets and also for odor removing purposes. Different types of floor cleaning machines are available today such as floor buffers, automatic floor scrubbers and extractors that can clean almost all types of hard floors or carpeted flooring surfaces in very less time than it would have taken using traditional cleaning methods. Again the cleaning would be different for different floorings. Cleaning is the essential need of the current generation. Basically in household floors the floor has to be cleaned regularly. Different techniques are used to clean the different types of surfaces. The reasons for floor cleaning are

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- To beautify the floor.
- Debris and obstructions are to be removed.
- Allergens and dusts are to be removed.
- Surface wear to be avoided.
- To make the environment sanitary (kitchens).
- Traction should be maintained at optimum level, so that no slip will occur.

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cleaning methods. Again the cleaning would be different for different floorings

II. RELATED WORK

A. WORKING

1. Idea: First we need to come up with an idea which will be useful in some or the other way as we came up with this Idea because most of the farmers are still working in a same old way as we wanted to simplify the methods under pesticides spraying sector.
2. Raw Material: After we come up with an idea of modelling, we have to search for the suitable raw materials for the model. The main importance of choosing a suitable raw material is to reduce weight so that it can be moved easily on the Field
3. Design and Assembly: Design is nothing but sketch of the model using software called solid works. Using this software we design the parts of the model we finish designing we will move like sprockets, main frame, wheels. Once on to assembly of the parts. After assembly fabrication work will be started.
4. Real time testing: Soon after the fabrication work we need to test it on fields as trial and error method so that if there any problem faced we can modify it with any other methods.

B. PROPOSED MODELLING –

Construction of Machine Construction of component attachment of the floor cleaner machine. □ The DC motor resting on pedal space and remove pedal so that human effort less necessary.

- The attachments of battery of the motor operate so that easily to work at a time.
- The pulley are arranged to transmit power and the shaft to other attachment of part.
- Brushes of attach of separate motor therefore all of surfaces area to clean as possible.
- The attachment belt to modified floor cleaner machine power can be easily transmit.
- This modified floor cleaner machine attach of automatic flow of liquid to help of motor pump.
- The other side of liquid also attach water tank to help cleaning of dust.
- The modification of attachment breaking system to easy to control properties.
- The modification of all component to control arrange of control pane

TOOLS AND MACHINES

- Cutting machine
- Gas welding machine
- Drilling machine
- Grinding machine

III. FUTURE SCOPE

- Automatic water flow on mop
- The machine can able to clean steps
- Fully automatic control of the machine
- Remote control machine

IV. RESULT

• Mopping

It is a function of floor cleaner machine to developed mopping on the area of surface wastage of row material.

• Cleaning

It a type of function floor cleaner machine to clean the area to remove dust and wastage of material to the clean.

• Drying

It is a type of function floor cleaner to dry the surface area of floor to the after soaking and cleaning to the surface floor and the machine dry box can be attach to the floor cleaner.

V. APPLICATIONS

1. In industrial area for cleaning
2. In home use
3. In malls and cinema hall
4. In Government offices
5. In Banks
6. Railway station and airports
7. Complex and small shope

VI. ADVANTAGES

1. One-pass cleaning on all hard floor types bringing increased productivity with the best results.

Saves lots of time and manual labour with its every efficient sweep.

2. The perfect solution for heavy duty cleaning and sweeping.
3. Combination sweeper scrubbers are ideal for deep cleans of large floor areas.
4. Removes pet hair
5. Removes allergen from breathing air
6. Easy to use

VII. CONCLUSION

The ultimate need of this seminar is satisfied and with the help of this component machine is able to clean the floor easily. As the component selected motor can consume much less power so it will be the power saving and cost saving too. The components are designed in order to enable easy operation and to reduce the effort of human beings.



VIII. REFERENCE

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