

# Solar Floor Cleaning Machine

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**Abstract:** *The purpose of this project is to clean the floors in colleges, hospitals, auditoriums, malls and workshops. The aim of this project work is to design and develop process for cleaning the floor having wet and dry surfaces. It is very useful for cleaning the wet as well as dry floors. In modern days interior decorations are becoming an important in our life cleaning of floor is very important for our health and this floor cleaning machine reduces the effort required for cleaning. Hence this project is very useful in our day to day life. It is very simple in construction and easy to operate, anybody can operate this machine easily. This floor cleaning machine consist.*

**Keywords:** Colleges, Hospitals, Auditoriums

## I. INTRODUCTION

Floor cleaner is very much useful in cleaning floors in hospitals, houses, auditorium, shops, computer centers etc; it is very simple in construction and easy to operate. Anybody can operate this machine easily. It consist of moisture cotton brush, the brush cleans the floor and dried with aid of small blower. Hence it is very useful in hospitals, houses, etc. The time taken for cleaning is very less and the cost is also very less. Maintenance cost is less. Much type of machines is widely used for this purpose. But they are working under different principles and the cost is also very high. Good well-maintained entrance matting can dramatically reduce the need for cleaning. For public and office buildings about 80 to 90% of the dirt is tracked in from outside. Installing a total of 15 feet of matting consisting of both indoor and outdoor sections will remove about 80% of this. Thus about two-thirds of the dirt can be removed at the entrance

## II. LITERATURE REVIEW

Sr. No.	Name of Author	Title of Paper	Conclusions
01	Web serch	IJSTE - International Journal of Science Technology & Engineering	Volume 2   Issue 11   May. Design & Fabrication of Shaft Driven Bicycle.
02	RS Khurmi & JK Gupta		Machine Design

## III. PRESENTATION

Floor cleaning machine is a device used to clean floor. They are widely used in public places like supermarket and modern malls. In 2007, global floor cleaning market is led by Asian pacific, capturing about 31.71% of global floor cleaning machine's sales. Europe is the second- largest region-wise market with 31.34% global sale shear. At present, the major manufactures floor cleaning machines are concentrated.

Floor cleaning machine downstream is wide and recently floor cleaning machine has equipped increasing signinfinece in various fled of commercial, industrial, transposition and other. Globally floor cleaning machines market is mainly driven by growing dementor commercial which account for nearly 49.19% of total downstream consumption of floor machines in global in 2017. Floor cleaner is especially valuable in cleaning floors in doctor's facilities, houses, assembly room, shops, PC focuses and so forth; it is extremely straightforward in development and simple to work

#### **IV. HISTORY**

Historical evidence suggests that carpet cleaning procedures emerged during the 19<sup>th</sup> century. The Industrial Revolution inspired new ideas of cleanliness in Europe and North America. Before the advent of the Industrial Revolution, people protected their carpets by covering them with druggets, or thick, heavy woolen goods that spread underneath tables and other exposed areas. Druggets protected against spills and other stains. Wealthy individuals used canvas cloth cover carpet while away on vacations and during social events held in their homes. The lack of ventilation caused houses to fill with dust, dirt, and soot, which prompted people to search for ways to clean their homes. Societies placed significant value on their homes at that time, which sparked an innovative mindset to clean houses more efficiently. One of the most common techniques for cleaning carpet involved beating rugs with broom to remove sand, dust, and soot; however, this method did not remove stains. Effective stain removal methods did not emerge until the 1830s, when creative housewives recorded their secrets for the removal of ink, grease, and oil. One stain removal method involved scrubbing carpet with lemon juice and a hot loaf of bread. During the late 1860s and 1870s, carpet cleaning techniques took a leap for the better with the advent of the first manually-operated vacuum cleaner

#### **V. DESIGN**

In the design of floor cleaning machine is very compact as compare to other cleaning machine are available in the market but has attractive design and high durability



##### **5.1 Components Required**

1. A.C Motor
2. Pulley
3. Battery
4. Brushes
5. 5 Beta
6. 6 Tank



### **5.2 Working Principle**

The cleaning liquid is mixed in proper proportion and it is poured into the reservoir through the top way. The cleaning liquid is poured until the tanks are filled. Actuating the lever opens the valve. Cleaning liquid from the tank spills on the brush. After the required amount is delivered, the lever is released and the machine is switched ON. The brush gets drive from motor through pulleys and belts. The brush applies pressure on the floor, when the adjuster rod is unscrewed and the handle is moved in the required direction to clean the sufficient area.

### **VI. CONCLUSION**

This in our project we have designed the Automatic floor cleaning machine with the help of A.C Motor and belt transmission. The machine is designed in order to enable easy operation and to reduce the effort of human beings. Even children and aged people can handle this machine, no critical operations is needed in this machine. The ultimate need of this project is satisfied and with the help of this machine we can clean the floor easily. Thus in our project we have designed the Automatic floor cleaning machine with the help of A.C Motor and belt transmission. The machine is designed in order to enable easy operation and to reduce the effort of human beings. Even children and aged people can handle this machine, no critical operations is needed in this machine.

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