IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 2, March 2022

Design Modification and Fabrication of Eco-friendly Cleaning Machine'

Avinash Chahare¹, Piyush Walke², Vivek Godghate³, Shubham Jiwane⁴, Akhil Shindre⁵, Shashank Jayde⁶, Dr. M. J. Sheikh⁷

Final Sear Students, Department of Mechanical Engineering^{1,2,3,4,5,6}
Head of Department, Department of Mechanical Engineering⁷
Bapurao Deshmukh College of Engineering, Sevagram, Wardha, Maharashtra, India

Abstract: With the growth of technology, researchers are paying greater attention to automated floor cleaning devices in order to make mankind's existence more comfortable. The concept is gaining traction in developed countries, although it is still unpopular because to design complexity, machine costs, and power tariff running costs. A manual floor cleaning machine is proposed in this project. Early in the day, a floor is cleaned with a broom that is controlled by a human hand. This requires a continual movement of the human hand, which is exhausting and time demanding. The goal of this project is to provide a modernised procedure for wet and dry floor cleaning. This equipment is capable of cleaning floors in both dry and wet conditions. It also has a dust storage box. It was decided to create a prototype model that uses a DC drive powered rotary brush with pneumatic controlled dust shifting to assist users in removing waste and maintaining a clean and hygienic environment, thereby avoiding health inequalities and safety concerns for both workers and the general public.

Keywords: Eco-friendly cleaning machine, Road Cleaner, Manually Operated

REFERENCES

- [1]. Mr. S. Rameshkumar, M. Selvakumar, S. Senthilkumar, P. Surya, I. Thilagavathi, 2018, Design Fabrication of Multipurpose Floor Cleaning Machine, International Journal of Advanced Science and Engineering Research.
- [2]. Muhammad Kashif Shaikh Ghaffar, M. Aadil Arshad, NandKishor S. Kale, Ansari M Bilal, Prof D. M. Ugle, 2018, A Research Paper on "Design and Development of Floor cleaning machine", International Journal of Advance Engineering and Research Development (IJAERD).
- [3]. Arjun V Murali, Amal Raj, AnandhuJayaram et al, "Floor Cleaning Machine", International Journal of Advanced Engineering and Global Technology, ISSN No: 2309-4893, Volume 5, Issue-03, May 2017,18241826.
- [4]. Mr. S. Rameshkumar, M. Selvakumar, S. Senthilkumar et al, "Design and Fabrication of Multipurpose Floor Cleaning Machine", International Journal of Advanced Science and Engineering Research, ISSN: 24559288, Volume 3, Issue: 1, 2018, 1012-1019.
- [5]. Sandeep. J. Meshram, Dr. G.D. Mehta--Design and Development of Tricycle Operated Street Cleaning Machine!
 Journal of Information, Knowledge and Research in Mechanical Engineering
- [6]. Anup Mendhe, Mayank Lalka, Dinesh Shende et al, "Multipurpose Floor Cleaning Machine", International Journal for Scientific Research & Development, ISSN (online): 2321-0613, Volume 5, Issue 01, 2017,740742.
- [7]. Ms. R. Abarna, S.Devadharshini, S.Dhileep et al,"Design And Fabrication Of Automatic Floor Cleaning Machine", International Journal of Science and Engineering Research, (p)-2230-235, 3221 5687, (P) 3221 568X, Volume 6 Issue 4 April -2018.
- [8]. Himani Patel and Mahima Patel, "Wireless Multi -Purpose Floor Cleaning Machine", International Journal of Latest Technology in Engineering, Management & Applied Science, ISSN 2278-2540, Volume 8, Issue 4, April 2019, 16-19.

DOI: 10.48175/IJARSCT-2911

IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 2, March 2022

- [9]. Sandeep. J. Meshram, Dr. G.D. Mehta —Design and Development of Tricycle Operated Street Cleaning Machinel Journal of Information, Knowledge And Research In Mechanical Engineering ISSN 0975 668X| Nov 15 To Oct 16 | Volume–04, Issue-01.
- [10]. M. Ranjit Kumarl M. Tech Student, Mechanical Engineering, Nagarjuna College of Engineering and Technology, Bangalore, India. ISSN: 2278-0181 Vol. 4 Issue 04, April-2015
- [11]. Liu, Kuotsan, Wang Chulun, A Technical Analysis of Autonomous Floor Cleaning Robots Based on US Granted Patents, European International Journal of Science and Technology Vol. 2 No. 7 September 2013, 199-216.
- [12]. Imaekhai Lawrence Evaluating Single Disc Floor Cleanersl An Engineering Evaluation, Innovative Systems Design and Engineering, Vol 3, No 4, 2012, 41-44

DOI: 10.48175/IJARSCT-2911