Automatic Wall Painting Machine

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Abstract - *In Today's world decoration is the most important to human. Interior and exterior decoration of home, offices, colleges, and other buildings are most important part of society. The main goal to design painting machine is to make painting friendly and simple. Wall painting machine helps to low cost painting machine. In paint chemical hazards to human health. Painting procedure required the painting work which is irritate to the human being and make it boring procedure and consume time. This whole process are automated. It save labour work, cost and saving human labour. In this addition. It would get the opportunity to reduce or eliminate human infection. It solve most of the problem with safety when lots of activities occur at the same time. This project motivate the development of automatic wall painting machines.*

Key Words: **Automatic Wall Painting Machine, Wiper Motor, Spray Painting, Spray Gun, Chain Sprocket.**

1. INTRODUCTION

Painting machines has automated in automotive industries but it is rarely use for construction industry and also for the house wall painting. . Automatic wall painting machine is realized successfully in mechanical industries for painting of automotive part in the industry. Automatic wall painting machine is not using complicated portable the machine is design using low cost equipment. In this machine components use are 4 gears, 2chain drive, dc motor 1, battery, 4 wheels, 1 inch square pipe, limit switches etc. The machine is light in weight and also compact. In addition, it would offer the opportunity to reduce human exposure to difficult and hazardous environment which would solve most of the problem connected with safety when many activities occur at same time. Working of wall painting machine is simple no need to skill workers. The need of wall painting machine is clear and strong. The objective of the project is to automatic machine programming for painting applications of small lot sizes with high number of part variants. Presently robotic painting is economically feasible for large lot sizes, since a robot   needs to be established (using off-line programming and/or manual teach-in) for each single part variant. The movable machine has well-built need which can be painted on the wall of residential building. This machine is appropriate to work only for interior painting work. Due to smart and simple control it can easily control noise and vibration.

2. LITERATURE REVIEW

Mohamed Abdellat [1] In this paper author introduced wall painting robot to avoid the repetitive work of painting the process which makes exhausting and hazards to human they introduce the conceptual design of robot .which contain arm that work vertically. The arm is fitted on the mobile for give the motion to arm to paint the wall area. This robot is fast painting or working using ultrasonic sensors. For adjusting the motion of the limit the control system is used for guide the arm motion. It is only used for interior walls of building. In this robot the roller contain painting liquid and paint the area. The robot can adjust man over itself in front of the wall.

Dhaval Thakar et. al. [2] this paper gives basic information about small and medium scale industries manufacturing components have to paint for protecting from rusting so the spray application consumes maximum time and paint which required the skilled worker emerged with the application. They cannot manage robotic arrangement for higher efficiency so the rise of the such process have to be made which is affordable, gives better accuracy, consumes minimum time for coating so objective has to developed such mechanism which coat the object with the dipping technique having semi-automatic arrangement which is suitable for our requirement and which can be valuable for small and medium scale industries.

Berardo Naticchia et. al. [3] in this paper, they shown that automated painting can be not only aimed at correcting productivity, but also quality checking. A robot arm with high precision is required. An automated system to convert the normalized coordinates of the liquid colors to be reproduced into the movement speed of the robot end tool and valve opening end of the mixing board. Most of the work will be probably necessary to achieve high resolution. Because of the shape of full scale robots, probably also the resolution of the human scale robot will be lower. Another particularity of the small scale arrangement is of course the ability to access some hard places of buildings under construction, where human range robots could not be allowed.

Takuya Gokyu et. al. [4] they have shared that construction of Wall-Surface Operation Robot plan to automate and increase the efficiency a series of restoration works by adding, changing of an attachment, new task for cleaning. Tile separation sensing and repair work to the initial functions of picture painting in a single and multiple colors is also done. The analysis of this example was introduced as a

periodic inspection of the 10th year for the office building concerned. And, high profitability is expected because of presence of many similar structures.

3. CONCLUSION

The automatic wall painting machine has been design fabricated for painting walls easily. This machine can be used in interior work in industries and houses. It saves human power and time as well as labor cost. It gives the opportunity to reduce human exposure to difficult and hazardous environment.

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