

Government Polytechnic Valsad

Mechanical Engineering Department

Project report on

Multi-Purpose Water bodies Cleaning Machine

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Abstract

To save pure water bodies and save the life of aquatic life in the pond we came up with the idea of pond cleaning machine .This project emphasis on design and fabrication of the pond waste cleaning machine. The work has done looking at the current situation of our locality pond and water bodies The area which it covers are removing solid surface waste , pumping oxygen into water spraying chemicals and Distribution of food for aquatic animals . Our main aim is to reduce man power , time consumption for pond cleaning . By using of various automation of operation.

Introduction

- Due to increase in water pollution in the form to waste debris;
- it is hampering the life of aquatic animal and make their life in danger. Similarly sometimes the aquatic animal tends to eats surface waste debris considering it as a food; which ultimately cause the death of animals.
- Due to polluted water many skin deices to human kind are observed.



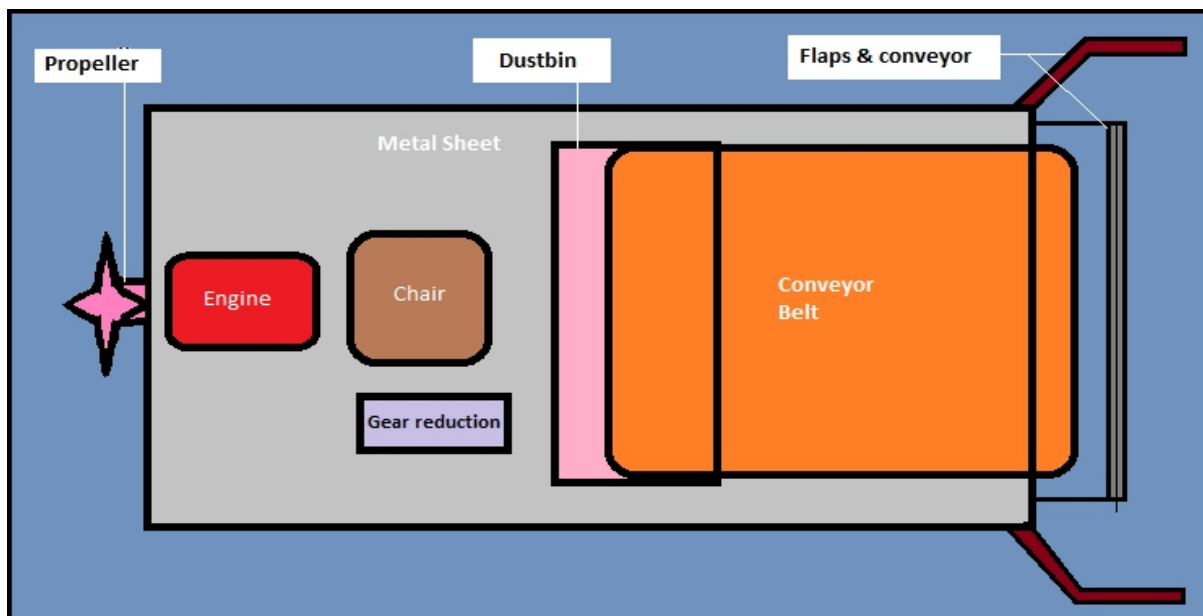
AIM we want to obtained

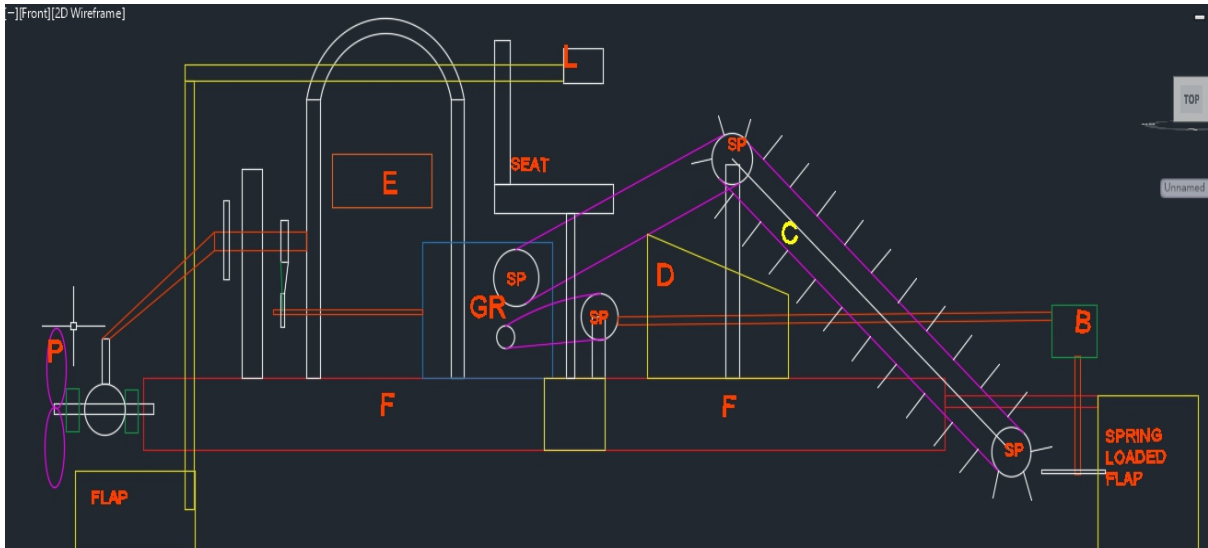
- ❖ To reduce the solid waste pollution in water bodies
- ❖ To overcome the difficulty of removing waste particulate floating on water surface.
- ❖ To maintain the automation during working towards cleaning River.
- ❖ To perform the fast & reliable operation during cleaning River.
- ❖ Improve the water quality of a Godavari stream or river.
- ❖ To work for society for clean up a section of a stream or river.

Working principle of Water bodies cleaning machine

- The solid waste from the surface of water is concentrated on the front face of the conveyor belt by the flap provide in front.
- This solid Waste is hook up with conveyor with the help of project rod on conveyor
- At the end part of conveyor a collector is put which collect all waste and further process are carried out
- Same way all Algali ,Plants are cut by cutter provided in front part & collect Through Flaps

Line Diagram





Work progress till date

Till date the project work is completed as shown in figure below, some modification still have to be completed. The driving mechanism works completely fine. We haven't performed any float test as our project is still requires some modification we plan our float test in future.



