

# Fabrication of Solar Drainage Cleaner with Bucket Collector

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## Abstract:

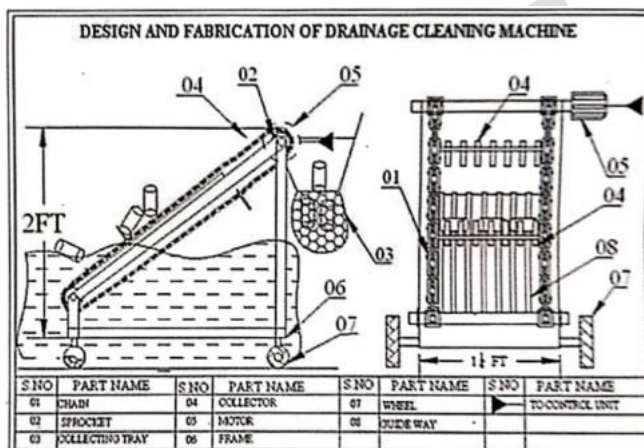
Wastewater is defined as the flow of used water from homes, businesses, industries, commercial activities and institutions which are subjected to the treatment plants by a carefully designed and engineered network of pipes. This type of waste water is classified and defined according to its sources of origin. Typically 200 to 500 litres of waste water are

generated for each person connected to the system everyday. The drainage water cleaner system are used to clean wastes from water like polythene, bottles etc. present in water. This can be used to overcome the problem of filtration of wastes from water and it save the time and cost that spent on cleaning the drainage.

## I.INTRODUCTION

In this project we have automated the operation of drainage cleaning with the help of a motor and chain drive arrangement .some needs of automation are described below:.

## II.BLOCK DIAGRAM



## III.WORKING

The drain waste water cleaner machine is designed and manufactured by using gear changing and shaft coupling principle. It consists mainly DC or AC geared motor , shafts, waste removal plates, dustbin, bearings, sprocket and chains and wheel sprocket gear. Construction material are easily available, creates employment(construction and maintenance,simple to construct). As the industry setup increase the environment the water coming from industries are full of wastes like polythene, bottles, and other materials and that warm mix with the other water that are used by people and we know that water is not good for the health of people. So to overcome from these problems

we can filter the water drainage water before it mix with other water. This type of filtration of water is called primary filtration.In this project we use DC or AC to run the system when power supply is available and equipment we used are motor, chain, driver, bucket, frame, wheel, sprocket

gear, solid shaft etc.

## IV.ADVANTAGES

- 1.Maintenance cost is very low
- 2.It is easy to manufacture
- 3.It is easy to operate
- 4.It is compact and portable
- 5.It can be efficiently used
- 6.Its machine parts are easily available
- 7.It can also run without power supply
- 8.No need to purchase special machine for filtration

## V: DISADVANTAGES

- 1.Vibration may occur due to loose parts attachment.
- 2.Corrosion may occur for long time using in water.

## VI:APPLICATIONS

1. It can be used to separate plastic, thermocol from sewage.
2. It can be used in plastic industries.
3. It is used almost in all types of drainage.
4. It can be used almost all type of industries.