



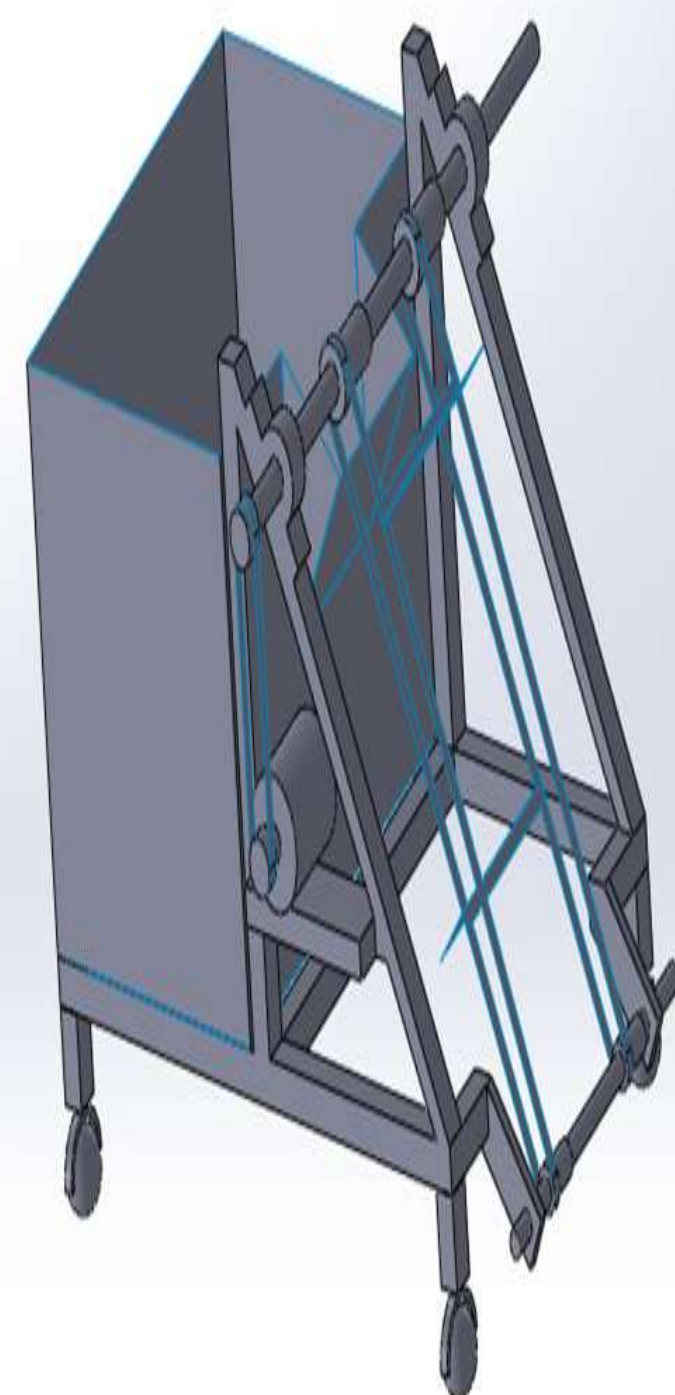
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Fabrication of Drainage Cleaner

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Introduction

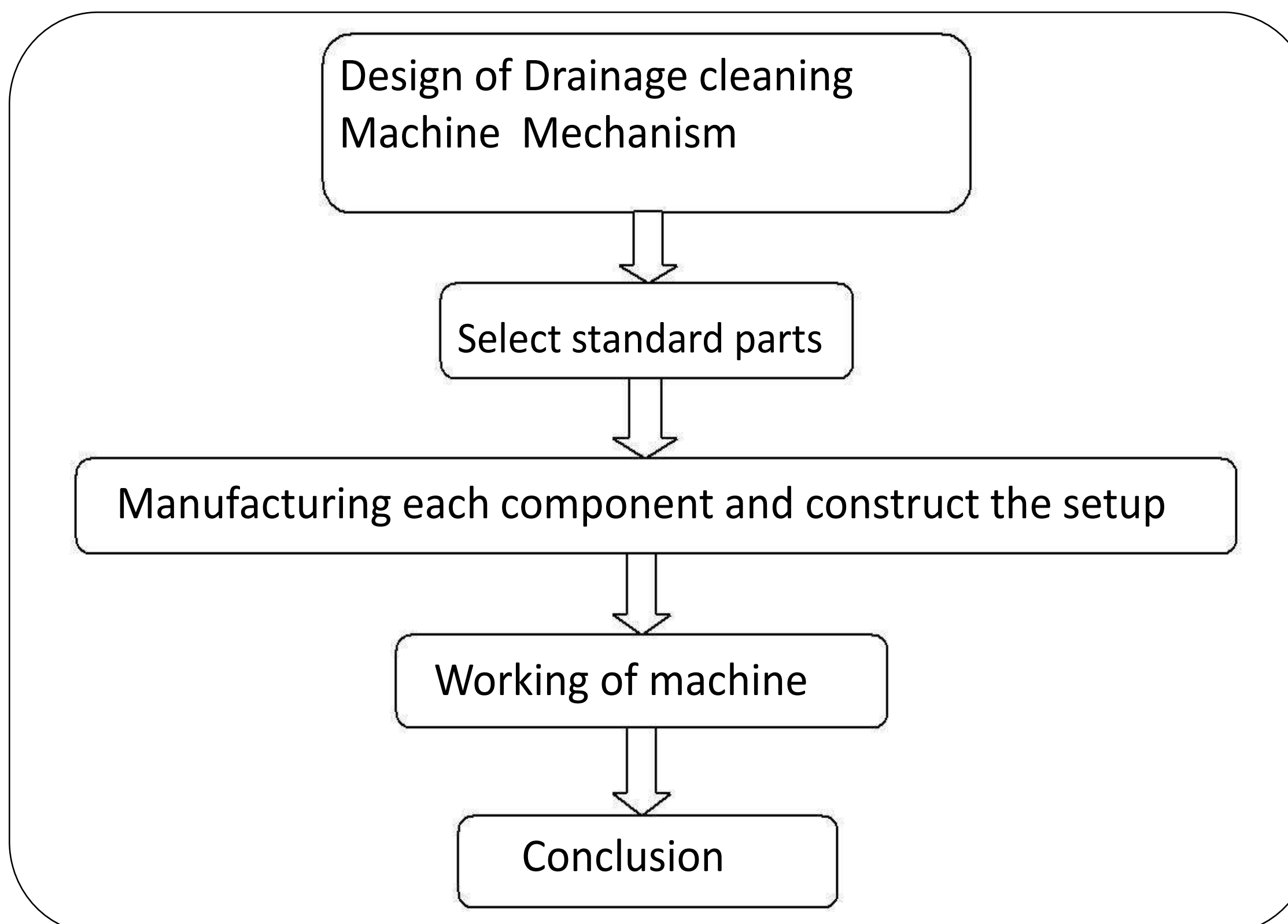
Drainage Cleaning overcomes all sorts of drainage problems and promotes blockage free drains promoting continuous flow of drain water. Impurities in drainage water can be only like empty bottles, polythene bags, papers etc.



Project Objectives

- Drainage cleaner to replace manual work to automated system.
- It removes the waste matter, rather than destroys a pollutant in a drainage system.
- To get proper flow of water efficiently because of regular filtration of wastages.

Methodology



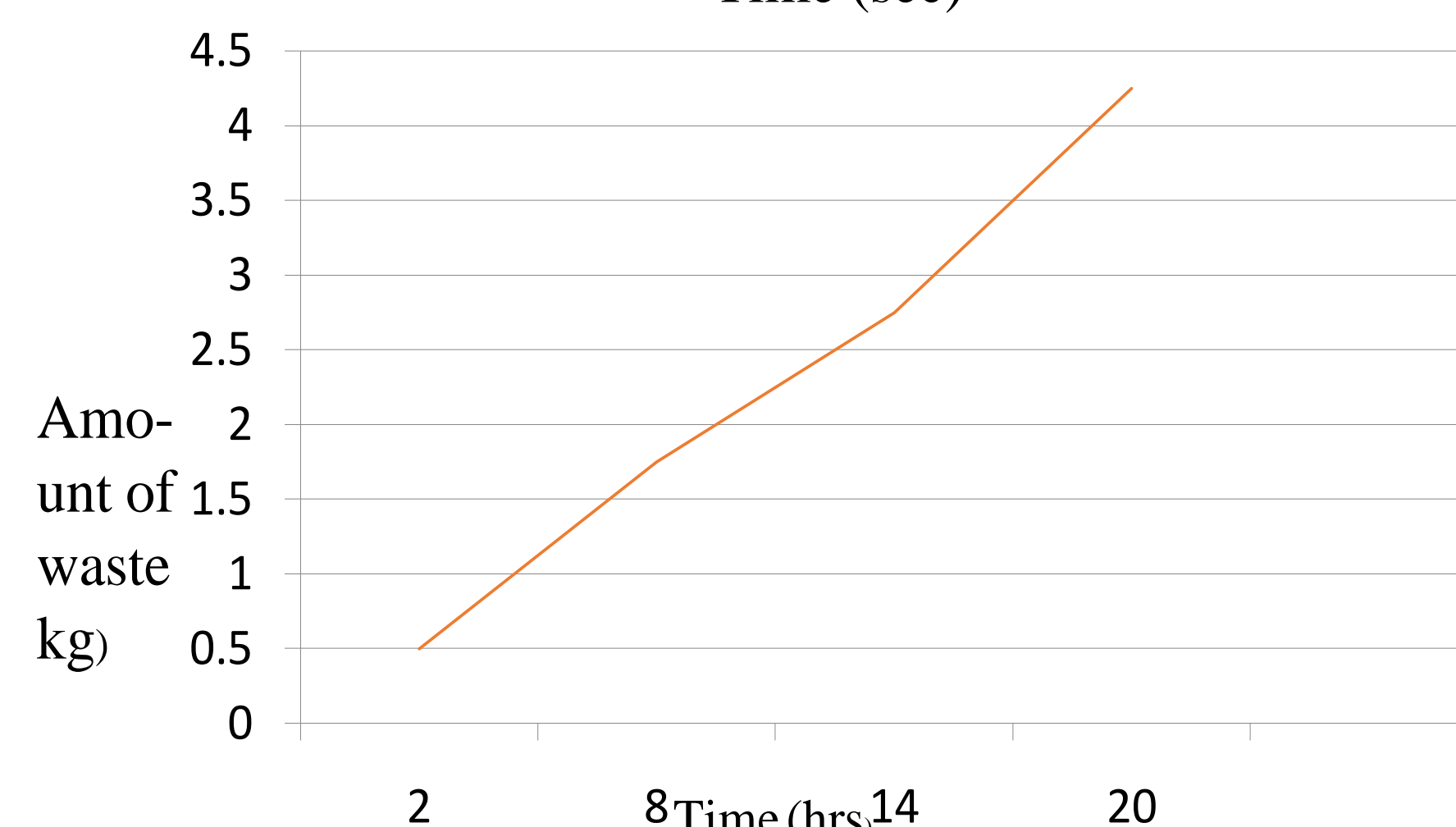
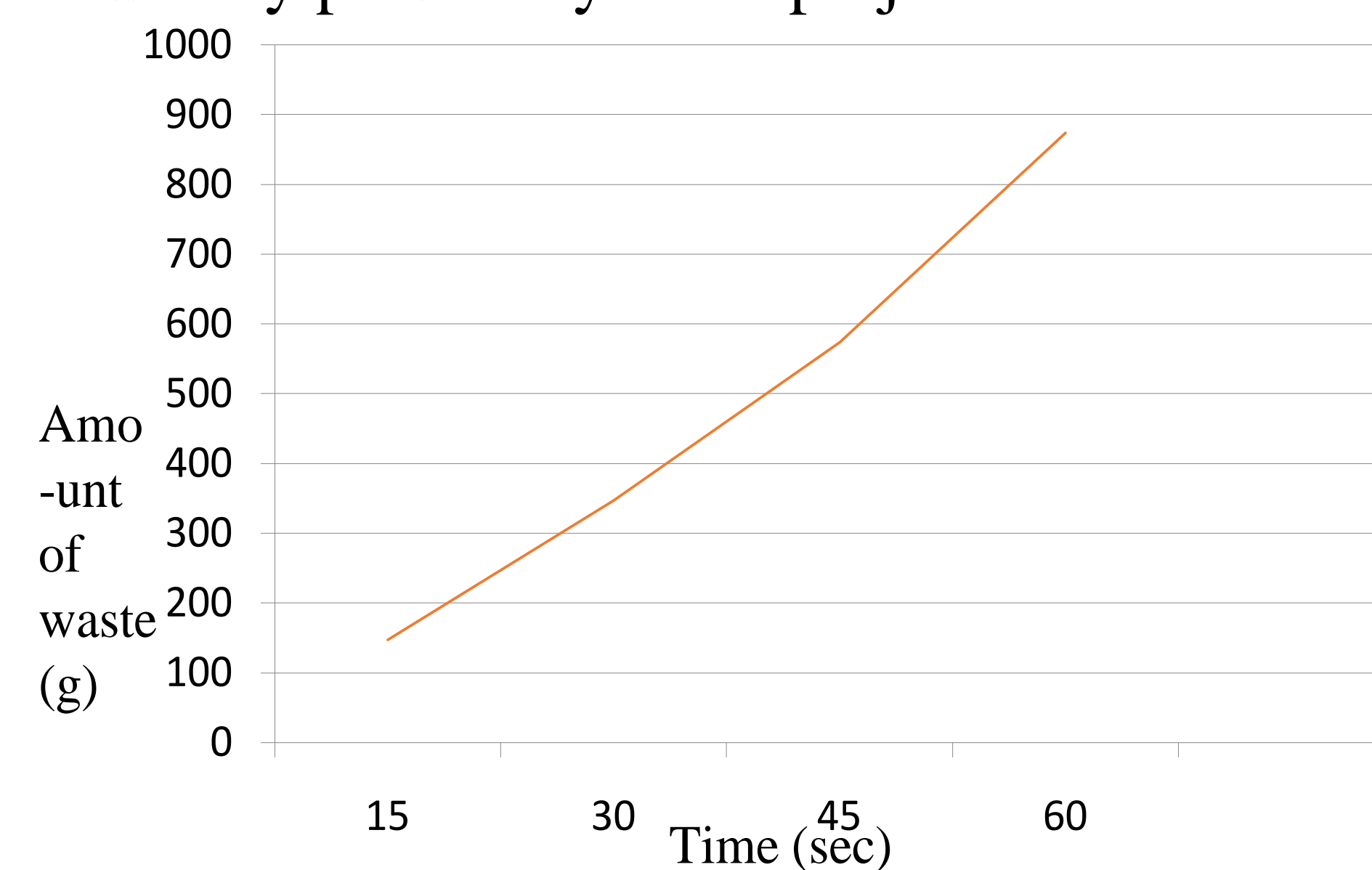
Results and Discussion

Weight Lifted: We tried to present the model where the model is successfully able to lift the 350 gram of solid waste. With the constraint of the size and budget the project performs excellent in its parameters.

The parameters considered are,

- While working the system the parameters considered are depth of the channel 15cm and the width of the channel 30cm
- The lifter speed and motor speed is constant
- The taken by the lifter to lift each object from bottom to top is 7 seconds
- Therefore 1 cycle is completed by one collector is in 14 sec.

The graph of our project is compared with previously made project, showing time v/s amount of waste explains that how much waste is collected in the bin with respect to time. The 1st graph is of our project followed by previously made project.



Images



Conclusions

- The cleaner functioned more effectively during the heavier rains which had more volume of running water with garbage and high velocity.
- Drainage from industries is treated through this project to meet the national emission standards, with stable operation, low cost and good effect.
- The system can move along the drain to collect the floating waste so as to reduce human labor.

References

- James C.Y. Guo (November1999), "Winter Sand Recollection By Highway Drainage", ASCE J. of Drainage and Irrigation Engineering, Vol 125, No 6
- Ashok Dargar, et.al.(2009), "A Method of Identification of Kinematic Chains and Distinct Mechanisms", Institute of Fundamental Technological Research.
- https://en.wikipedia.org/wiki/Drain_cleaner

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