

DESIGN AND FABRICATION OF AUTOMATED DRAIN CLEANER WITH GUTTER SHAFT DRIVE MECHANISM

Vetri Velmurugan K¹, Venkatesan A², Yuvaraaj Kumar S², Hariharan R²

¹ Faculty, Department of Mechanical Engineering,

Sri Sai Ram Engineering College, Chennai, Tamil Nadu, India

² UG Scholar, Department of Mechanical Engineering,

Sri Sai Ram Engineering College, Chennai, Tamil Nadu, India

The problem we encountered is the drain (sewage) cleaning activity. The action of drain cleaning is done by manual or semi-automatic machines which causes disease for the humans involving in it. In case of leaving, it without cleaning, the people around it might suffer for the action. Due to this blockage in drainage, there will be no more flow of it leads to stagnant, foul -smelling drain. For this we are going to automate the total process from the movement of the vehicle to collecting them in a tray. The only job of the worker is to make a knot on the package from the machine. The total packaging of the waste will be automated as soon as possible. As the movement of the vehicle can be simply like a four-wheel toy car using either electric drive or mechanical drive. And the vehicle is to be driven by a worker as controlling the drone but not that much complicated. The cleaning process will be done by using conveyor belt driven by two motors on each side. There will be a container at the top end of the conveyor where the wastes are temporarily stored and then packed in a plastic or bio-plastic bag. After this process, the worker is to take the bag out and tie it up. This is the proposed solution.