NARNARAYAN SHASTRI INSTITUTE OF TECHNOLOGY

MECHANICAL DEPARTMENT

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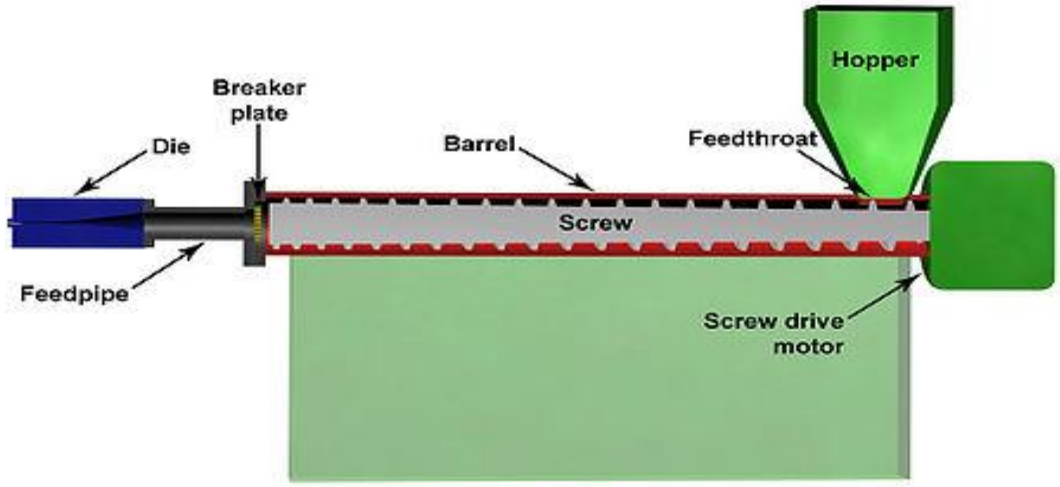
Project Title: Extrusion Process, Analysis of Pipe Extrusion Machine

Abstract:-

Pipe Extrusion machine works on flow rate of plastic melting material within the screw extruder. Screw extruder is the main component for deciding flow rate of material. Different types of polymer will have differing screw designs. In this project we are going to analyze all the units of pipe extrusion line machine by different techniques and comparison. We have found some problems like uneven heating, alignment problem in die, vacuum problem, shaft design etc.



Major Hardware components used:-

1. Hopper 2.Metering unit 3.Extruder screw
2. Heating and Cooling coil

Software used: - SolidWorks 2014.

Project Application:-

(1) Plastic Industries (2) Food Industries (3) Biomass Briquettes (4) Other Industries.

Approx. Project Cost:- Depending on material used, Application, Required Capacity and Manufacturing Cost.