NARNARAYAN SHASTRI INSTITUTE OF TECHNOLOGY

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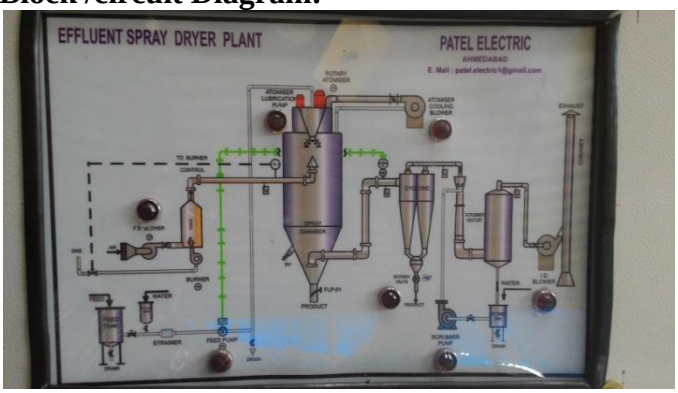
Project Title:-Speed Control of Induction Motor Using Temperature as Reference

Abstract:- Induction motor speed controlled by using temperature as reference, as using temperature reference for speed variation, temperature is set to be at maximum value. If temperature increases from that maximum value then induction motor speed is going to decrease. For that one j type temperature sensor sense temperature and PID control is using for giving particular input to variable frequency drive. Variable frequency drive used to vary speed of induction motor. A **variable-frequency drive (VFD)** is a system for controlling the rotational speed of an alternating current (AC) electric motor by controlling the frequency of the electrical power supplied to the motor. A variable frequency drive is a specific type of adjustable speed drive. Variable-frequency drives are also known as adjustable-frequency drives (AFD), variable-speed drives (VSD), AC drives or inverter drives.

Major Hardware components used:-VFD Drive, PID contoller(Temperature controller), Thermocouple, Relay, Induction motor
Software used:-In our project does not contain any programming component.

Project Application:-
(1)Spray drayer plant

Approx. Project Cost:-20,000 Rs.

Project Photo:-

Block /circuit Diagram:-