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Group No: **12**

Guided By

**PROF. H. C. PATEL +
PROF. PRAMOD
PAWAR**

SMT. S. R. PATEL ENGINEERING COLLEGE, UNJHA

Project Title

**"DESIGN & DEVELOPMENT OF POWER TRANSMISSION LINE
INSPECTION ROBOT"**

Abstract:

India is developing country and Electricity sector plays vital role. To provide electricity in different areas new transmission lines and towers have to be establish. Inspection of conductors is very difficult and time consuming process. There are many ways for inspection of power transmission lines. The conventional methods for inspection are difficult, time consuming and expensive. This report presents the development of automatic inspection robot which is insures the safety of operation, comparatively low operating cost. Robot can easily move on conductor. Design of robot prevents the strike between robot and obstacles like suspension clamps, cable spacers. Image processing is helps to measure different parameters. Also there is arrangement of live video streaming of conductor and robot on personal computer. There are different sensors mounted on robot like temperature sensor, voltage sensor, Lidar sensor. There is arrangement of find defects of conductor. Finally, this inspection robot helps to determine life and present condition of cable and gives some information of other components like insulator, joints, etc.

Prepared By:

Sr. No.	Student Name	Enrollment No
1	PATEL HARSHKUMAR DINESHBHAI	150780119044
2	PATEL JAYKUMAR ASHVINBHAI	150780119047
3	PATEL NEEL PANKAJKUMAR	150780119058
4	TEKWANI PRAFULKUMAR SURESHKUMAR	150780119082

