

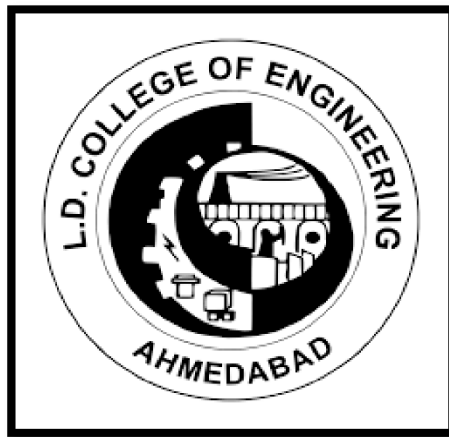
A REPORT ON AN INDUSTRIAL VISIT
TO SOLANCE INDUSTRIES LIMITED

Submitted to

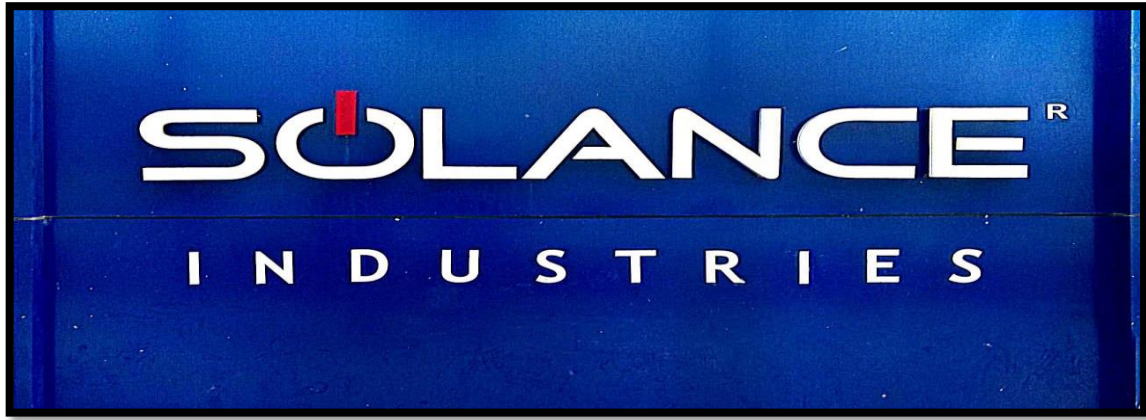
L.D. COLLEGE OF ENGINEERING (AHMEDABAD)

Department of Electrical Engineering

Year: 2024



PREPARED BY: -	
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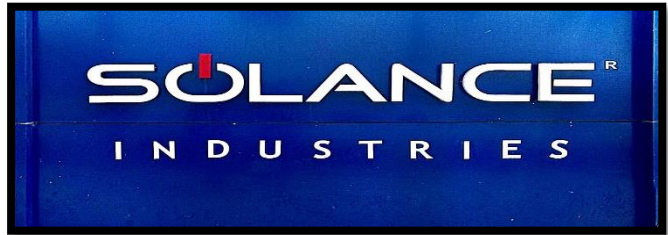
Industrial visit to " **SOLANCE INDUSTRIES LIMITED** " was done under the supervision of

<p>Dr. Chetan Upadhyay Assistant Professor Department of Electrical Engineering L.D. College of Engineering, Ahmedabad</p>	<p>Mr. Mitesh Kumar Priyadarshi Assistant Professor Department of Electrical Engineering L.D. College of Engineering, Ahmedabad</p>
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INTRODUCTION

- An Industrial visit to "**SOLANCE INDUSTRIES LIMITED**", Bavla, Ahmedabad, Gujarat was organized by the Electrical Engineering department of L.D. College of Engineering on Saturday, 2nd March 2024. 15- students of third year pursuing Degree in Electrical Engineering and two faculty members Mr. Mitesh Kumar Priyadarshi and Dr. Chetan Upadhyay visited "**SOLANCE INDUSTRIES LIMITED**". This Industries Manufacturing Two-Wheeler, Three-Wheeler and Four-Wheeler Batteries and have been in existence for more than four decades in battery industries. To understand how actual equipment looks and how it's processing, to see latest advancements of equipment, management in plant and safety to be followed in Battery Manufacturing Industries. Also, to Experience the job and responsibilities of an Electrical Engineer.

COMPANY PROFILE:-



Solance works on one principle More Power. More Technology. More Life Customers are at the center of our organization and we want you to ask for more, as we are ready to deliver more... more than your expectations.

Based on the decision of the four-decade-old POLAR group, we have diversified our robust product portfolio into the manufacture of 2- wheeler battery (VRLA) with a whopping production capacity of 4 million batteries per annum.

Created built and supported by a young team of experienced technocrats, this operation delivers consistent quality, uninterrupted supply and products of path-breaking technology. There is no way to go but Solance.

WORK PLAN: -

In the morning at 11:00 a.m. we visited " **SOLANCE INDUSTRIES LIMITED** ".

Before entry to the manufacturing area a very informative session about the company and the safety instructions to be followed in the workplace was conducted.

From 11:45 PM industrial visit was started, we visited to manufacturing plant.

Around 1.30 PM visit was Finished and after that we clicked some pictures with Industries members.



➤ **About Solance Industries :-**

Our Goal :- Nothing can be more important than customer satisfaction. Happy customers brings a joy to us.

Production Technology :- We use engineering and manufacturing technology to make production faster, simpler and more efficient.

Quality :- To ensure the safety and optimal performance of Solance Products, we put them through a rigorous quality.

Training and Development :- For better working experience, we regularly conduct various training & development programs.

Various Test Performed on Lead Acid Battery :-

➤ Performance Characteristics :-



Measure	Purpose
Discharge Capacity	To verify the available capacities at selected discharge rates or discharge durations.
Charge Retention During Storage	To Provide Storage Duration Data
Float Service with Daily Discharge	To determine cyclic performance under float charge conditions.
Recharge Behavior	To determine the recovery of capacity or autonomy time after a power outage

➤ Durability Characteristics:-




Measure	Purpose
Service life at an operating temperature of 40°C	To determine the operational life at elevated temperatures
Impact of a stress temperature of 55 °C or 60 °C	To determine the influence of high stress temperatures on cell or monobloc battery life
Abusive over-discharge	To determine the expected behavior when excessive capacity is discharged
Thermal runaway sensitivity	To determine the expected times to establish a condition of escalating current and temperature
Low temperature sensitivity	To determine the sensitivity toward damage induced by electrolyte freezing
Dimensional stability at elevated internal pressure and temperature	To determine the propensity of the cell or monobloc battery to be deformed by internal pressure and at elevated temperature
Stability against mechanical abuse of units during Installation	To determine the propensity of the cell or monobloc battery to fracture or leak when






➤ **Different Batteries:-**

Sr.No.	Battery	Description
1.	2-Wheeler Batteries :	
1.1	Platinum Line Series : -SLZ4L  -SLZ9R 	<p>Dimensions in mm :- 113*70*86 Filled Weight :- 1.60kg Capacity :- 4.0h @ C10 Warranty :- 24+24 Months</p> <p>Dimensions in mm :- 139*77*138 Filled Weight :- 3.4kg Capacity :- 9.0h @ C10 Warranty :- 24+24 Months</p>



<p>1.2</p>	<p>Gold Line Series</p> <p>CLX5L/12V</p>  <p>CLX7R</p> 	<p>Dimensions in mm :- 121*60*130 Filled Weight :- 1.85kg Capacity :- 5.0h @ C10 Warranty :- 12+12 Months</p> <p>Dimensions in mm :- 151*60*130 Filled Weight :- 2.35kg Capacity :- 7.0h @ C10 Warranty :- 12+12 Months</p>
<p>2.</p>	<p>UPS Batteries</p> <p>SLV12Ah</p> 	<p>Dimensions in mm :- 151.5*99*100 Filled Weight :- 3.5kg Capacity :- 11.5h @ C10 and 12 @ C20 Warranty :- 6 months</p>

	<p>SLVH 26</p> 	<p>:</p> <p>Dimensions in mm :- 165*125*174 Filled Weight :- 8.80kg Capacity :- 24 @ C10 and 26 @ C20 Warranty :- 24 months</p>
<p>3.</p>	<p>Automotive Batteries :</p> <p>S38B20L/R</p>  <p>SXP1100</p> 	<p>Dimensions in mm :- 197*129*224 Filled Weight :-10.30kg Capacity :- 35Ah @ C20 Warranty :- 18+18 months</p> <p>Dimensions in mm :- 410*173*233 Filled Weight :- 27kg Capacity :- 100Ah @ C20 Warranty :- 18+18 months</p>



4.

**Jumbo Series
Batteries**

:

SST18000



Dimensions in mm :- 518*275*272

Filled Weight :- 62kg

Capacity :- 180AH @ C20

Warranty :- 30+30

SST250



Dimensions in mm :- 260*172.5*214

Filled Weight :- 14.9kg

Capacity :- 25AH @ C20

Warranty :- 30+30

