Vivekanand Education Society's Institute of Technology

Chembur, Mumbai – 400 074

A report

On

Industrial Visit to Silvassa,Dadra and Nagar Haveli .

(From 6th January 2018 to 8th January 2018)

Organized by Vihang Leisures Inc.

Compiled by

Hitesh Jetwani(D6B)

On behalf of Class D6B Electronics.

Industrial Visit Incharge

Dr. Asawari Dudwadkar

(Asst. Prof. ETRX Dept.)

Mr. Abhay Kshirsagar

(Associate Prof.)

Mrs. Rakhi Jadhav

Mr.Mayur Narkhede

The entire was tour organised and managed by Vihang Leisures Inc. The accommodation arrangements were made at Hotel Pluz and Treat resort .

The students travelled by train from Mumbai to Ahmadabad and to and fro. Travelled by bus inside the city for three days for the local visits to industries and other places.

Following are the industries that the students visited.

sudhir

Powering the Nation

The students from Electronics and Instrumentation visited the above mentioned industry i.e Sudhir Power Ltd., Gujarat, an ISO Certified company.

Popularly known as **Sudhir Power** ,Founded in 1973, Sudhir Group is committed to new and innovative technology and strives to develop breakthrough products to meet the ever changing need of power industry.

The mentors there explained the students about the services they provide, such as testing of instruments, Testing, Calibration, Consultancy and Certification, Training, Energy Auditing, Third party inspection, Development Assistance and R&D.

The Company has a wide blue-chip customer base and operates through multiple manufacturing facilities across India. The product line focuses on 7.5KVA – 3000 KVA Diesel & Gas Generators, 100 KW Solar Panels, Oil & Dry Type Transformers, HT 11KV & 33KV Panels & LT Panels, Packaged Substations and Turnkey EPC contracts covering electrical and mechanical services.

Significant collaborations, technical know-how support and license agreements with selected industry giants, including Cummins for Generators, Schneider for Packaged Sub Stations, Schneider for HT Panels have helped Sudhir to achieve unprecedented growth and become a name to reckon with.

Departments served at the facility

- Manufacturing
- Service (post and pre sale)
- Project/Design
- Sales and marketing
- Finance and HR
- Project Execution

Electronics and Electrical Testing

- Component Testing
- Equipment Testing
- Industrial Equipment
- Medical Equipment
- Environmental Testing
- Safety Testing
- EMI/EMC testing
- PV panel Testing

Software and System Testing

- Software Process Assessment
- Information Security Testing and Assessment

Application oriented R&D activities are undertaken by Sudhir Power,varied industry groups, for quality enhancement of products/processes.

It is recognized by DSIR (Dept of Scientific & Industrial Research), Govt. of India. It has been involved in various R & D projects.

Electricity generation by non conventional energy resources, e.g. domestic wind mill, Solar Pv – on grid & off grid testing


UIDELINE TO BE FOLLOWED WHILE BRAZING
PAINT BOOTH


DO WORK
FIRST TIME RIGHT


PAINT BOOTH
DO WORK
FIRST TIME RIGHT

Voltas is India's largest air conditioning company, and one of the world's premier engineering solutions providers and project specialists.

Founded in India in 1954, Voltas Limited offers engineering solutions for a wide spectrum of industries in areas such as heating, ventilation and air conditioning, refrigeration, electro-mechanical projects, textile machinery, mining and construction equipment, water management & treatment, cold chain solutions, building management systems, and indoor air quality.

The Company's strengths lie principally in

•Management and execution of electro-mechanical projects, including air conditioning and refrigeration

•Sourcing, installation and servicing of diverse technology-based systems serving Indian industry through representation of global technology leaders

Their products include :

HVAC

Heating, ventilation, and air conditioning (HVAC) is the technology of indoor and vehicular environmental comfort. Its goal is to provide thermal comfort and acceptable indoor air quality. HVAC system design is a subdiscipline of mechanical engineering, based on the principles of thermodynamics, fluid mechanics, and heat transfer. Refrigeration is sometimes added to the field's abbreviation as HVAC&R or HVACR, or ventilating is dropped, as in HACR (as in the designation of HACR-rated circuit breakers).

HVAC is an important part of residential structures such as single family homes, apartment buildings, hotels and senior living facilities, medium to large industrial and office buildings such

as skyscrapers and hospitals, on ships and submarines, and in marine environments, where safe and healthy building conditions are regulated with respect to temperature and humidity, using fresh air from outdoors.

Air Conditioning

Voltas is India's largest air conditioning company, established by tata company as an specialist sub-company and as a result they are a project specialist.

and they have taken projects for Air conditioning from not only the interior of an occupied space like offices , buildings , homes and institutions amongst others , to improve the comfort of occupants in both domestic and commercial environments. In domestic environments This process is most commonly used to achieve a more comfortable interior environment, typically for humans or animals; however, air conditioning is also used to cool/dehumidify rooms filled with heat-producing electronic devices, such as computer servers, power amplifiers, and even to display and store artwork.

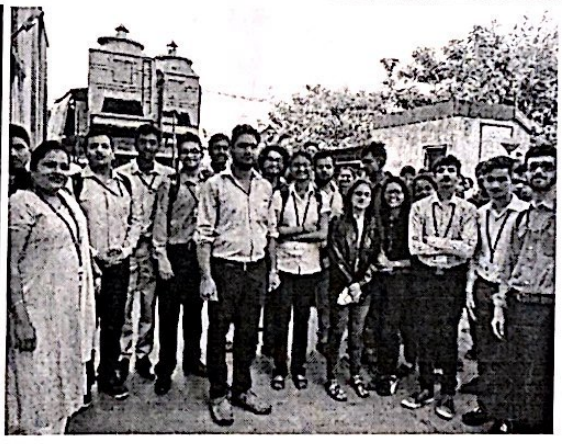

CONTROL PANEL ASSEMBLY

Asha

V.E.S.
Since 1962

Industrial Visit Report 2018

A complete report based on an industrial visit organised by Vivekanand Education Society's Institute of Technology (VESIT), for the students of computer engineering in order to enhance their knowledge and practical experience and let them have an overview of the activities related to manufacturing and product development carried out by Sudhir Power Generators company and RR Kabel company.



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Index

Overview of the Trip

Vivekanand Education Society's Institute of Technology (VESIT) had organised an industrial visit on 4th Jan 2018 to Sudhir Power 171 kms from VESIT college and RR Kabel on 5th jan 2018 which is 165 km from VESIT college. Both located in industrial sector in Silvassa, Dadra and Nagar Haveli, Maharashtra for engineering students.

Objectives of visit

The industrial visit SILVASSA was organised by VESIT for engineering students. The guiding staff on site was very supportive to all students. This visit will surely help us in our future practical life and bring a positive change in real life problem scenarios.

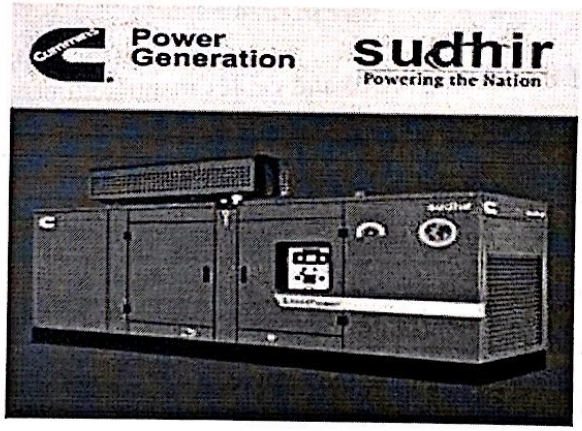
To enhance the knowledge of students.

To bring awareness about power generators, types of cables, their use at different areas.

To understand the process of product development in the industry.

Company Profile:

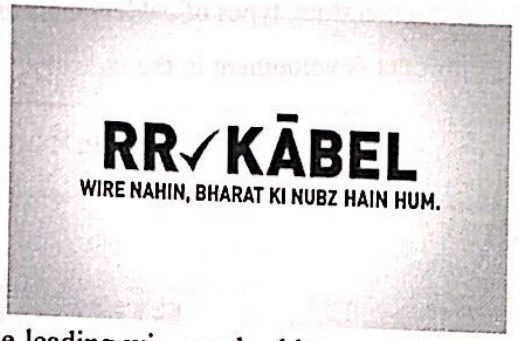
1. **Sudhir Generators:**



- Sudhir Power Ltd. stands in the vanguard of progress, in each one of its chosen spheres. It dominates its segment with best-of-the-breed, silent diesel and gas Gensets ranging from 7.5 kVA – 3000 Kva, powered by Cummins engine. Sudhir has forged a formidable 30 years partnership with Cummins to become India's largest Genset manufacturer. Sudhir has the distinction of being the first genset company in the country to comply with the latest CPCB II norms for air and noise pollution.

- These are complimented by an alliance with Schneider Electric , France for HT 11kV & 33kV Panels & LT Panels and BIOSCO designed– Packaged Substations up to 24 kV. Wherein Transformers range extends upto 20 MVA, 33kV for Oil type transformers & 6.5 MVA, 22 kV for Dry type VPI Transformers, upto 10 MVA, 33 kV for Cast Resin Transformers & MLRE – Mould-less Resin Encapsulated transformers.
- Considering the need and large demand for renewable energy solutions in India, and abundant availability of its resources, Sudhir is also developing large commercial & utility scale photovoltaic (PV) solar power plants.

2. R R Kabel:



- As one of the leading wires and cables manufacturers in the world, RR Kabel are also the pioneers of wire design, technology and applicability. The cutting edge technology and research has continually enhanced the efficiency, reliability and safe conduction of electricity. This in turn supported the core of our engineering endeavour, which is to guarantee safe environments everywhere – offices, retail spaces, industrial plants and residences. Ever since inception, R R Kabel have been inspired by the promise of a better life, which innovative engineering promises. This inspiration has transformed into a relentless pursuit, which has seen us engineer and manufacture a colossal range of products apposite for prodigious industries. Products have been engineered to survive harshest of environments like the crushing, high pressure of the ocean or sweltering heat or cold of arid lands.
- Wires and cables permeate through every aspect of our modern lifestyle, which commands uninterrupted and efficient electricity supply. From planes to trains, telecommunication to entertainment, satellites to Wifi – wires are the

omnipresent, unsung heroes pulsating with electricity, bringing surroundings to life and bridging distances. Diverse product offerings of R R Kabel are nimble and energy efficient, minimizing losses, tending security and earning you savings through every millimetre it pervades. In this 20-year journey so far, it have been lauded with several product and system certifications and awards that speak for quality and dependable wires, making it one of the best quality wire and cable company in India and abroad. Yet, we at RR Kabel, will not cease to excel in the wire and cable industry, through our diligent efforts and commitment to the creation of the best.

Details of our Journey:

Day 1 (4th January 2018)

- We departed from VESIT Campus at 7:30 a.m. in the morning and reached Pluz Resort by 12:30 p.m. in afternoon. As we reached we were offered lunch and later moved ahead for the first industry (Sudhir Generators) to visit.
- We reached Sudhir Generator by 3:30 p.m., where we were given a tour of the entire assembly process of the manufacturing unit and were explained the process in detail.
- We were told about the history of the company and how and when they progressed by manufacturing different types of power generators using different energy sources.
- The working of the generators along with its components were explained in detail. We left from Sudhir Generators by 4:30 p.m.
- Later we were taken to sight seeing, where we visited places like museum, art gallery, Shri Swami Narayan temple, church and then were taken back to hotel for night stay.

Day 2 (5th January 2018)

- We departed from Pluz Resort at 8.30 a.m. for the second industry (R R Kabel) to visit. We were taken to a Hanuman temple that was on the way and then reached the premises of R R Kabel by 11:00 a.m.

- At R R Kabel, we were split into two groups. Second year students were first made to attend the presentation, while the third year students were taken for the field visit. Later the third year went for presentation, while the second year attended the presentation.
- At the presentation, we were shown various products made by the company and also was given a brief information about the history and success of the company. All the aspects from Marketing to Management, from Safety to Security, were explained to the students.
- At the field visit, the entire technology of making the products were explained along with the machinery used for the same.
- We left from R R Kabel by 2:00 p.m. , went for Lion Safari then to the Hotel for Stay.
- The day was accompanied with a DJ Night in the Hotel Premises.

Day 3 (6th January 2018)

- Students were allowed a swimming pool visit from morning 8:00 am to 10:00 am, after which we checked out of the Pluz Resort and were taken to enjoy the beauty of Nakshatra Garden.
- We were escorted back to Pluz Resort for Lunch, after which we left for visit to dudhni lake that was on the way back to Mumbai.
- We reached VESIT campus by 10:30 p.m. and completed the process of Industrial Visit Successfully.

Group observations and learnings:

The following is a list along with photographs and specifications of generators and cables which we had observed during our industrial visit.

- There are number of activities conducted by Sudhir Power Generators like loading and loading activities of materials like metals and machine parts.
- All the loading and unloading, packaging activities are done by machines and labors.
- There is proper management, utilization of manpower and machines.
- All the labors are active, alert and attentive to their work on machines.
- In time of our visit we have observed different types of machines mentioned below in details.

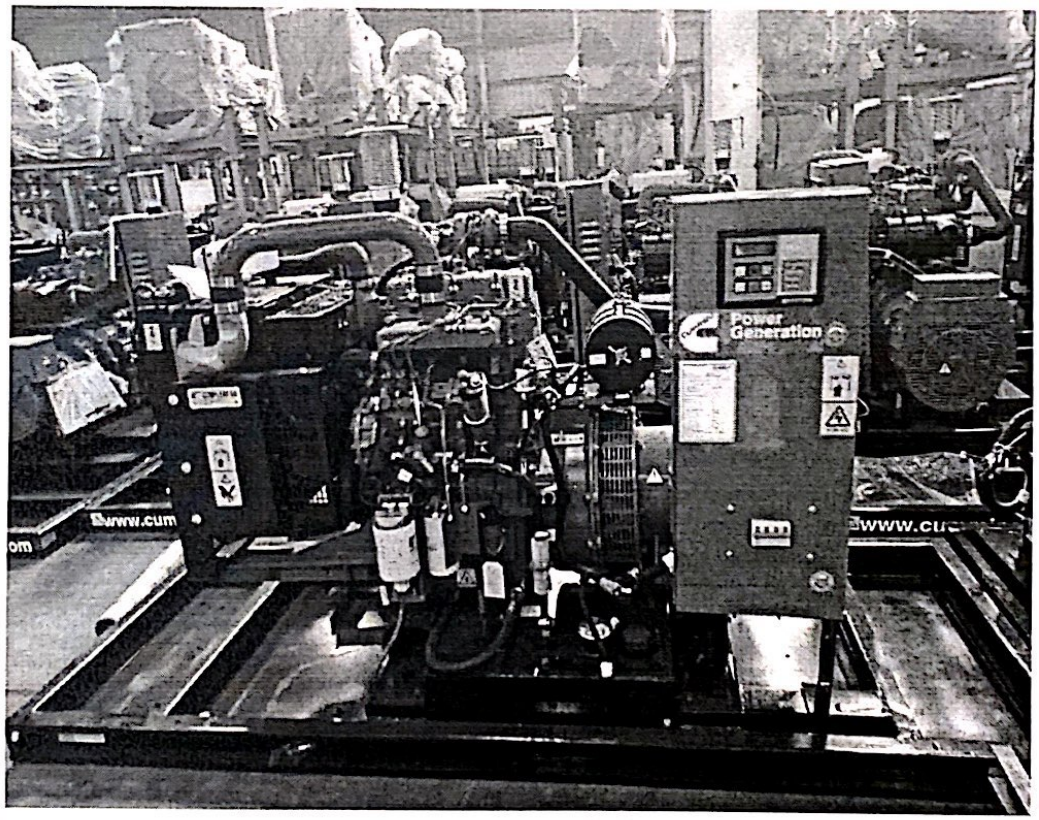


Fig 1: A Power Generator at Sudhir Power Generator

- Eco-friendly power generation plant at Sudhir Power as it uses diesel and produces sound of 70db that's why eco-friendly. There are multiple units like : Digitizer, Generator, Transformer, Regulator, Vacuum oven, Punching machine, Bending machine, Welding unit.

- At RR Kabel manufactures cables. Varied types of cable wires are manufactured here including Control, Data, Instrumentation, Heat Resistant and Flame Retardant,Auto,Power, Drag Chain & Servo, Silicon Cables. we observed that huge coiled copper wire of 32 bunch of 8mm diameter is loaded. Where 32 copper wire threads are combined together to make a single copper thread by going through twisting machine, Heating machine, binding machine, cooling, insulation. Based on required length and diameter wire is produced and sent for packaging.

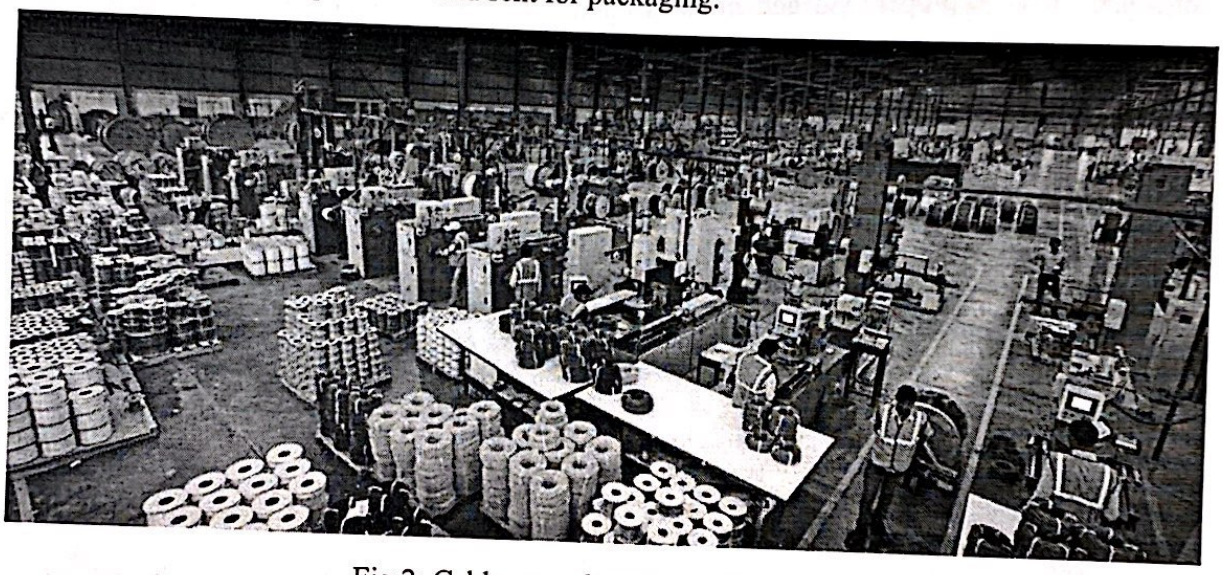


Fig 2: Cable manufacturing at RR Kabel

Conclusion:

- We are thankful for faculties for organizing such an informative event for students to develop practical skills with an opportunity to research on the company.
- It was a Wonderful experience for all students as well for staff. Every student was very cooperative to each-other as well to the faculties.
- Students were enriched with information related to different products, practical stimulation and were made aware about its usefulness for the society.
- We (all students and staff member/s) are very much thankful to Dr. (Mrs.). J. M. Nair, Principal and Mrs. Vijaylaksmi M., Vice Principal of Vivekanand Education Society's Institute of Technology and Dr. (Mrs.). Nupur Giri, Head of Computer Engineering Department for giving their valuable support. We are also very much thankful to our office staff for helping us with the process w.r.t accounts and other staff for their cooperation during the visit.

References

Following channels helped in data gathering for this report.

- http://www.sudhirpower.com
- http://www.rrkabel.com
- Wikipedia
- Points noted by us at the time of visit

Faculties Accompanied for the visit

1. Mrs. Arthi C. I.
2. Mr. Richard Joseph
3. Ms. Kajal Jewani
4. Mrs. Yugchhaya Dhote
5. Mrs. Snehal Mane
6. Ms. Swati Sharma
7. Ms. Mukesh Yadav
8. Mrs. Sheetal Balsaraf

APPENDIX

Pictures clicked by faculties during visit

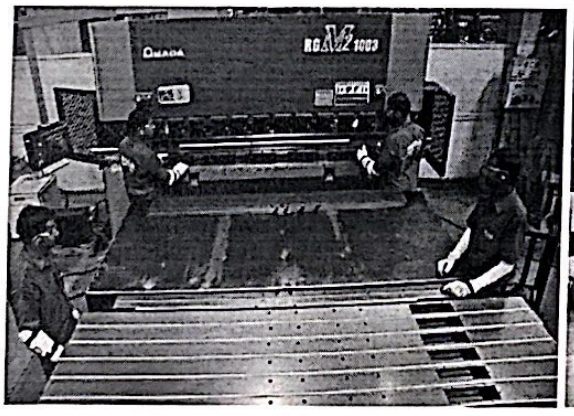


Fig 1. Punching Machine to cut metal sheets into different shapes

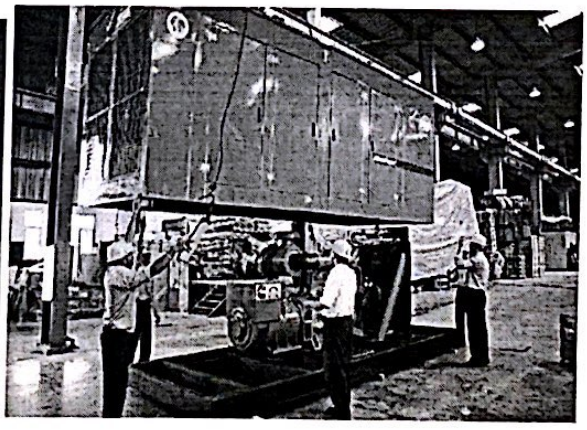


Fig 2. Covering generator using heavy duty crane

Fig 3. Faculties and students at Sudhir

Fig 4. Faculty and students at RR Kabel

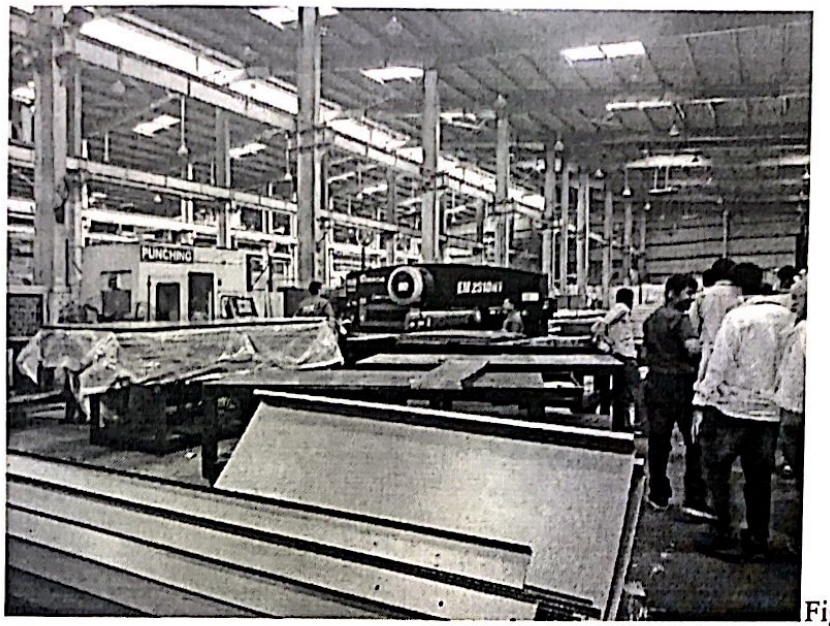


Fig 5. Inside Sudhir


Fig 6. Ready Product of RR Kabel

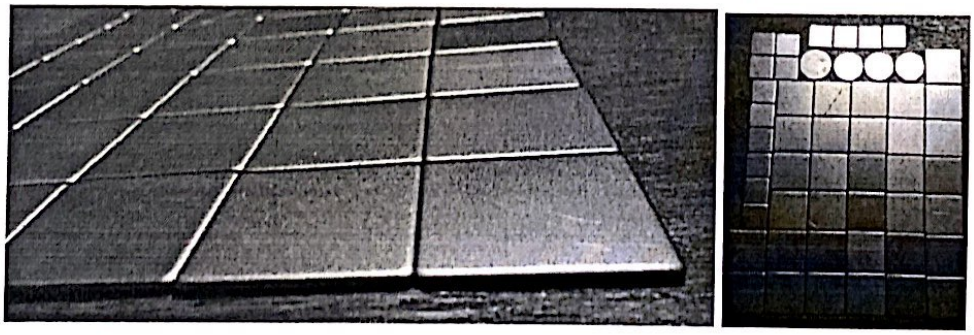


Fig 7. Sample 0.1mm thickness metal pieces of different shapes

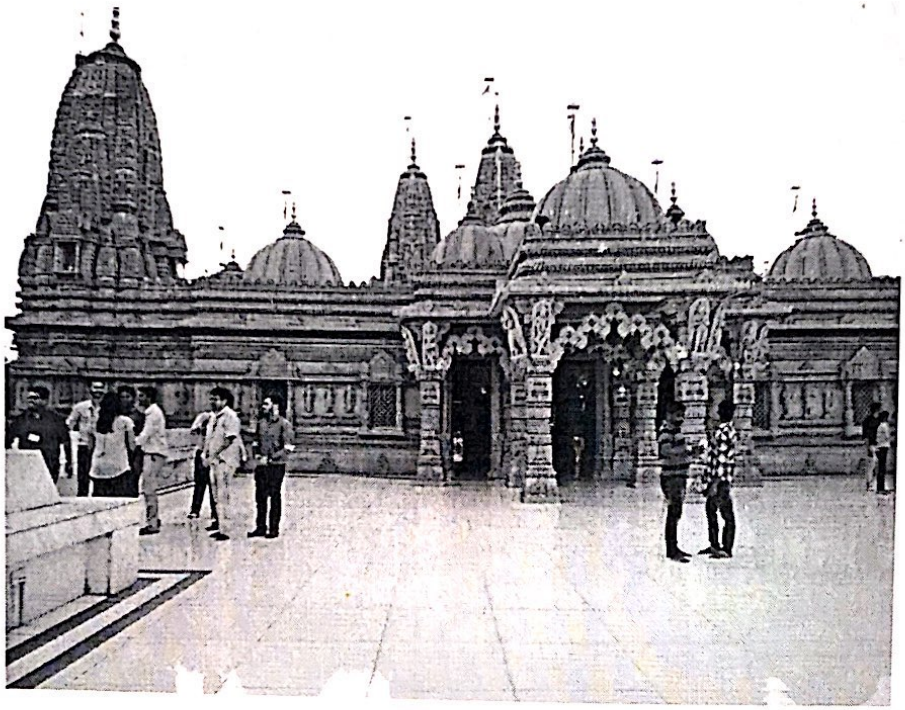


Fig 8. Inside view of Shri Swami Narayan Mandir at Silvassa

Fig 9. Sunset at Shri Swami Narayan Mandir at Silvassa

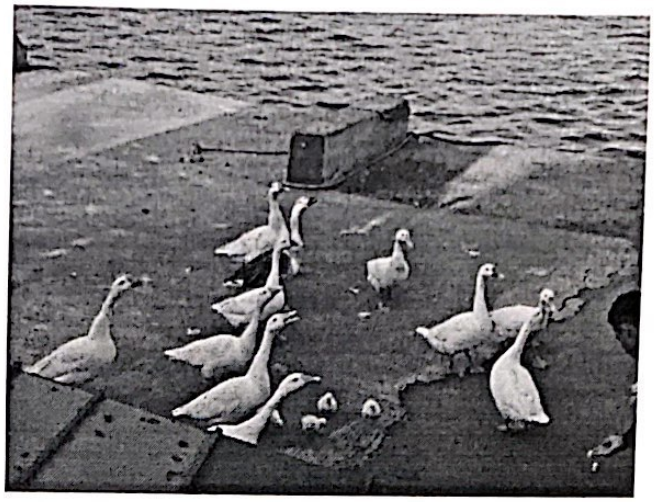


Fig 10. At Dudhni Lake

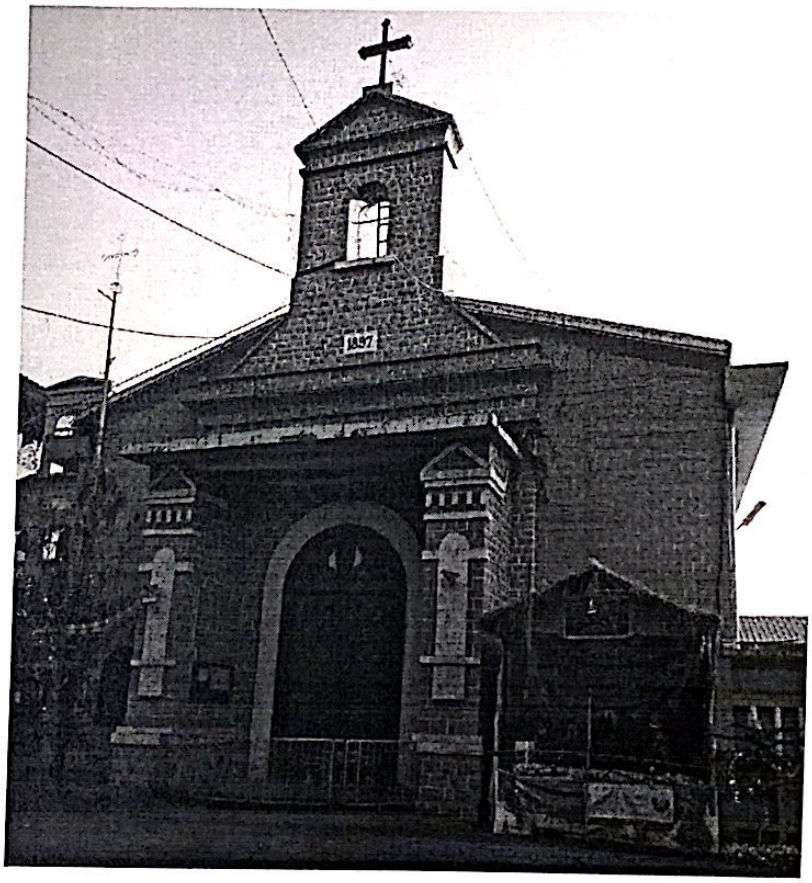


Fig 11. Silvassa Church, Sayli Rd, Dadra and Nagar Haveli

Fig 12. Nakshatra Garden, Silvassa

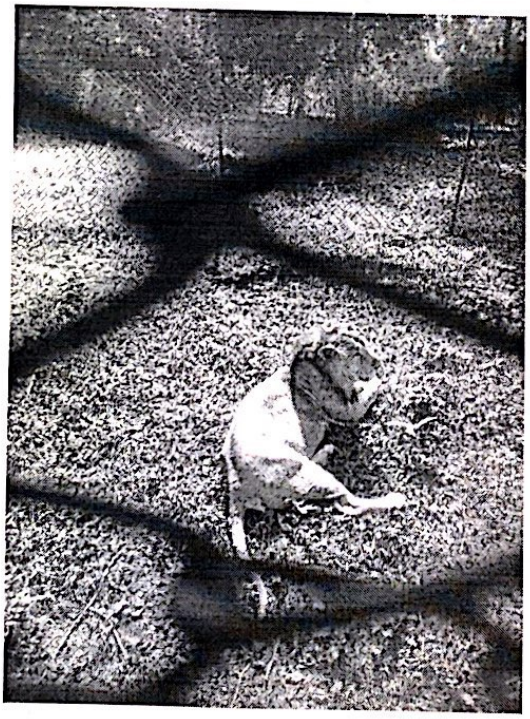


Fig 13. Lion at Lion Safari

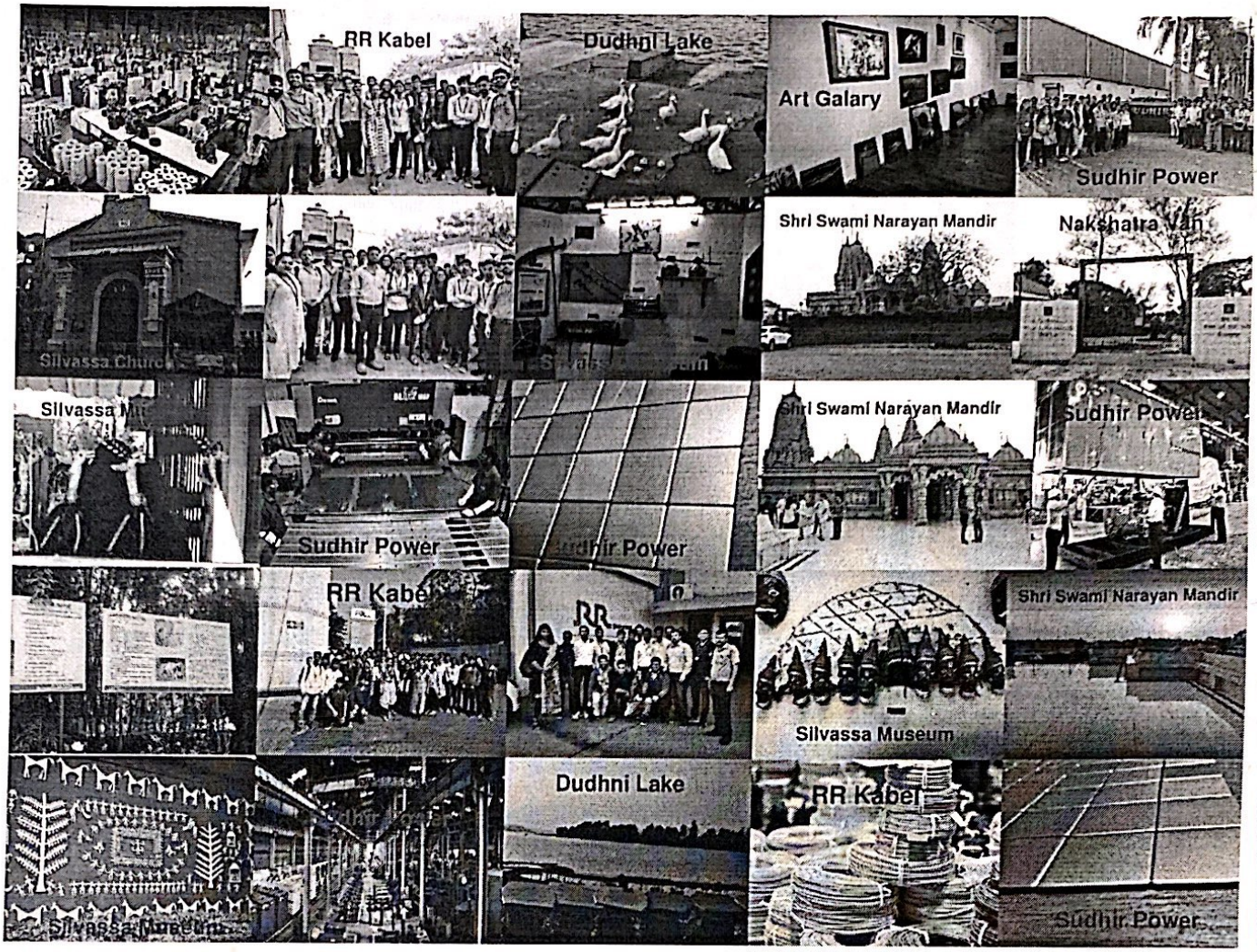


Fig 14. Industrial Visit

Fig 15. Industrial visit

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Chembur, Mumbai – 400 074

A report

On

Industrial Visit to Silvassa, Dadra and Nagar Haveli .

(From 6th January 2018 to 8th January 2018)

Organized by Vihang Leisures Inc.

Compiled by

Murlidhar Sharma (D15)

On behalf of Class D15- INFT

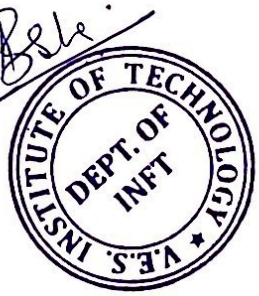
Industrial Visit Incharge

Mrs. Roopkala R

(Assistant Prof., INFT Dept.)

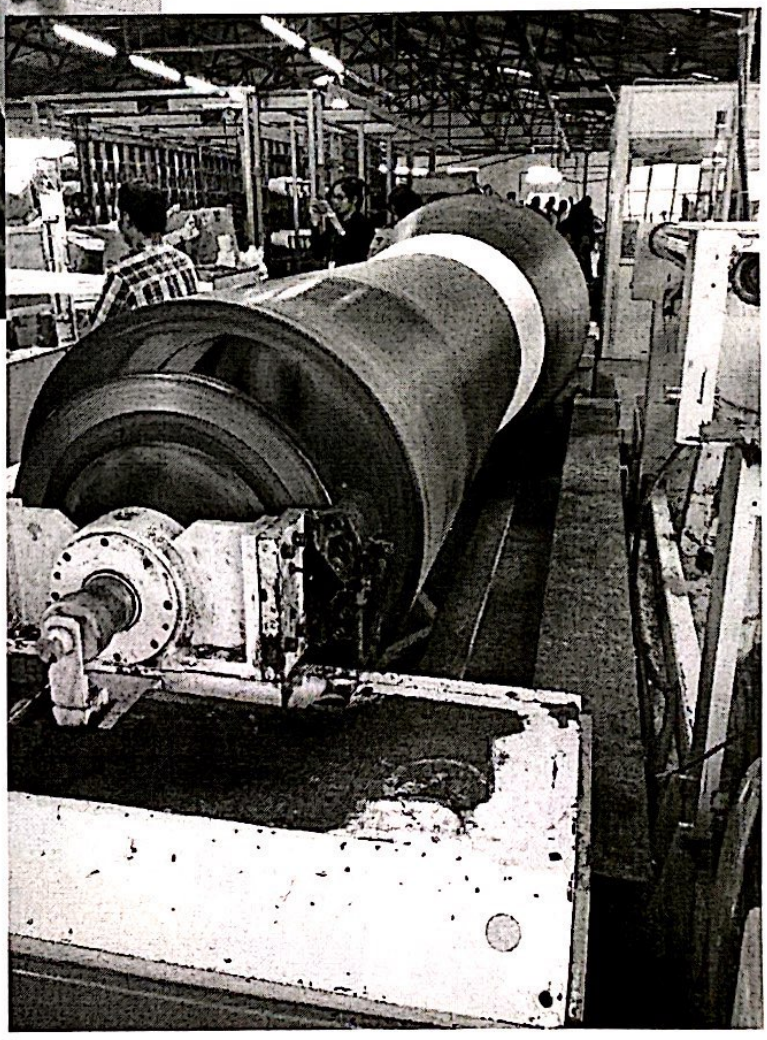
Mrs. Asha Bharambe

(Associate Prof., INFT Dept)

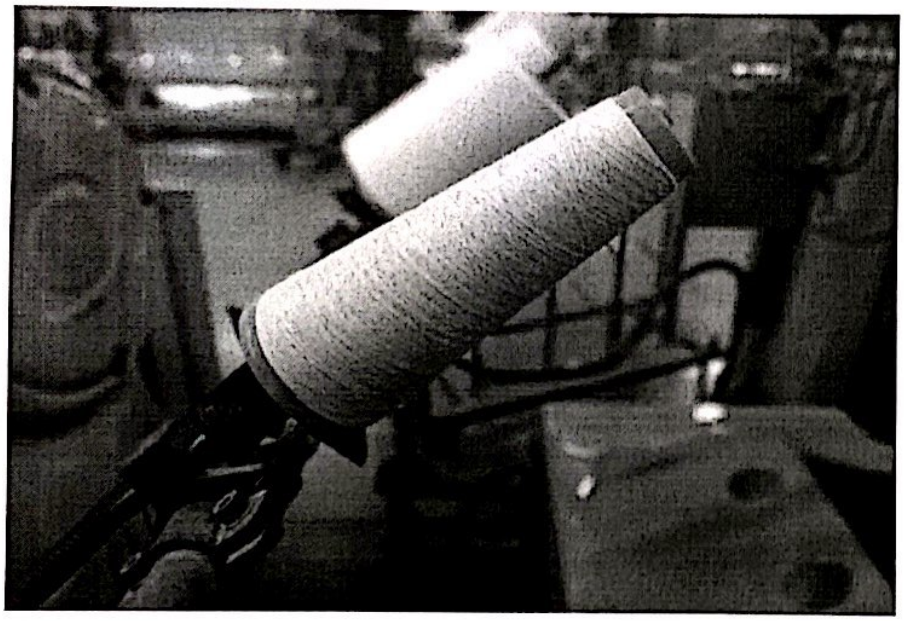


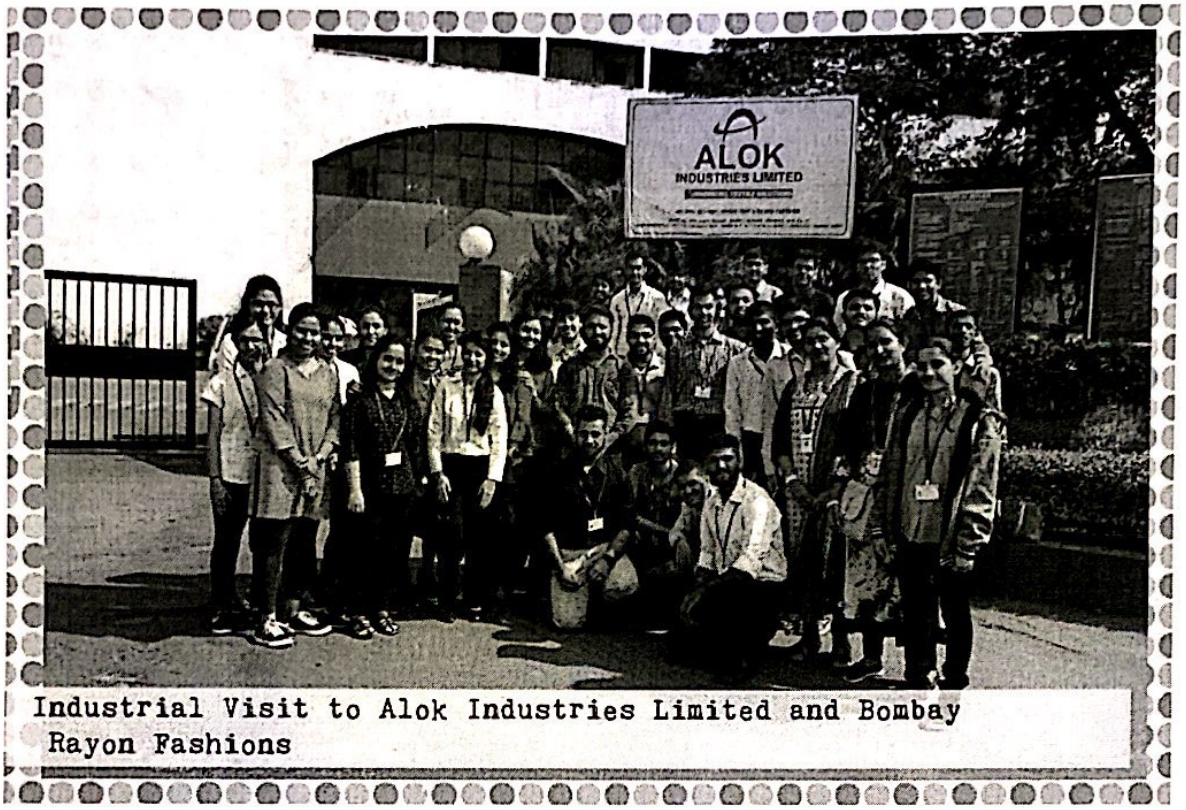
Students of Third Year INFT batch went to Alok Industries Limited and Bombay Rayon Fashions Limited on their Industrial Visit. They visited Bombay Rayon on the first day of the trip i.e. 6th January 2018 and Alok Industries on the third day. The students learned about the process of weaving of cloth and how it is converted from yarn to fabric or cloth.

On the first morning, the students went to Bombay Rayon Fashions Limited. The students learned about the various processes used to strengthen a yarn or thread before it can be used for making fabrics. The instructor explained the importance of spooling and twisting of the yarn as the characteristics of the yarn depend on the amount of twist given to the fibres. Bombay Rayon majorly dealt with cotton fibres as most of the products made in the factory were cotton based. The students were allowed to explore the weaving process on their own, as they got an opportunity to see various machines weaving cloth of various colours and fibres. The students later cleared the various doubts they had regarding the intricacies involved in the weaving process from the instructor.



The third day of the trip was focused on the second industry to be visited, after a day of sightseeing and safari. Ashish Patel, the instructor during the visit at Alok Industries, engaged the students from the beginning. This visit was largely focused on the weaving process, but the fact that Alok Industries was an ISO certified company was highlighted in the high standards maintained by them. The students were taken in small batches to explain to them thoroughly, the minute details of the weaving process such as warp and weft. The huge machines, made by Toyota, were operated at a slower pace to allow the students to see the weaving process which was also explained by Ashish as it was happening. This resulted in a deeper understanding of the weaving process as the students related it to the processes, they observed on the first day. The visit was concluded with Ashish answering the students' questions in detail and giving them helpful advice. Some students also visited the retail outlet in Alok Industries to purchase a few of their products as they were impressed with the quality of cloth offered at low prices.





Industrial Visit to Alok Industries Limited and Bombay Rayon Fashions

BRFL
Bombay Rayon Fashions Limited

ALOK
INDUSTRIES LIMITED
INNOVATIVE TEXTILE SOLUTIONS

(Asha. Bharambe.)

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DEPT. OF INFT

Vivekanand Education Society's
Institute of Technology
Approved by AICTE & Affiliated to University of Mumbai

Field Trip and IV arranged for Students

(2017-18)

Name of Department	Instrumentation
Date of IV	6th to 8th January,2018
Name and address of Industry	Sudhir power and Voltas, Silvassa
Class Visited	2nd and 3rd Year
Number of students visited	55
Number of staff visited	Mrs.Amudha Senthilkumae and Mr. Kader sheikh
Profile of Industry (in short)	Sudhir Power is an Industry leader in the field of setting up Diesel base Captive Power Plants upto 20MW. It stands tall in the Indian Power Generation Sector, providing complete turnkey Electrical solutions from GENERATION, DISTRIBUTION to ELECTRIFICATION. Voltas Limited is an Indian multinational engineering, HVAC, air conditioning, and refrigeration company based in Dadra and Nagar Haveli, Silvassa, India. The company makes equipment for industries in areas such as heating, ventilation and air conditioning, refrigeration, construction equipment,

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Amudha Senthilkumar

	materials handling, water management, building management systems, indoor air quality and chemicals. It also provides machinery & servicing in Textile and Mining field.
Objective of Visit	To understand the power generation system, solar power system. To understand testing of instruments, different manufacturing techniques of Air conditioners.
Outcome of Visit	At Sudhir, students understood designing and manufacturing of PV Solar modules, EPC Turnkey Solutions, Grid connected Utility and off grid Industrial & Residential Projects At Voltas, students gain the knowledge of engineering skills and knowledge base are seen in advanced design and development, as well as adaptation and improvement of products and equipment.
Link of Report and photos	Silivasa Report

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Vivekanand Education Society's Institute of Technology

Chembur, Mumbai – 400 074

Department of Instrumentation

Silvassa Industrial Visit Report

(From 6th January 2018 to 8th January 2018)

Organized by Vihang Leisure

Faculty Members- INST Department

Amudha senthilkumar (Assistant Prof., Industrial Visit Incharge)

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The entire tour was organised and managed by Vihang Leisure. All the students were accommodated in two different hotels, Hotel pluz and Treat Resort. Bus was mode of transportation for the entire IV.

Following are the industries that the students visited.

The students from Electronics dept, Information Technology dept and Instrumentation dept visited the industry i.e Voltas Limited, Silvassa.

Voltas is one of the world's premier engineering solutions providers and project specialists. Founded in India in 1954, the company offers engineering solutions for a wide spectrum of industries in areas such as heating, ventilation and air conditioning, refrigeration, electro–mechanical projects, textile machinery, mining and construction equipment, materials handling equipment, water management & treatment, cold chain solutions, building management systems, and indoor air quality.

V.E.S. INSTITUTE OF TECHNOLOGY DEPT. OF INST

S-Amudha

With manufacturing units at Dadra and Nagar Haveli, Silvassa, Voltas possesses total capability in the manufacture of room/split air conditioners.

VOLTAS LIMITED

The mentors there explained the students about the services they provide, such as testing of instruments, different manufacturing techniques of Air conditioners. **Voltas Limited** is an Indian multinational engineering, HVAC, air conditioning, and refrigeration company based in Dadra and Nagar Haveli, Silvassa, India. The company makes equipment for industries in areas such as heating, ventilation and air conditioning, refrigeration, construction equipment, materials handling, water management, building management systems, indoor air quality and chemicals. It also provides machinery & servicing in Textile and Mining field. The Textile division is active from the very onset of the company.

Voltas has modern manufacturing plants spread over an area of over 35,000 square metres, located in Dadra (Union Territory), Silvassa and in other parts of the country respectively. With a total workforce in excess of 800, Voltas' plants manufacture :

- Room ACs
- Commercial refrigerators
- Water coolers
- Air conditioning equipment for central plant projects

Voltas' engineering skills and knowledge base are seen in advanced design and development, as well as adaptation and improvement, of products and equipment. The Voltas approach of intelligent innovation and customized problem-solving is given full play through use of advanced design software. These include the RR programme for coil designing, and AutoCAD Mechanical Series 6 with Solid Modeling package ('Inventor') for alternative design & quick innovation.

State-of-the-art shop floor equipment and manufacturing processes yield products, components and assemblies of high precision and complexity, validated through a rigorous QA

cycle.developmental assistance testing services are carried out as per the requirement of user / customer / manufacturer at EQDC laboratories.

Voltas' operations have been organized into three business clusters. Each of these commands its own well-defined systems and resources for market coverage and service to customers.This policy is followed at all branches, manufacturing units and other locations, overseen by Locational Ethics Counselors. Location-level initiatives include:
• Periodically conducting both formal and informal sessions on the TCOC • Linculcating Voltas' ethical values among suppliers, vendors and contractors • Broadening the perception of the TCOC beyond a set of dos and don'ts • Encouraging employees to think beyond their normal orientation towards solutions, using
case-studies as a teaching tool for greater understanding and participation.

Voltas conducts its relationships and dealings - in business and otherwise - in accordance with the Tata Code of Conduct. This provides a framework for employees to make ethical decisions and take ethical initiatives on their own.
This framework is implemented and monitored by the Company Ethics Counselor, in tandem with an Ethics Committee at Voltas Head Office in Mumbai. They take the necessary steps to create and sustain a work environment in which employees have a clear, common understanding of right and wrong, and feel free to discuss ethical issues and report violations. Systems and processes have been put in place to facilitate the voicing of genuine concerns.
The Ethics Counselor, Officers and Ethics Committee promote and facilitate ethical behaviour within the Company, and with all agencies or business partners (including but not limited to customers and vendors) in their dealings with the Company. An environment is created for people to feel free to come forward with any concerns about non-ethical behavior; any such concerns are investigated properly in complete confidence, so that the person/s making the report are protected from any retaliatory actions.

VOLTAS manufacturing plants have all been certified for ISO 9001:2000 by TUV of India. Emphasis is placed not just on product quality and consistency, but on economies and efficiencies which deliver greater customer value for less outlay. The highest priority is given to protection of the environment, with effluent treatment plants which operate continuously around the clock. The statutory norms of Directorate of Industrial Safety & Health (DISH) are strictly complied with.

It's in the very nature of Voltas' core businesses to be actively engaged in today's Green movement. Every day, the need to conserve energy, preserve the ecology and minimise man's carbon footprint become more and more imperative. That's a call which Voltas answers through its products, its services, and its operating principles.

(Some pictures of our visit to Voltas Private Limited ,Silvassa)

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Powering the Nation

The second industry that we all visited was Sudhir Generators Limited.**Sudhir is a name synonymous with Power.** An Industry leader in the field of setting up Diesel base Captive Power Plants upto 20MW having its corporate office in Gurugram & revenue of over INR 1400 crores, **it stands tall in the Indian Power Generation Sector, providing complete turnkey Electrical solutions from** GENERATION, DISTRIBUTION to ELECTRIFICATION.

Founded in 1973, Sudhir Group is committed to new and innovative technology and strives to develop breakthrough products to meet the ever changing need of power industry. The Company has a wide blue-chip customer base and operates through multiple manufacturing facilities across India. The product line focuses on 7.5KVA – 3000 KVA Diesel & Gas Generators, 100 KW Solar Panels, Oil & Dry Type Transformers, HT 11KV & 33KV Panels & LT Panels, Packaged Substations .Sudhir is dedicated to provide quality product and services that enhance our customer's success.Backed by a talent pool of experts of over 2500 employees, 5 state of art manufacturing facilities, 14 Branch offices, international presence and dedicated training & service centres. Sudhir is continuously serving the width and depth of the Indian industry with its power solutions.**Sudhir Power** is committed to excellence in design and manufacture products under the most stringent quality system complying with international IEC standards that add credibility and superiority to its products and services.

At Sudhir the motto is ***Giving The Best to The Customer...*** and to do that its products are manufactured on the best of machines and latest technology from across the globe that equip its manufacturing plants. Each plant adheres to the highest international standards in terms of product designing, manufacturing and testing giving the customer a world class quality product.

Sudhir strives to exceed international standards for quality, durability and efficiency through constant improvement in our systems and processes and is highly determined to ensure the safety of our people & equipment so that an accident free environment is maintained. Sudhir Power has the distinction of being the first diesel generator company in the country to comply with the latest CPCB II norms for air and noise pollution. Sudhir has the expertise to successfully meet the power requirements of a wide range of individual and institutional customers. Important sectors for power generation solutions are Telecom, Construction, IT/ITES, Realty, Hospitality, Textiles, Auto & Auto Ancillaries, Food Processing, Data Center, Infrastructure, Pharma and Manufacturing sector.Eco friendly & silent diesel generators to meet your need of generator for home. With state of the art manufacturing unit, Sudhir Power Gneset is manufacturing the best in class diesel generators for the residential use. These generators are designed for our home, residential flat, buildings, cottage, villa or bungalow to meet our power needs at the right time. When it comes to fuel consumption, Sudhir Gensets can save up to 50% of the fuel cost as compared to other brand.

Each unit is tuned for optimum efficiency while operating between 45% and 65% of full load

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(which is the average loading) by delicate proportioning of core and winding losses.

By using CRGO silicon steel mitred cores and paper enamel covered conductors the units are made compact, resulting in lower losses, better regulation and longer life.

Careful design of the core and tank reduces noise level to the minimum. The clamping method adopted helps to keep the optimum properties of the grain-oriented silicon steet, without reducing their mechanical stability. Winding on HT side are provided with sufficient end-turn reinforcement for extra strength. Windings are pre shrunk and impregnated under, vacuum with hot dry Transformer oil before assembly to ensure their proper functioning.

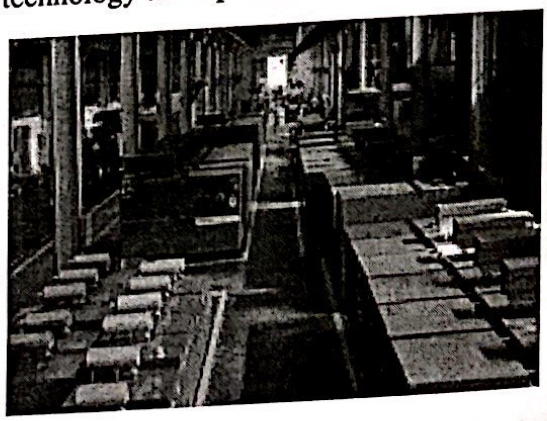
Radial as well as axial clearances and cooling ducts provided for the coils add to the safety and uniform cooling of the windings and limbs.

Windings are designed to withstand sufficient thermal, dynamic and electrical stresses induced during operation as well as under short circuit conditions.

Each tank is pressure tested and the exterior surface coated with primer and 2 coats of weather proof paint, the shade being dark grey 1110. 6 of IS-5/1980. The interior is given anti-corrosive protection with oil Hesistant varnish.

Transformers are supplied with first filling of insulating oil conforming to IS-335/1980.HV & LV wound coils are separated by means of fiber glass cylinders & supported on the frame by special porcelain supports. HV coils are made in disc form, using enameled & fiberglass covered copper strips.

All conductors are treated with Polyesteramide resin during covering stage to achieve inter turn di-electric strength of 6-8KV & eliminating trapped mechanical forces during the thermal operating cycle.Indian is densely populated and high solar installation, an ideal combination for using solar power. Solar Plants use photovoltaic (PV) technology to convert solar energy into solar electricity from sunlight.
At Sudhir, designing and manufacturing of PV Solar modules, EPC Turnkey Solutions, Grid connected Utility and off grid Industrial & Residential Projects using solar photovoltaic technology takes place.



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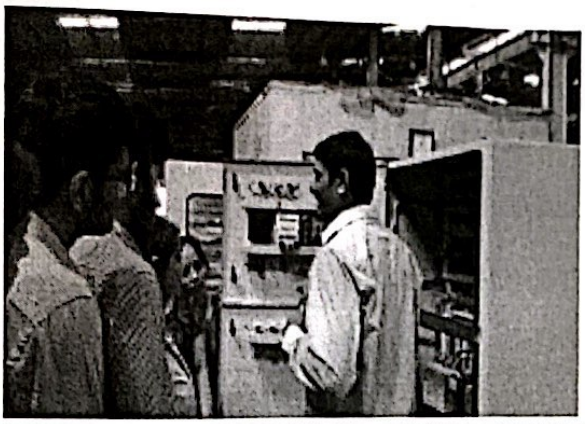

The students also visited the following places after the industrial visits

1. Lion Safari. , Deer park ,The Vanganga –Dudhani Lake.

THANK YOU!!!

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