

Diwaliba Polytechnic, Mahuva Report of "SAGAR TRANSFORMER, VAPI"

A. Personal Details:

Name of Coordinators:	Nitiksha Pancholi Pratik Gamit			Date of Visit:	17/10/2022
Place:	 102, Sai Darshan Shopping Centre, Plot No. C5/54, Near GIDC Office, Char Rasta Silvassa Road, Opposite Shah Pulp And Paper Mills, Valsad, Vapi-396195, Gujarat, India 			Organized by:	Electrical Department
Participants:	DP: 7 Boys Students	CGPIT: 7 Boys Students	Total: 14 Boys Students	Mentor:	Divyeshbhai Bhadja

B. Industry Profile:

SAGAR TRANSFORMER was established in the year 2005. It has started with manufacturing of transformers. Today it has positioned itself as a leading manufacturer of auto transformer, all type of coils, inductor, control transformer etc. Under the leadership of owner Mr. Ratilal N. Koradia, they have long-drawn-out their operations extremely since their inception. They cater to multiple clients that includes various commercial, industrial and residential sectors. Their organization believes in utilizing its resources to the fullest and thereby reduces the manufacturing and overall costs.

C. Purpose of Industry Visit:

As an electrical engineering student, an industrial visit to a transformer manufacturing company can be highly beneficial. Here are some potential purposes of such a visit:

- 1. Understanding the Manufacturing Process: An industrial visit to a transformer manufacturing company will help you understand the entire process of manufacturing transformers. You will learn about the various stages of production, the equipment used, and the quality control measures that are put in place.
- 2. Learning about Transformer Design: During the visit, you will be able to see different types of transformers and learn about their design and function. You will be able to observe the different components that make up a transformer, such as the core, windings, and insulation materials.
- 3. Exposure to Industry Standards and Practices: You will have the opportunity to observe industry standards and practices related to transformer manufacturing. This will help you understand the expectations of the industry and how to design and manufacture transformers that meet those standards.
- 4. Hands-on Experience: Some transformer manufacturing companies may allow you to participate in the manufacturing process. This hands-on experience can be valuable, as it allows you to apply your theoretical knowledge in a real-world setting.
- 5. Networking Opportunities: You may have the opportunity to meet industry professionals, which can be beneficial for your future career prospects. You can ask questions, gain insights, and potentially even make connections that could lead to internships or job opportunities in the future.

Overall, an industrial visit to a transformer manufacturing company can be an excellent opportunity to learn about the manufacturing process, design, industry standards and practices, and gain hands-on experience, which can be invaluable as you pursue your career as an electrical engineer.

D. Activities Carried Out:

As an electrical engineering student on an industrial visit to a transformer manufacturing company, some of the activities that you might carry out include:

- 1. Tour of the factory: You will be taken on a tour of the factory where you can observe the production process and learn about the different stages involved in the manufacturing of transformers.
- 2. Interaction with the engineers: You will have the opportunity to interact with the engineers working in the company and ask them questions about the design, testing, and maintenance of transformers.
- 3. Observing the testing process: You will be able to observe the testing process of transformers, which includes routine tests, type tests, and special tests.

- 4. Hands-on experience: You may get a hands-on experience in assembling and disassembling the transformer parts, testing the insulation, and winding the transformer coils.
- 5. Understanding the quality control process: You will learn about the quality control process implemented in the company to ensure the manufactured transformers meet the industry standards and customer requirements.
- 6. Discussion on the latest technology and trends: You will have the opportunity to discuss the latest technology and trends in transformer manufacturing, including the use of renewable energy sources and smart grid technology.
- 7. Safety measures: You will be briefed on the safety measures implemented in the factory to prevent accidents and ensure a safe working environment.
- 8. Understanding the business operations: You will also learn about the business operations of the company, including supply chain management, marketing strategies, and customer service.

Overall, an industrial visit to a transformer manufacturing company will provide you with valuable insights into the practical aspects of transformer design, manufacturing, testing, and maintenance. It will also help you understand the importance of quality control, safety measures, and customer satisfaction in the industry.

E. Outcome of Industrial Visit:

As an electrical engineering student, an industrial visit to a transformer manufacturing company can provide you with a valuable learning experience. Here are some possible outcomes you can expect:

- 1. Understanding of manufacturing processes: You will get a chance to see firsthand how transformers are manufactured, from the design stage to the finished product. This will help you understand the various stages involved in the manufacturing process and the equipment used in each stage.
- 2. Exposure to industrial standards and quality control: You will learn about the different standards and quality control measures followed by the company to ensure that the transformers produced meet industry standards and customer requirements.
- 3. Exposure to advanced technologies: You will see the latest technologies used in transformer manufacturing and how they are implemented in the production process. This can help you understand how technology is evolving in the industry and how it can be used to improve efficiency and product quality.
- 4. Insight into career opportunities: You can get a better understanding of the various career opportunities available in the field of transformer manufacturing, including roles such as design engineer, quality control engineer, production engineer, and more.

5. Networking opportunities: You can connect with professionals in the industry and learn about their experiences and career paths. This can help you build professional relationships and gain insights into the industry's current and future trends.

Overall, an industrial visit to a transformer manufacturing company can help you bridge the gap between theoretical knowledge and practical applications, providing you with a better understanding of the industry and career opportunities available.

Some Glances of the Industrial Visit:









