

DEPARTMENT OF MECHANICAL ENGINEERING

Industrial Visit Report

Company Name: Edizi Tools Pvt Ltd

Date of Visit: 8/06/2024

Location: Plot No 24, 2nd phase, Electronic city, Bangalore-560100

Department: Mechanical Engineering

Attendees: 7th Semester Students

Accompanied by: Dr. Hemanth Rau T **Duration:** 09:30 AM - 04:30 PM

1. Objective of the Visit

The primary goal of the industrial visit was to expose students from New Horizon College of Engineering to real- world applications of engineering such as Practical Exposure to Industrial Processes, Understanding Industry Operations, Familiarization with Modern Equipment and Tools, Enhancing Technical Knowledge, Quality Control and Standards, Career Guidance and Networking, Promoting Innovation and Creativity and Safety and Environmental Practices.

2. Company Overview

EDIZI Tools Pvt. Ltd. is a leading manufacturer and supplier of high-quality industrial tools and precision components. The company specializes in providing innovative and durable solutions for a wide range of industries, including automotive, aerospace, engineering, and manufacturing

3. Key Areas of Focus During the Visit

1. Manufacturing Processes and Techniques

- Observe the production workflow, from raw material processing to finished product assembly.
- Understand the operation of advanced machinery, such as CNC machines, lathes, and milling equipment.
- Learn about key machining processes, including cutting, drilling, grinding, and heat treatment.

2. Tool Design and Development

- Explore how precision tools are designed using CAD (Computer-Aided Design) and CAM (Computer-Aided Manufacturing) software.
- Understand the importance of tool geometry, material selection, and custom designs for specific applications.

3. Quality Control and Assurance

- Study the company's quality assurance protocols, including testing, inspection, and calibration of tools.
- Observe the use of precision measuring instruments, such as micrometers, calipers, and CMM (Coordinate Measuring Machines).
- Learn about industry standards and certifications for maintaining quality.

4. Material Handling and Inventory Management

- Understand how raw materials, components, and finished products are stored and managed efficiently.
- Learn about the company's inventory control system and supply chain logistics.

5. Automation and Technology Integration

- Explore the role of automation in manufacturing, including robotic systems and Industry 4.0 technologies.
- Observe how EDIZI Tools uses real-time monitoring and data analysis to optimize production.

6. Safety Practices and Workplace Environment

- Understand the safety measures in place to protect employees and ensure smooth operations.
- Learn about the company's compliance with workplace safety standards and environmental regulations.

4. Key Learnings

- Understanding Manufacturing Processes
- Tool Design and Customization
- Quality Assurance and Standards
- Technological Integration
- Material Science and Selection
- Workplace Safety and Environmental Practices

5. Key Insights Gained from the Industrial Visit to EDIZI Tools Pvt. Ltd:

Students observed how advanced machinery like CNC and VMC are used to manufacture high-precision tools and components, providing a clear understanding of modern production techniques. The visit demonstrated rigorous quality assurance procedures, including the use of advanced measurement tools like CMM, and the importance of adhering to ISO standards for ensuring product reliability. Insights into automation, robotics, and Industry 4.0 technologies showcased how modern manufacturing integrates real-time monitoring, data analytics, and IoT for enhanced efficiency and accuracy. Students learned the fundamentals of designing tools using CAD/CAM software and observed how customization meets the specific needs of industries like automotive and aerospace.

5. Student Feedback

Students expressed their appreciation for the visit, noting that it provided them with a deeper understanding of industrial practices and enhanced their appreciation of the engineering challenges and newer options for their career approaches in the complete mechanical sector. They particularly valued the insights into the developing innovations in the new methods of testing which has been a keen addition to their knowledge base.

6. Conclusion

The industrial visit to EDIZI Tools Pvt Ltd was an enriching experience for the students, bridging the gap between classroom learning and industrial application. It provided them with practical exposure to modern testing and tooling, quality assurance, and sustainability in engineering. Such visits are instrumental in shaping students' professional outlook and preparing them for future careers in engineering.



Glimpse of the Industrial Visit