A Report

On

# ***"Industrial Visit – Indogerman Tool room "***

For the Students of Mechanical Engineering Department. (Semester – IV)

On 7th June 2024. (Friday)

- **Objective:** "Training and Exposure on the working of a CNC Lathe, CNC Milling, Semi-Automatic, automatic and Manual Lathe machine, drilling machine, Robotics related to the subject of Conventional Machining Processes & Manufacturing Technology in Sem III & IV respectively"
- **Venue: "Indogerman Tool room, Vatva, Ahmedabad, Gujarat.**
- **Number of Students:** 28 Present out of 28 registered Students (IV semester, Mechanical Engineering)
- **Head of the Department:** Mr. Tushar Thakar
- **Faculty Coordinator's:**
  1. Mr. Bhagyadeep Kalal (Asst. Prof. Mechanical Engg. Dept.)
  2. Mr. Vivek Y. Parikh (Asst. Prof. Mechanical Engg. Dept.)

# 1.1 OVERVIEW:

The number of students who attended the visit was 28 accompanied by 2 faculty members.
The purpose of our visit to Indogerman Tool Room in Ahmedabad was to gain practical insights into the tooling industry and understand the advanced manufacturing processes employed by the company. Indogerman Tool Room is known for its expertise in providing precision tooling solutions and services to a wide range of industries.

Initial the Procedure were briefed by Lokesh oza Sir, Admin Department and then Production Person were allotted to explain about the different departments of the company.

Under their guidance and along with 2 faculties, students were then led to visit Manufacturing unit of plant.

To put it briefly, following sections of the IGTR were visited.
Design Department
Production unit
Training centre.

# 1.2 Features of Company:

- Founded in 1990.

Indogerman Tool Room, located in Ahmedabad, is a leading player in the tooling industry. The facility boasts state-of-the-art infrastructure and advanced technologies to design and manufacture precision tools. The company specializes in producing molds, dies, and other tooling solutions that cater to the needs of industries such as automotive, aerospace, electronics, and more.

# 1.3 Manufacturing and Machine department:

During our visit, we had the opportunity to tour the entire facility, which was well-organized and equipped with modern machinery. The key areas of the facility included:

### Design and Engineering Section:

- Witnessed the CAD/CAM software used for designing molds and dies.
- Learned about the design validation processes to ensure accuracy and efficiency.

### Machining and Fabrication Section:

- Observed CNC machining centers and precision machining processes.
- Discussed the use of advanced materials and tools in the fabrication of molds.

### Quality Control Department:

- Explored the quality control measures in place to ensure the precision and durability of tools.
- Discussed the use of metrology equipment and inspection techniques.

### Training Center:

- Learned about the training programs offered by Indogerman Tool Room to enhance the skills of professionals in the tooling industry.
- Discussed the importance of skill development in the manufacturing sector.

# 1.4 Interactions with Industry Experts:

We had the opportunity to engage in insightful discussions with experts from Indogerman Tool Room. Topics covered included:

1. **Technological Advancements:**

Discussed the adoption of Industry 4.0 technologies in tool manufacturing.
Explored how automation and digitization are enhancing efficiency.

2. **Challenges and Solutions:**

Explored the challenges faced by the tooling industry and the innovative solutions implemented by Indogerman Tool Room.

3. **Market Trends:**

Gained insights into current market trends and demands in the tooling industry.
Discussed the company's strategies for staying competitive in a dynamic market.

# 1.5 Photography

Photography was prohibited inside plant premises, so group photo was taken outside the plant.


## SUMMARY AND OUTCOME OF THE VISIT

The visit to Indogerman Tool Room provided a comprehensive understanding of the tooling industry and its intricacies. The facility's commitment to precision, advanced technology, and continuous improvement was evident throughout the tour. The insights gained during the visit will be valuable for our academic and professional development in the field of manufacturing and tool engineering.

Below are listed feedbacks of few of the students

1. Practical exposure to student.
2. The visit has helped them to understand their already learned subject.

## ACKNOWLEDGEMENT

The coordinators are grateful to the College authorities, Management and President – Dr. Manish Shah (LJK Trust) for supporting them to carry out such a program and for providing the support. Secondly, the coordinators would like to thank Dr. Prexa H. Parikh – I/C Director (L.J.I.E.T.), who encouraged the coordinators for this program. Also, the coordinators extend their gratitude to the Head of the Department – Mr. Tushar Thakar, who has played a major role by being there at the time of need. Last but not the least; the students did a wonderful job and the coordinators are proud of each of their students.