

INDUSTRIAL VISIT and Training REPORT at IGTR AHMEDABAD

14/07/2023

INDO-GERMAN TOOL ROOM

INTRODUCTION: -

- I am writing this report to provide an overview of the industrial visit and Training that took place on **14/07/2023** at a Tool-Room and Production unit, namely **INDO-GERMAN TOOL ROOM**. The purpose of the visit was to gain a better understanding of the operations, management, and facilities of the Tool-Room. The visit was attended by **48** visitors, including **2** Faculty members.

· Indo-German Tool Room® ·

INTRODUCTION OF INDO-GERMAN TOOL ROOM: - IGTR is a known institute for train the students at an international standard. Most facilities of IGTR are of German technology which were calibrated to Indian standards. They have served till the ISRO with a very successful past record. Their main objective is to cultivate skills in those students who come to take training.

IN TIME FOR TRAINING: - 9:45 AM

OUT TIME: - 12:05 PM

- The visit was started with a heartily welcomed by the administrative department of IGTR. Then we are guided to **ARISE Room**, where we attended a One-to-One Seminar, taken by Rahul Sir on the topic of **Industrial Automation & Robotics**.
- Rahul sir firstly explained the Manual Labor which is required at operating a Lathe Machine.
- Then after Rahul sir guided us to understanding of Automation, what is Automation and why it is required and how it can be applied at industry level.
- He explained us how robots are useful at developing Automation.

- He explained in detail that what are the current advantages of Automation and its Limitations, he also suggested some possible ways to countermeasure the limitations.
- Then we saw a detailed video explaining us the basic difference between the Robots and Automation.
- In the mean time he also solved some of the doubts raised by the students.
- After the session at **ARISE**, we were guided to the different Tool Rooms where we get some Hands-on training on controlling the **industry level robots for Welding, Machining & Pick and Place**.
- The Mentioned robots were of **KUKA** brand named **KR8 R1400, KR10 R1100, KR120 R2500**, which are for Welding, Pick & Place, and Machining respectively.
- Then we headed towards the **PLC Room**, where we understand the working and testing of PLC boards.
- Afterwards we visited the **CNC Room**, where we observe the computational unit of a CNC machine and how it works.
- Then we headed to lunch.

- PRODUCTION LINE AT IGTR -

IN TIME FOR PRODUCTION SHOP: - 1:00 PM

OUT TIME: - 3:00 PM

INTRODUCTION TO IGTR PRODUCTION LINE: -

- Production line at IGTR is at industry level, to train the trainees how to adapt the in the environment of industry.
- Production Line is consisting of **Design Team, Consultancy & Marketing Team, Production-Planning-Control Team, and Quality Control Team**.
- At the design team room, we observed the products which were manufactured by IGTR.
- In the Consultancy & Marketing Room we learn how a client is handled and how to negotiate on our conditions.

- Then we tour the different sections at PPC and Production Unit.
- We observed many machines some are mentioned:

- **Electronica Ultima 3SA**
- **JUNG JF520**
- **EDM Machines of HAAS**

- The guiding faculty of IGTR has make sure that any of the doubts raised by the students should be solved thoroughly.
- At the various departments we gained many useful knowledge regarding the working procedures at Factory unit.
- It was a memorable and fascinating visit, everybody enjoyed during the whole trip.

• **After all visits we take some memorable photographs**





▪ Conclusion ▪

- Overall, the industrial visit was informative and provided valuable insights into the operations, management, and facilities of the **Indo-German Tool Room**.