







<u>Semester 2</u> <u>Thrust area: Validation and Innovation & Business Model Development</u>

Quarter 3

Theme	Entrepreneurship
Activity Name	Field/Exposure Visit to Patent Facilitation Centre - Automotive Axles Ltd
Mode of Conduct	Offline
Level of Activity	Level 2
Participants	Students: 50Faculty: 2
Description	St. Philomena college. Mysuru, organized an industrial visit to the Automotive

Description

St. Philomena college, Mysuru, organized an industrial visit to the Automotive axles limited Mysore on April 3rd, 2025. The purpose of visit was to provide MBA students to reduce the gap of industry and academic



Objective

- To familiarize students with the company's activities and the machine works.
- Process of melting metal and converting them into bus tools.
- To understand the steps and process of heating and manufacturing metals into tools.
- To explore the work-life balance of employees.

Visit details

The industrial visit commenced with a warm welcome from the Automotive Axles Ltd representatives. The students were divided into groups and guided through the various sections of the plant.



Mr. Samarth Raj Trainer Head guided us throughout the session. He briefly explained us about the company.



Automotive Axles Limited (AAL)

- Established in 1981, Automotive Axles Limited (AAL) is a joint venture of Bharat Forge Limited, Pune and Meritor Heavy Vehicle Systems, USA.
- The current Chairman of Automotive Axles Limited (AAL), a company based in Mysuru, is Dr. B. N. Kalyani.
- The company's project at Hootagalli near Mysore, commenced commercial production in July 1984
- In the beginning they started with the 85 employees and 1 plant, Now they are working with the 200 employees and 2000 crore turnover And 4 plant in Mysore.
- AAL's domestic customers include Ashok Leyland Limited, Daimler India Commercial Vehicles Private Limited, Man Trucks India Private Limited, Mahindra & Mahindra Limited, Tata Motors Limited, etc
- The average Automotive Axles salary ranges from approximately ₹3,01,673 per year (estimate) for an Engineer to ₹45,00,585 per year (estimate) for a Plant Head.

Machines overview:

- Raw Material Handling: Raw materials like steel billets and forgings are received.
- **CNC Machining :**Components like axle shafts and housings are machined using CNC turning and milling centers.
- **Gear Manufacturing :** Gears are manufactured using gear hobbing, shaping, and grinding machines.
- **Heat Treatment :** Machined parts are heat-treated in continuous carburizing furnaces.
- **Robotic Welding:** Axle housings and brackets are welded using robotic MIG/MAG welding arms.
- Quality Inspection: Final products are checked using, Coordinate Measuring, Machines (CMMs), Laser inspection tools, Noise and vibration testing systems.
- **Final Dispatch :** Approved axles are cleaned, painted (if required), and prepared for dispatch.

Overall Assessment:

The visit to Automotive Axles Limited, Mysore was highly beneficial, offering real-time exposure to advanced manufacturing processes like CNC machining, robotic welding, and axle assembly. It helped bridge the gap between theory and practice, showcased Industry 4.0 technologies, and deepened our understanding of quality control, precision engineering, and professional work environments.