



INDUSTRIAL VISIT REPORT

**ON
21ST AUGUST 2025**

**AT
ARROW COACH BUILDERS, MADURANTAKAM**

**PREPARED BY,
SUBBIAH S – 220021601059**

7th SEMESTER – MECH B

DEPARTMENT OF MECHANICAL ENGINEERING

COURSE DETAILS : MED 4101 - AUTOMOBILE

ENGINEERING

Industrial Visit Report

Date of Visit: 21.08.2025

Place of Visit: Arrow Coach Builders, Madurantakam.

Course Details: MED 4101 - Automobile Engineering.

Introduction :

As Part of The Curriculum for The Automobile Engineering Subject (7th Semester), Students of B.Tech Mechanical Engineering Visited Arrow Coach Builders, Madurantakam on 21st August 2025. The Objective of The Visit Was to Gain Practical Exposure to Automobile Body Building, Coach Design, And Related Manufacturing Processes, Which Supplement the Theoretical Knowledge Acquired in The Classroom.

Objectives of the Visit :

- To Understand the Process of Coach and Bus Body Fabrication.
- To Study the Materials and Technologies Used in Body Building.
- To Observe Various Stages of Production, From Chassis Preparation to Finishing.
- To Gain Insights into Quality Control and Safety Measures Followed in The Industry.
- To Bridge the Gap Between Academic Knowledge and Real-World Industrial Practices.

Overview of Arrow Coach Builders :

Arrow Coach Builders is a Well-Established Company Specializing In Bus And Coach Body Building. The Unit at Madurantakam is Engaged in Designing and Fabricating Different types of Vehicle Bodies Including Passenger Buses, Staff Buses, School Buses, And Customized Vehicles.

The Company Is Known For:

- Following Automotive Industry Standards (Ais) And Safety Regulations.
- Using Modern Fabrication Techniques Such as Mig Welding, CNC Cutting, And Panel Pressing.
- Employing Corrosion-Resistant Materials and Ergonomic Designs.
- Ensuring Comfort, Safety, And Durability in Vehicle Body Construction.

Key Observations During the Visit :

1. Chassis Preparation: Inspection of Chassis Before Fabrication, Alignment and Strengthening Processes.
2. Body Structure Fabrication: Frame Construction Using Steel Sections, Use of Advanced Welding Techniques, Application of Anti-Rust Coatings.
3. Paneling And Assembly: Fitting Of Side Panels, Roof, And Flooring; Installation of Doors, Windows, And Emergency Exits.
4. Painting And Finishing: Surface Preparation and Primer Coating, Spray Painting with Quality Checks For Finish And Durability.
5. Interior Work: Seating Arrangements, Upholstery, And Flooring; Provision of Electrical Fittings, Lighting, And Safety Features.

6. Quality Control: Dimensional Checks, Strength Testing, And Safety Inspections; Compliance with Regulatory Standards.

INDUSTRIAL VISIT PHOTOGRAPHS



Learning Outcomes :

- Understood The Complete Workflow of Bus Body Building.
- Gained Knowledge About Materials, Tools, And Processes Used in Automobile Fabrication.
- Observed The Integration of Ergonomics and Safety Standards in Vehicle Design.
- Learned the Importance of Industrial Discipline, Teamwork, And Precision in Production.
- Connected Theoretical Concepts of Automobile Engineering with Practical Applications.

Conclusion :

The Industrial Visit to Arrow Coach Builders, Madurantakam Was Highly Beneficial for The Students of Mechanical Engineering. It Provided a Clear Understanding of the Vehicle Body Building Process and Its Significance in the Automotive Sector. The Visit Enriched the Students' Practical Knowledge and Will Help Them in Their Future Academic Projects and Career Development.