



CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY
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A REPORT ON
INDUSTRIAL VISIT

SUJALA PIPES PVT. LIMITED, NANDYAL
ORGANISED BY DEPARTMENT OF MBA

Event : Industrial Visit to Sujala Pipes Pvt. Limited, Nandyal
Participants : II MBA Students
Date & Day : 1/8/26 & Saturday
Time : 09:30 AM to 04:00 PM

1. Introduction

An industrial visit was organized by the Department of MBA, CBIT Proddatur, to Sujala Pipes Pvt. Limited, Nandyal. The main objective of this visit was to gain practical knowledge about the manufacturing and testing of PVC pipes, which are widely used in borewells and agricultural irrigation systems.

2. About the Industry

Sujala Pipes Pvt. Limited is a well-established company engaged in the production of PVC pipes used for:

Borewell casing

Agricultural irrigation

Water transportation

The company follows standard industrial procedures and quality measures to ensure durable and efficient products.

3. Raw Materials Used

The company uses four major raw materials in the manufacturing process:

PVC Resin

Primary raw material (base polymer).

Provides strength and structure to the pipes.

Calcium Carbonate (CaCO_3)

Acts as a filler material.

Reduces cost and improves stiffness.

Masterbatch (Colouring Agent)

Used to provide color (white, blue, etc.).

Enhances appearance and UV resistance.

Stabilizer (One-Pack Stabilizer)

Maintains thermal stability during heating.

Prevents damage to PVC at high temperatures.

Approximate raw material cost: ₹2500 per bag

4. Manufacturing Process of Pipes

4.1 Mixing

Raw materials are mixed uniformly in required proportions.

4.2 Heating

The mixture is heated to around 200°C .

This ensures proper melting and blending of materials.

4.3 Extrusion

The heated material is passed through an extrusion machine.

Pipes of different sizes and types are formed.

4.4 Cooling

Pipes are cooled using a liquid cooling system.

Cooling helps maintain shape and strength.

4.5 Cutting

Pipes are cut into standard lengths such as:

3 meters

6 meters

5. Types of Pipes

Casing pipes (for borewells)

Agricultural pipes

Blue casing pipes

White submersible pipes

6. Quality Control & Testing

The company ensures strict quality checks through the following tests:

6.1 Temperature Test

Pipes are exposed to high temperatures for about 1 hour.

6.2 Pressure Test

One end of the pipe is closed.

Water is filled and pressure is applied to check leakage and strength.

6.3 Reverse Test

Pipes are tested under heat conditions to ensure durability.

6.4 Additional Tests

Elimination test (for specific pipes like blue pipes)

Strength and flexibility testing

Quality checks are conducted every 1 hour

7. Standards Followed

The company follows ISI Standards (IS 4985) for manufacturing PVC pipes.

8. Production & Business Details

Daily production: ~50,000 kg

Daily turnover: ~₹1 Crore

Annual turnover: ₹300 – ₹400 Crores

Number of distributors: Around 5000

Manufacturing cost per pipe: ~₹3100

Consumer price: ~₹6000

9. Machinery and Technology

Advanced extrusion machines are used for production.

Automated systems ensure precision and efficiency.

Machines are identified with:

Machine name

Code

Year of manufacture

10. Applications of Pipes

The pipes manufactured are used in:

Borewell systems

Agricultural irrigation

Water supply systems

11. Key Learnings

Practical understanding of PVC pipe manufacturing

Importance of quality control and testing

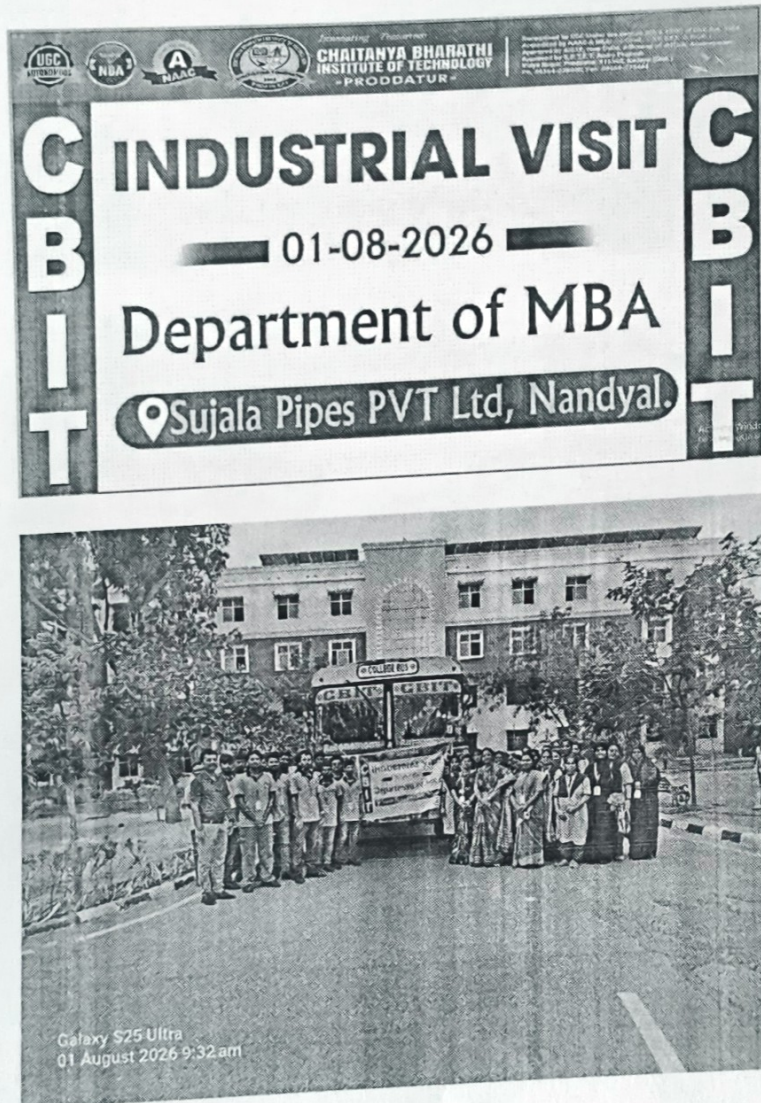
Role of raw materials and temperature management

Insight into industrial operations and production flow

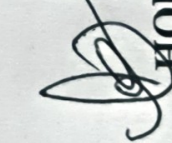
12. Conclusion

The industrial visit to Sujala Pipes Pvt. Limited, Nandyal, was highly informative and insightful. It provided real-time exposure to manufacturing processes and quality testing methods. This visit helped in bridging the gap between theoretical knowledge and practical industrial applications, especially in the areas of production and operations management.

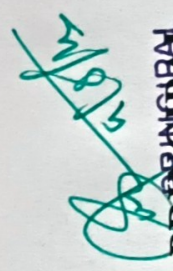
Glimpse of the Industrial Visit







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