

EXCELLENCE IN EDUCATION; SERVICE TO SOCIETY





REPORT ON INDUSTRIAL VISIT

Date of Visit

: 28th October 2025

Name of the Industry

: RAMCO Cement Factory

Location

: Kolimigundla (M), Nandyala Dist., Andhra Pradesh

Faculty Coordinators

: Mr. B. Raghunatha Reddy and Mr. A. Anil Kumar

1. Introduction

As part of the academic curriculum and to enhance the practical learning experience of students, the Department of Civil Engineering, Annamacharya University, organized an **Industrial Visit to the RAMCO Cement Factory** on **28th October 2025**.

The visit was aimed at providing students with real-world exposure to the cement manufacturing process, plant operations, and industrial management practices that complement their theoretical knowledge.

Industrial visits form an integral part of engineering education as they bridge the gap between classroom learning and industrial practice. By observing actual operations in a large-scale production facility, students develop a deeper understanding of engineering concepts and their applications in industry.





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(ESTD, UNDER AP PRIVATE UNIVERSITIES (ESTABLISHMENT AND REGULATION) ACT, 2016)

Rajampet, Annamavya District, A.P – 516126, INDIA



2. Objectives of the Visit

The main objectives of organizing this visit were:

- To give students first-hand experience of cement manufacturing processes and plant operations.
- To help students understand the role of civil engineers in material testing, quality control, and construction materials.
- To observe modern industrial machinery, automation, and environmental management systems used in cement production.
- To develop awareness about safety standards, energy efficiency, and sustainability practices in heavy industries.
- To encourage interaction between students and industry professionals, fostering better understanding of industrial expectations and employment opportunities.





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3. Overview of Facilities Visited

RAMCO Cements Limited, part of the prestigious RAMCO Group, is one of India's most reputed cement manufacturers. The company has a long-standing legacy of producing high-quality cement that meets both national and international standards.

The factory visited by the students is a technologically advanced unit equipped with:

- Modern rotary kilns and automated control systems.
- · Vertical roller mills for efficient grinding.
- State-of-the-art laboratories for quality testing of raw materials and finished products.
- Environmental management systems including dust collectors and waste heat recovery units.

The company's commitment to sustainability, energy conservation, and quality assurance makes it a role model for modern industrial practices.



After the briefing, students were divided into smaller groups for a **guided plant tour** covering the following sections:



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- 1. Raw Material Handling Section Students learned about the sourcing and storage of raw materials like limestone, clay, and gypsum.
- Crushing and Grinding Unit Demonstration of crushers and mills used for grinding raw mix into fine powder.
- Pre-heater and Rotary Kiln Area Observation of the high-temperature process where raw mix is converted into clinker.
- Clinker Cooling and Storage Section Understanding how clinkers are cooled and stored before grinding into cement.
- Cement Grinding and Packaging Unit Students observed how cement is ground with additives, tested for fineness, and packed for dispatch.
- Quality Control Laboratory The technical team demonstrated various tests for cement quality, such as consistency, initial and final setting time, compressive strength, and fineness test.
- Environmental and Safety Section Officials explained the use of pollution control systems, safety gear, and sustainable practices like waste heat recovery and water recycling.

Throughout the visit, the plant engineers provided detailed explanations and answered students' questions patiently, making the session highly interactive and informative.



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The industrial visit proved to be a significant learning experience for all participants. Some of the key takeaways include:

- Practical Understanding of Cement Production: Students gained insight into each stage of cement manufacturing—from raw material selection to final product dispatch.
- Application of Engineering Concepts: The visit helped students relate theoretical knowledge of materials, mechanics, and production to real industrial practices.
- Exposure to Advanced Machinery: The use of automated systems, modern grinding mills, and rotary kilns showcased the role of technology in enhancing efficiency.
- Environmental Awareness: Students learned about pollution control measures, energy recovery systems, and sustainable industrial operations.
- Industrial Discipline and Safety Practices: Observing strict adherence to safety norms and protocols inspired students to value safety in engineering operations.
- Teamwork and Professional Interaction: The visit encouraged teamwork, discipline, and communication between students, faculty, and professionals.

Conclusion

The Industrial Visit to RAMCO Cement Factory was an enlightening and rewarding experience that successfully met its objectives. It provided students with valuable industrial exposure, practical insights, and technical awareness that go beyond textbooks.

The Department of Civil Engineering, Annamacharya University, extends heartfelt gratitude to RAMCO Cement Factory for their support and cooperation, and to the university management for facilitating this educational initiative. Such visits play a vital role in shaping competent, knowledgeable, and industry-ready civil engineers.

Event Coordinators

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