

## DEPARTMENT OF CIVIL ENGINEERING

05/01/2026

### A REPORT ON INDUSTRIAL VISIT TO ACC READY MIX CONCRETE PLANT

An industrial visit was organized to ACC Ready Mix Concrete Plant on 03-01-26 after receiving the conformation from the above said firm. The students of 3<sup>rd</sup> & 4<sup>th</sup> year were informed about the visit prior by a week. The K Suresh Kumar Assistant Professor & Students reached the Ready Mix Concrete Plant at 10:45 AM.

Mr J Vamshi, Technical Head, Adani Concrete Division AP&TG explained about Mix Design of Concrete by showing the different part of the batching plants. Q.C Engineer explained the advantages of ready mix concrete that make it a more viable than preparing the mix at the worksite

- **Quality and Consistency**

One of the advantages of using ready mix concrete is that variables such as compressive strength, workability, proportioning of ingredients, water-cement ratio and slump can be controlled and moulded as per the requirement of the project. The use of ready mix concrete has allowed a significant speeding up of the construction process courtesy the improvement in quality of the materials used. The use of high-tech equipment, finished products and raw materials provide a constant quality standard unlike the old times. The old methods, however, involved high inconsistency as a result of hand mixing and different measures of materials used. The plant has a well-equipped laboratory where the following tests are conducted:

- **Slump Test** – to measure workability
- **Compressive Strength Test** – using cube specimens
- **Moisture Content Test** – for aggregates
- **Sieve Analysis** – to determine grading of aggregates
- **Density and Temperature Checks**
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- **Efficiency**

The traditional method of mixing concrete included working onsite which involved a lot of labour and long periods to complete any project. With the construction industry adapting to the advent of technology, manufacturing process now requires less supervision, efficient use of cement and saves on energy and resources. The use of ready mix concrete thus helps in ensuring high speed construction. Concreting can be done at a rate of 30-45 cubic meter per hour in comparison to plants that have a speed to 15-20 cubic meter per hour.

- **Environment Friendly**

Conserving our environment has become top priority in the modern world. The climate has been adversely affected with season changes and effects on human beings becoming evident. Preparation of cement on site involved a lot of risk due to dust emission and the strong rays of sun. Ready mix concrete reduces all these risks along with low noise pollution.

- **Convenient Delivery**

One of the primary goals of ready mix concrete is providing the best quality material within the needed time frame to the customers. Delivery time is important regardless of the quantity being big or small. It also benefits the constructor in terms of saving storage space for large quantities of cement and the required aggregates. The most important part is the convenience of being provided with the material without having to go through the hassle of accumulating the materials, preparing the mix or having to transport it to the work site. To add to the existing benefits, ready mix concrete is of great convenience for construction sites that are situated in or near congested localities and secluded areas.

- **Safety Measures and Environmental Control**

The plant follows strict safety protocols:

- Mandatory PPE (helmets, gloves, safety shoes)
- Dust suppression systems
- Noise control measures
- Proper handling and storage of materials
- Emergency shutdown procedures

Environmental protection measures include controlled waste disposal and reduced material wastage.

- **Technical Learning Outcomes**

The visit enhanced our understanding of:

- Industrial-scale concrete production
- Automation and batching accuracy
- Importance of quality control in structural safety
- Application of IS codes in practical construction
- Role of RMC in modern infrastructure development

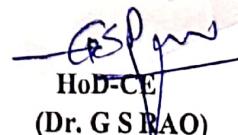
The industrial visit to the ACC Ready Mix Concrete Plant was technically enriching and educational. It provided practical exposure to modern concrete technology, automated batching systems, and quality assurance methods. The visit successfully bridged the gap between theoretical knowledge and industrial application, making it highly beneficial for civil engineering students.

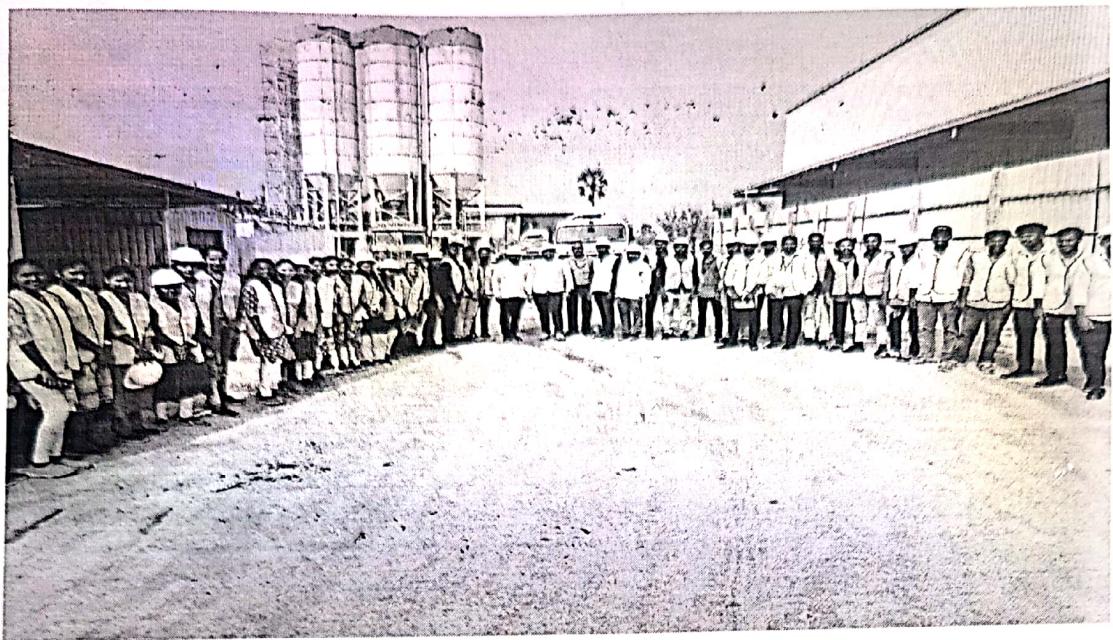
At last, the Faculty thanked the QC Engineer and Management for sparing their valuable time and sharing their vast knowledge to the students and the management assured that the students are welcome at any time to the plant and clarify any doubts related to the subject which enriches their knowledge practically.

**FEEDBACK AND ACTION TAKEN:**

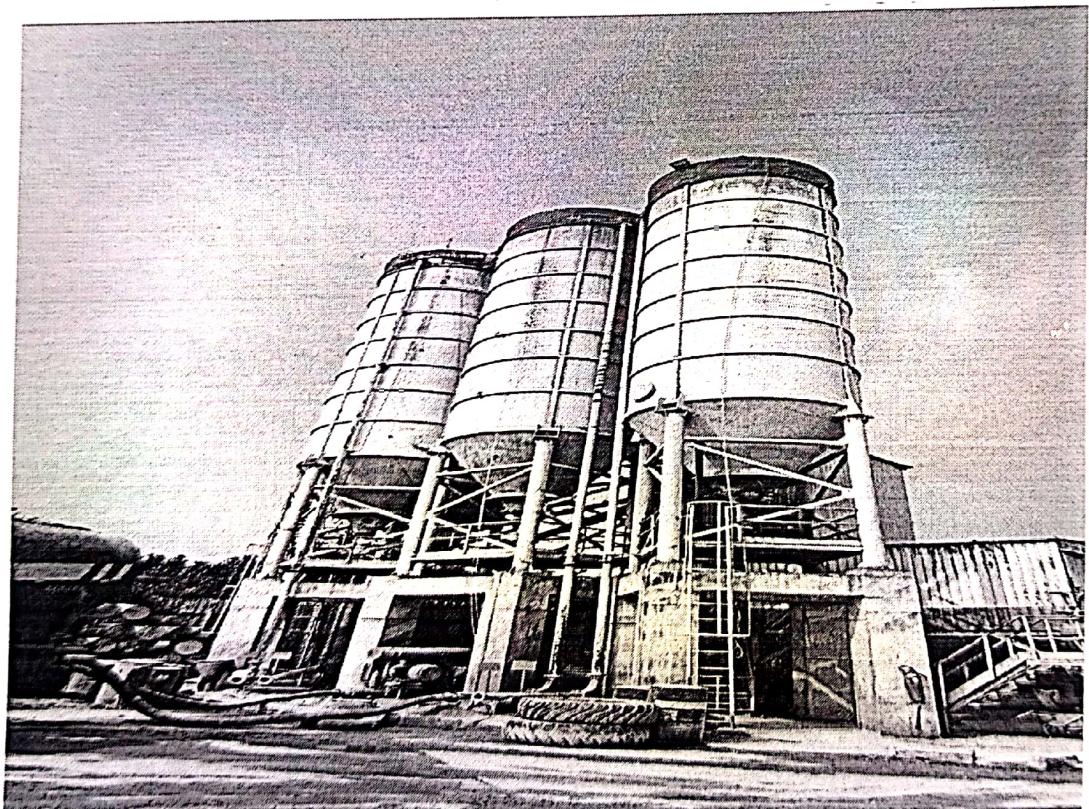
- Overall feedback is good.
- The students have gained knowledge practically about concrete and its present trends
- As per students feedback, more visits of this kind will be arranged

  
Industrial Visit i/c  
(Mr. K. Suresh Kumar)

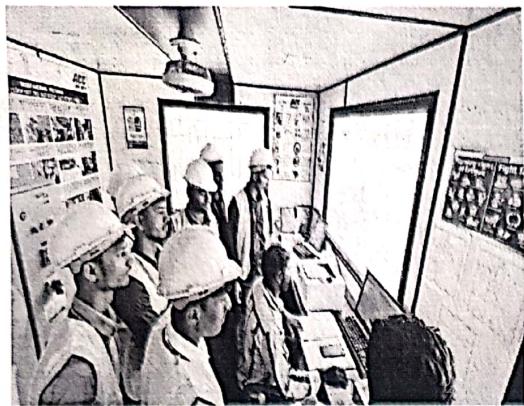
  
HoD-CE  
(Dr. G S RAO)



**Group Photo of Students, Faculty**

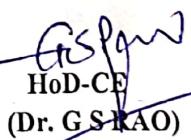


**Silos at ACC RMC Plant**



**J Vamshi Technical Head Explaining About The Workability Test Testing in Field**

  
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