

**REPORT ON INDUSTRIAL VISIT TO DESIGN  
MIX & M-SAND UNIT, BANGALORE**

MARCH – 8, 9, 10 2019

S3 CE-1

CIVIL DEPARTMENT

SCMS SCHOOL OF ENGINEERING & TECHNOLOGY

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# **REPORT ON INDUSTRIAL VISIT/TOUR**

As the proverb goes “The logic can take you from A to B, but imagination can take you anywhere” it perfectly corroborates to the magnificent creations of civil engineering which have been built by the admirers of Civil engineering following their creative insight. No other branch of engineering is much more creative and ingenious as civil engineering is, so in order to cater the creative minds of civil engineering students and to make them familiar with the practical side of their coursework, an industrial visit to Bangalore was organized by the Civil Engineering department of SCMS School Of Engineering & Technology on 8 March 2019.

On 7 March 2019, we 53 students of S3 CE – 1 , day scholars and hostellers alike, along with our faculty members assembled at 5:00 PM and left the campus at 6:00PM in the bus that we arranged for the occasion. We reached our hotel at Bangalore by 8:00 AM where we were given a warm welcome. Breakfast was served at 9:00AM and then we started our journey to Design Mix & M-sand Unit, Bangalore.

Our main purpose for this visit is to be familiar with manufacturing of Ready Mix Concrete (RMC) and the equipments used. Design Mix unit in Vishweshwarapura, Bangalore is a top company in the category of Ready Mix Concrete dealers. Also they are reputed for dealing with M-sand and Crushed stones.

We reached our destination by 10:30AM and we took a look around the plant with our faculties. We were shortly joined by an instructor who introduced himself and gave a brief description about the plant and its functioning. He interacted with us and explained about the type

of cement produced there. Over the next few hours we were shown and briefed about the various phase in an RMC plant. Our instructor gave us a thorough feel of the essence of civil engineer in the plant. His talk included the following topics:-

RMC is ready to use material with predetermined mixture of cement, sand, aggregates and water. RMC is type of concrete manufactured in a factory according to a set recipe or as per specification of the customer at a centrally located batching plant. It is delivered to worksite often in truck mixers capable of mixing the ingredients of the concrete en route or just before delivery of the batch.

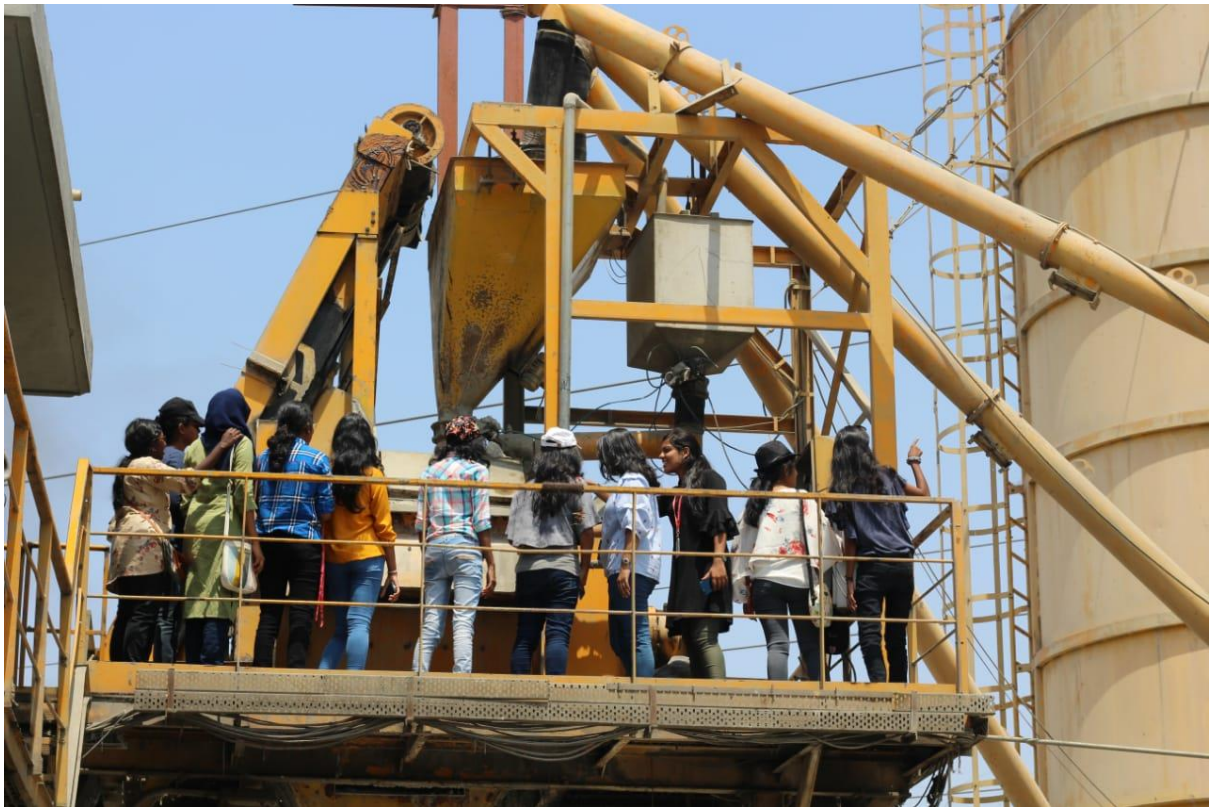
The second option is to mix the concrete at batching plant and deliver it in agitator truck which keeps the mixed concrete in correct form. RMC is preferred to use to on site concrete mixing because of the mixture precision and reduced worksite confusion. It also decreases labour , site supervision and project time result in savings .

By using RMC we can save time and money required for the labour . In the following places RMC can be used:-

- Major concerting projects like dams , roads, bridges, tunnels, canals etc
- For concreting in congested areas where storage of materials is not possible.
- Sites where intensity of traffic makes problems.
- When supervisor and labour staff is less.
- To reduce the time required for construction etc.
- He industrial and residential projects.



Students climbed up and down various staircases in the plant to get a good idea of the gigantic equipment there and the functions of each. It was thrilling to see the giant silos which were familiar to us from our textbook which was connected to the batching equipment. Our faculty taught that silos can store bulk cement in large quantities and thus will ensure optimum capacity running of the plant.



We were taken first to see the batching plant. Weigh batching was carried out there. Our instructor told us that batching by weight was more preferable to volume batching, as it is more accurate and leads to more uniform proportioning. The equipment was fully and all the ingredients were accurately batched.





Next we were taken into the mixing unit where massive stationary mixers were working with loud noise and flying dust . Central mixed concrete is made out of these mixers from where this freshly mixed concrete is conveyed to placing through big mixing trucks. It is actually worth seeing . Further procedure will take plce at site.

Our detour of the factory was at an end by 12:30Am. Even during this short span of time, we had learnt a lot from this plant. After spending a good deal of time at the project site we headed to our hotel for having lunch.

Ater lunch we went to see the Botanical garden and went for shopping at Commercial street in bangalore. We retured by 9:30Pm and had our dinner. The next day at 7:30AM we cheked out from the hotel , had breakfast and went to Vani vilasa sagara dam, Jogi Matti and after lunch we went to Chitradurga Fort which was a magnificent fort built purely of stones.

After sight seeing we went to our hotel. The following day was as exciting as the first two. We went for jeep trekking in the morning at Mullayagiri peak, Jhari waterfalls and Z point. After luch we had a small sight seeing and then we headed back to our college. We reached our college by 8:00AM.

This trip was immensely helpful for us to learn new techniques in the filed and also see beautiful ancient civil structues.