



POORNIMA

GROUP OF INSTITUTIONS

Industrial Visit at Orient Syntax Pvt. Ltd.

1. **Introduction:** 31 students from Department of Mechanical Engineering, PGI visited the yarn manufacturing plant of Orient Syntax Pvt. Ltd. on August 10, 2017 at Bhiwadi. The Timings were 03.30 PM to 5.00 PM. The visit was held under the supervision of **Mr. H.R. Sharma, (Managing Director) and Mr. Alok Banarjee (Head Manager).**

2. **Feedback:** The overall feedback of the industrial visit is given as follows:
 - a. The HR and the technical staff were very polite and supportive.
 - b. The hospitality was very satisfactory.
 - c. Description and Q & A during the visit were also explained very nicely and patiently.
 - d. The visit was very informative and gives a rich practical exposure to the students.

3. **Observations:** The observations of the industrial visit are as follows:
 - a. The industry was related to Yarn manufacturing. The Plants is having installed capacity of 50336 spindles that produces 18000 Metric tonnes of Yarn annually. It gives the practical exposure of yarn manufacturing processes and various types of Mechanisms to all students.
 - b. From the mechanical point of view we have observed working of different mechanisms like Cam follower system, mechanisms with higher pair and lower pair, different stages of maintenance system and Inventory control.
 - c. Two types of yarns produced there like regular quality single/double dyed yarn and fancy yarn like neps, slub, injection slub, coarse denier effect wooly, melange, fluorescent color.
 - d. The major customers are from Ludhiana, Amritsar, Mumbai, Iran and Saudi.
 - e. Another observation was the working of different departments for different yarn manufacturing processes.

4. **Departments:** There are following Major Departments:
 - a. Dye House
 - b. Blow Room
 - c. Carding
 - d. Drawing
 - e. Simplex

- f. Ring Frame
- g. Auto Winding
- h. Cheese Winding
- i. TFO Twisting
- j. Packing





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Industrial Visit at Sandhar Technologies Pvt. Ltd.

1. **Introduction:** 31 students from Department of Mechanical Engineering, PGI visited the automobile components manufacturing plant of Sandhar Technologies Pvt. Ltd. on August 10, 2017 at Bawal. The Timings were 11.00 AM to 1.00 PM. The visit was held under the supervision of **Mr. Kuldeep Sharma, (Operation Head, Sandhar Technologies Pvt. Ltd. Bawal Plant).**
2. **Feedback:** The overall feedback of the industrial visit is given as follows:
 - a. The HR and the technical staff were very polite and supportive.
 - b. The hospitality was very satisfactory.
 - c. Description and Q & A during the visit were also explained very nicely and patiently.
 - d. The visit was very informative and gives a rich practical exposure to the students.
3. **Observations:** The observations of the industrial visit are as follows:
 - a. The industry was related to Aluminum Die Casting. Two types of castings were produced there, one is High Pressure Die Casting and another one is Low Pressure Die Casting. It gives the practical exposure of manufacturing processes to all students.
 - b. The different automobile components were produced there like Engine cover, wheel hub, footrest of two wheeler, brake drums etc.
 - c. The major customers are TVS Motors and Royal Enfield.
 - d. Another observation was the working of different departments for different engineering processes.
4. **Departments:** There are following Major Departments:
 - a. **Casting Department:** It includes furnace to melt aluminum and silicon carbide and Injection Molding machines. Dies are prepared as per the customer specifications on CNC machines and used in injection molding machines. Robotic arms are used to handle molten metal. The products obtained from casting are unfinished and oversize.
 - b. **Machine Shop:** Products are finished in this department with the help of CNC machines with the help of programming and drawings given by the customers.
 - c. **Inspection and Quality Check Department:** All the products are checked with inspection gauges to check if they are in permissible range.

- d. **Paint Shop:** Chain conveyor mechanisms were used to handle the components. Products are painted manually with the help of sprayers operated by air compressors.
- e. **Packing Department:** Finally finished and painted products are packed here and sent to storage unit in order to dispatch to the customers as per their orders.

