

REPORT

Name of the Program:	Industrial Visit to Haier Appliances Washing Machine Division, Greater Noida
Date: 22 nd April 2025	No. of Participants: 43 students + 2 Faculty

An industrial visit was organized by was organized by the Department of Mechanical Engineering, Maharaja Agrasen Institute of Technology, Delhi to **HAIER APPLIANCES** Washing Machine Division. Haier is a multinational home appliances and consumer electronics company based in Qingdao, China, with a significant presence in India. The company has set up one of the largest industrial parks in India, spanning 122 acres in Greater Noida, where it manufactures a range of home appliances, including washing machines. With a production capacity of 1 million washing machines per year, Haier's facility showcases advanced manufacturing capabilities.

This visit provided an excellent opportunity for students to witness various processes involved in the production of washing machines and the quality control mechanisms employed to ensure high product standards. The focus of the visit was to familiarize the students with essential quality tools and techniques used in the industry, which are integral to maintaining the performance, durability, and reliability of Haier washing machines. An insight into Haier's product category was also provided. The visit was conducted under the guidance of Dr Piu Jain and Dr Surbhi Upadhyay, who provided valuable insights and helped students navigate through the experience.

The primary objectives of the visit were:

1. To understand the various production process and quality control process implemented.
2. To understand concepts like lean manufacturing, material handling, process optimization, continuous improvement philosophy (Kaizen) that are implemented in the industry.

During the visit, students had the chance to engage with industry professionals and observe the real-time application of quality tools and techniques. Below are the key areas covered during the visit:

1. Production Processes: Witnessing the real-time manufacturing of washing machines, advanced technologies and automation in production.

2. Quality Control Checks: Haier follows a comprehensive quality control system to ensure that every washing machine produced meets the company's high standards. Throughout the production process, multiple quality checkpoints are established to identify potential issues.

3. Inspection Stages: The quality control process starts with raw material inspection, followed by checks during the assembly process, and ends with a final inspection before packaging. Each product undergoes rigorous testing for functionality, safety, and durability.

4. Equipment Used: Modern testing equipment, such as vibration testers, load testers, and temperature simulators, are employed to simulate real-world conditions that the washing machines may encounter during their usage.

4. Kaizen - Continuous Improvement: Haier strongly emphasizes the philosophy of Kaizen, which focuses on continuous improvement in all aspects of the production process. Employees at all levels are encouraged to participate in improvement initiatives. Regular meetings and brainstorming sessions are conducted to gather suggestions from workers on how to optimize production processes, reduce waste, and improve product quality.

The industrial visit to Haier Appliances Washing Machine Division was an enriching experience for the students, providing valuable insights into the real-world application of quality control tools and techniques in the manufacturing industry. The concepts of Quality Control Checks, Root Cause Analysis, Kaizen (Continuous Improvement), and Quality Audits were explored in-depth, offering a comprehensive understanding of how Haier maintains its commitment to high-quality production standards. This visit reinforced the importance of quality management in the manufacturing industry and highlighted the practices that contribute to the overall success of a global brand like Haier.

The students gained practical knowledge that will help them in their future careers in engineering, manufacturing, and quality management. Overall, it was an excellent learning experience and an opportunity to bridge the gap between theoretical knowledge and practical application in the industry.



