



Date/Day: 23-04-2026 / Thursday

Title: Industrial Visit to Gansons Pvt. Ltd., Thane

Objective:

- To provide M. Pharm First Year students with practical exposure to the manufacturing of pharmaceutical process equipment used in solid dosage formulation industries.
- To understand the design, fabrication, automation, and operational principles of pharmaceutical equipment such as tablet coaters, mills, grinders, granulators, sifters, and powder transfer systems.
- To bridge the gap between theoretical concepts of pharmaceutical engineering and industrial manufacturing practices..

Program Outcomes: PO1, PO2, PO4, PO5, PO7, PO9, PO10

Details of the Resource Person: Dr. Akanksha Singh, Faculty MES H.K. College of Pharmacy accompanied First Year M. Pharm students to the industrial unit.

Participants Details:

Total no. of college students: 15

Total no of Faculty: 1

Summary of the Activity:

An industrial visit was organized for **15 M. Pharm First Year students** to **Gansons Pvt. Ltd.**, one of India's leading manufacturers of cGMP pharmaceutical process equipment with over 75 years of engineering expertise. The company specializes in granulation, coating, drying, particle sizing, blending, and powder handling systems used across pharmaceutical manufacturing facilities globally.

The visit commenced with an introductory presentation by the technical team of Gansons, wherein students were briefed about the company's history, manufacturing divisions, safety protocols, equipment design philosophy, and automation systems integrated with modern Pharma 4.0 manufacturing concepts.

Manufacturing Department

Students observed the complete manufacturing workflow involved in producing pharmaceutical processing equipment. The visit provided insight into:

- Stainless steel fabrication and welding processes used in GMP-compliant equipment manufacturing.
- CNC machining operations for precision engineering of parts.
- Surface finishing, polishing, and passivation to maintain hygiene and corrosion resistance.
- Assembly of motors, impellers, spray systems, control panels, and automation modules.
- Validation and performance testing of finished equipment before dispatch.

The importance of engineering precision, regulatory compliance, and clean design in pharmaceutical equipment manufacturing was emphasized throughout the visit.

Tablet Coating System – GansCoater®

Students were introduced to the **GansCoater® automated tablet coating system**, designed for film coating, sugar coating, enteric coating, and functional coating applications. The technical team explained:

- Working principle of rotating coating pan systems.
- Uniform spray application through advanced nozzle assemblies.
- Controlled inlet air temperature and exhaust air systems for efficient drying.
- Process automation through PLC/HMI interfaces for recipe-controlled operations.
- Automatic washing systems (WIP/CIP) integrated for cleaning validation.

Students gained understanding of coating uniformity, drying efficiency, and defect prevention during tablet coating operations.

Mill / Grinder / Particle Sizing Equipment

A detailed demonstration was given on pharmaceutical milling and grinding equipment, including conical mills and sifting systems. Students learned about:

- Particle size reduction principles.
- Rotor–screen mechanism used in milling.
- Uniform granule sizing for downstream compression and encapsulation.
- Reduction of agglomerates and improved powder flowability.
- Containment systems minimizing dust generation and cross-contamination.

The importance of controlled particle size in achieving content uniformity and process reproducibility was explained with practical examples.

Granulation and Mixing Systems

Students also observed:

- High Shear Mixer Granulators for wet granulation.
- Fluid Bed Drying systems for rapid and uniform drying of granules.
- Diffusion blenders and conical screw mixers for gentle powder mixing.
- Vacuum transfer systems for contained powder movement.

The integration of these unit operations into continuous pharmaceutical manufacturing lines was discussed in detail.

Automation and Quality Focus

The visit highlighted how Gansons incorporates:

- PLC-based automation
- Batch recipe programming
- Sensor-based monitoring
- Data logging for regulatory compliance
- GMP-oriented hygienic design
- Energy-efficient process systems

Students appreciated how engineering, automation, and pharmaceutical process understanding combine to build globally competitive manufacturing equipment.

Brochure/Photo Gallery



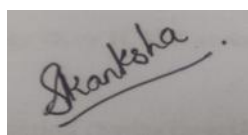
Key Outcome of the Activity:

- Students gained firsthand exposure to the manufacturing of pharmaceutical process equipment.
- Practical understanding of the working principles of mills, grinders, sifters, granulators, and coating systems was achieved.
- Students developed insight into equipment design considerations for GMP compliance and pharmaceutical automation.
- The visit strengthened concepts related to unit operations in pharmaceutical manufacturing and industrial process engineering.
- Students were able to correlate classroom learning with real-world pharmaceutical equipment manufacturing practices.

Links for social media:

LinkedIn:	https://www.linkedin.com/posts/h-k-college-of-pharmacy-mumbai-303524222_overview-of-the-visit-during-the-visit-share-7454813599740592128-x8Kg?utm_source=share&utm_medium=member_desktop&rcm=ACoAADf2WrMBUFgAeZVznddoMfc3VtpDnyqdS4Y
Facebook:	https://www.facebook.com/photo/?fbid=1446127094193595&set=a.470185965121051
Instagram:	https://www.instagram.com/p/DXq0dadiCSd/?utm_source=ig_web_copy_link&igsh=MzRIODBiNWFIZA==

Event Coordinator/s



Dr. Akanksha Singh

IQAC Coordinator



Dr. Archana Upadhyaya

Principal



Dr. Tushar Lokhande

Dr. Jaya Agnihotri

