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Department of Mechanical Engineering

Industrial Visit Report – Kumar Pumps & Motors, Tenali

II/IV B.Tech Regular and Lateral Entry Students of Mechanical Engineering Department were taken to Sri Lakshmi Ganapathi Engg. Works, Tenali for industrial visit on 24-08-2024 to acquire knowledge by seeing practically the things happening in Sri Lakshmi Ganapathi Engg. Works. Initially the Supervisory team explained demo lecture on Preparation of castings for Pumps and Motors. As a part of visit 47 students and 2 faculty (Dr. AVS Ramprasad and Dr. B Kiran Kumar) have visited.

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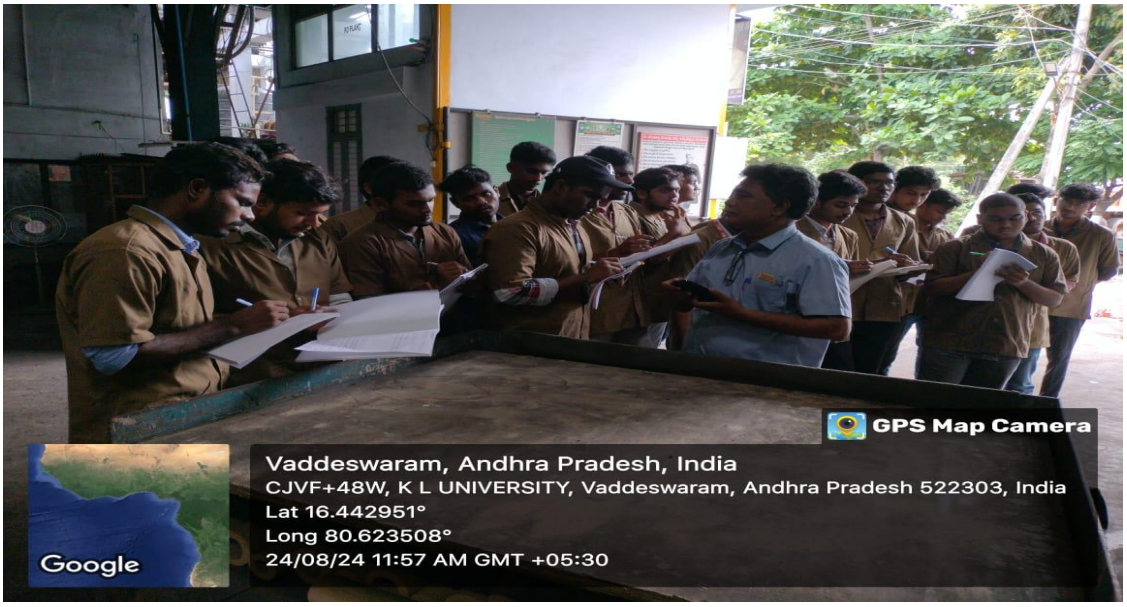
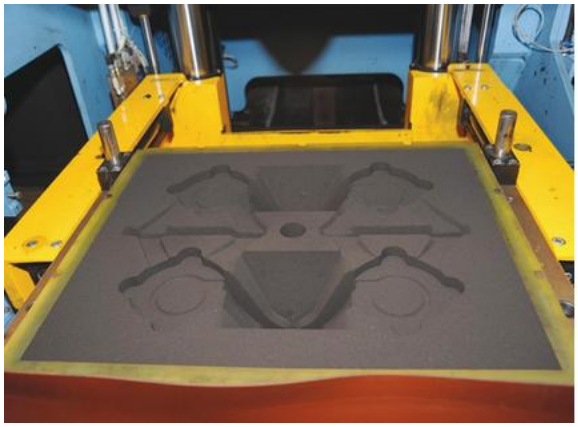


Sri Lakshmi Ganapathi Engineering Works, located in Tenali, is a well-established engineering firm known for its expertise in foundry operations. The foundry division specializes in the production of high-quality metal castings for various industrial applications. The division employs advanced techniques and equipment to produce castings that meet stringent quality standards. The foundry operations at Sri Lakshmi Ganapathi Engineering Works encompass a series of meticulously planned and executed steps to ensure the production of precise and reliable castings.

1. Pattern Making
2. Molding
3. Core Making
4. Melting and Pouring

5. Cooling and Solidification
6. Shakeout and Cleaning
7. Inspection and Quality Control
8. Finishing and Machining

All the students were taken to the molding section, where they observed the machine molding process followed by the metal pouring section, witnessing the pouring of molten metal into the prepared molds. Subsequently, they observed the separation of semi-finished products and the removal of gating system parts separately. The prepared semi-finished parts were then subjected to an air blast device to separate the carbon particles.



Additionally, students gained an understanding of the core-making machine, witnessing the injection of core sand. In the core preparation section, they examined how to correct a damaged core, which is necessary for placement in the prepared mold. The process of preparing molten metal in an electric induction

furnace was also observed, along with a clear visualization of how impurities were removed from the molten metal.

In this manner, students gained knowledge of processing a semi-finished product at various stages of molding, allowing them to comprehend and retain the information effectively.

At last, Dr. AVS Ramprasad, Associate Professor and Dr. B Kiran Kumar, Associate Professor thanked management of Sri Lakshmi Ganapathi Engg. for accepting and providing guidance for the industrial visit.

Department of Mechanical Engineering

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