



REPORT

Industry Name: Ice Factory

Place of Visit : Pachu Bandar, Vasai(W)

Date of Visit: 11th March 2025

Department of Mechanical Engineering of VIVA Institute of Technology, Virar organized an Industrial Visit to "Ice Factory" at Pachu Bandar, Vasai (W) for the subject Heating, Ventilation, Air- Conditioning and Refrigeration Lab (Sem VI). The visit was conducted for 1 day on 11th March 2025 for all the students of S.E., T.E. and B.E.Mechanical Engineering along with all the faculty members of Mechanical Engineering. 18 students and all the faculties attended the visit.

The Ice Factory at Pachu Bandar is a well-established facility that produces large quantities of block ice. This ice is primarily supplied to industries such as fisheries, chemical, pharmaceutical companies. The factory utilizes ammonia (NH_3) as its primary refrigerant due to its high efficiency and low environmental impact. The refrigeration cycle employed here follows the vapor compression cycle, which includes the core components namely compressor, condenser, expansion valve, and evaporator. The compressors used are suitable to operate with Ammonia and Freon refrigerant. They make use of water cooled condensers for condensing the refrigerant. The Ammonia receiver is used to prevent excessive liquid ammonia from staying in the condenser. The cooling coil evaporator is used as a heat transfer surface in which a volatile liquid is vaporized for the purpose of removing heat from refrigerated space. The chilling tank consist of ice tank, insulation of ice tank and ice block. The ice tank holds the cans, coils and the agitator which is insulated with twelve to eighteen inches of insulating material. The size of ice cans vary according to the requirement. Apart from these there are other electrical equipments like voltmeter, ammeter, temperature sensor etc. The visit provided students and faculty with a comprehensive understanding of the refrigeration system utilized in the ice plant.





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And Affiliated to University of Mumbai

NAAC "B++" Grade



BRH4+P7V, Pachy Bandar, Vasai-Virar, Maharashtra 401201, India

Vasai-Virar
Maharashtra
India



34°C
93°F

2025-03-11(Tue) 11:19(AM)



BRM3+49H, Pachy Bandar Rd, Police Colony, Vasai West, Vasai-Virar, Maharashtra 401201, India

Vasai-Virar
Maharashtra
India



35°C
95°F

2025-03-11(Tue) 11:12(AM)



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