

# Gyanmanjari Institute of Technology Bhavnagar



## Steelcast Ltd., Bhavnagar Industrial Visit Report

Visit Date: 11/02/2026 and 12/02/2026

<b>No. of Student</b>	56
<b>Department</b>	Mechanical Engineering
<b>Semester</b>	Diploma & B.Tech. - 2 <sup>nd</sup> , 4 <sup>th</sup> and 6 <sup>th</sup>
<b>Faculty Co-Ordinator</b>	Dr. Jigar K. Andharia & Prajesh Dave

## Industry Profile:

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**Company Name:** Steelcast Ltd., Bhavnagar – 364002, Gujarat, India.

**Work Profile:** Steelcast Ltd. is a leading manufacturer of high-quality alloy steel and stainless-steel castings, primarily catering to mining, earthmoving, cement, power, and railways sectors. The company is well known for its advanced foundry practices, precision casting technology, strict quality control systems, and compliance with international standards.

## Objective of Visit

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1. **Understanding Foundry Operations:** To study the complete steel casting manufacturing process, including pattern making, mould preparation, melting, pouring, solidification, and fettling operations.
2. **Exposure to Metallurgical Practices:** To gain practical knowledge of material selection, alloy composition, heat treatment processes, and their effect on mechanical properties of steel castings.
3. **Quality Control & Inspection:** To understand testing and inspection methods such as chemical analysis, non-destructive testing (NDT), dimensional inspection, and final product certification.
4. **Industrial Safety & Automation:** To observe safety practices, material handling systems, furnace operations, and the role of automation in modern foundry industries.

## About Visit

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The industrial visit to Steelcast Ltd., Bhavnagar was organized on 11th February 2026 for Diploma & B.Tech. Mechanical Engineering students from 2nd, 4th, and 6th semesters.

A total of 28 students participated in the visit under the guidance of Faculty: Prof. Prajesh Dave.

The visit commenced at 02:00 PM, where students were welcomed by the company's technical staff and safety officers.

Initially, students were given a brief introductory presentation about Steelcast Ltd., covering the company history, product range, major clients, and manufacturing capabilities. This was followed by a mandatory safety briefing, highlighting the use of personal protective equipment (PPE), safe movement within the plant, and emergency protocols.

During the plant tour, students observed:

- Raw material storage and handling systems
- Induction furnace operations used for melting steel
- Moulding and pouring processes
- Heat treatment furnaces for improving material properties
- Fettling, grinding, and finishing operations
- Quality inspection and testing laboratories

The technical staff explained each process in detail and clarified students' doubts regarding casting defects, process control, and production challenges. Students were also exposed to real-time industrial constraints such as process optimization, safety compliance, and quality assurance.

The visit concluded with an interactive question-and-answer session, where students discussed career opportunities, required skill sets, and the importance of industrial training in Diploma & B.Tech. education.

The industrial visit successfully ended at 05:00 PM, providing students with valuable practical exposure, industry-oriented knowledge, and a clear understanding of foundry and steel casting operations.



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