



Industrial Visit

Date of Industrial Visit: 4th September 2024

Subject: “Industrial Visit at Die Tek Pvt. Limited, Palghar”.

As a part of curriculum and considering the benefits & personal growth of individuals, the management of SJCEM recommended “One day Industrial Visit” for Third Year / Fifth Semester students. Based on the scope of Training, Internship and Placement, the Visit been conducted. Mechanical Engineering department 01-day visit to “**Die Tek Pvt. Limited, Palghar,**” located at Palghar. The visit was organized to provide insights into the industrial processes involved in die and tool manufacturing, precision engineering, and the advanced technologies used in this sector. The company is renowned for producing high-quality dies, tools, and molds, primarily used in the automotive, electronics, and consumer goods industries.

Location: Plot No. 2, Dewan And Sons Udyog Nagar, Kacheri Roadalyali, Palghar West

Objective of the Visit:

The primary objectives of the industrial visit were:

- ✓ To learn about the different types of springs and their manufacturing processes.
- ✓ To understand the role of advanced machinery and technology in production.
- ✓ To observe the quality control measures followed by the company.
- ✓ To gain practical insights into safety protocols and workplace management in a manufacturing setup.

Overview of Die Tek Pvt. Ltd.

Die Tek Pvt. Ltd. specializes in the design and manufacturing of dies, molds, and precision tools. The company has a reputation for delivering high-precision products to its clients across various industries, including automotive, aerospace, electronics, and packaging. Equipped with state-of-the-art machinery, Die Tek is committed to maintaining high standards of quality and meeting client-specific requirements.

Manufacturing Process at Die Tek Pvt. Ltd.

The visit provided an opportunity to observe various stages of the die manufacturing process, which includes: The spring manufacturing process at Die Tek Springs involves several critical stages, which we observed during the visit:

1. **Raw Material Selection:** The process begins with the selection of high-quality wire materials, primarily stainless steel, carbon steel, and alloy steel, based on the specific requirements of the spring being produced.

2.





3. **Wire Drawing:** The raw wire is drawn through dies to achieve the required diameter and strength. This ensures uniform thickness and optimal mechanical properties for spring production.
4. **Coiling and Forming:** Springs are formed by coiling the wire into the desired shape using CNC coiling machines. The type of spring (compression, tension, or torsion) determines the specific coiling technique used. The CNC machines ensure precision and accuracy in forming the springs.
5. **Heat Treatment:** After coiling, the springs undergo heat treatment in furnaces. This step is crucial to increase the durability, flexibility, and resilience of the springs by relieving internal stresses and improving their mechanical properties.
6. **Surface Finishing:** Depending on customer specifications, the springs may undergo various surface treatments such as electroplating, galvanizing, or powder coating. This improves the corrosion resistance and appearance of the springs.
7. **Quality Inspection:** Each batch of springs is subjected to rigorous quality control checks. Non-destructive testing methods, such as tensile strength testing, dimensional checks, and load testing, are performed to ensure the springs meet the required Drum Polishing.





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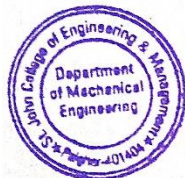


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Attendance List

Roll No	PID	Student Name	Attendance Mark
1	EU1225006	Bansal Aryan Atul Pooja	A
2	EU2225006	Bhuyal Bhavesh Sunil Suvarna	P
3	EU1225005	Jadhav Rugved Narendra Rashmi	P
4	EU2225007	Khadkya Rakesh Barkya Saku	P
5	EU2225008	Nagavasi Ashwin Lallu Pramila	P
6	EU2225012	Nanganure Darshan Dattatray Sunita	P
7	EU2225002	Patankar Sachit Ashish Ruby	P
8	EU1225001	Patil Darpan Dinesh Devyani	P
9	EU2225010	Patil Harsh Moreshwar Sumita	A
10	EU2225004	Patil Vinay Anandrao Suparna	P
11	EU2225009	Patil Yograj Bharat Bharati	P
12	EU2225011	Singh Aakash Pramod Sudha	P
13	EU1135045	Thomas Ivan Alex Shiju	P
14	EU2225001	Vakiti Vasant Shrinuvashulu Kalpana	P
15	EU1225008	Yadav Yug Ajay Deepali	P
16	EU1215006	Pagdhare Satkar Chitrasen Archana	P
17	EU1215007	Singh Aditya Vijay Pushpa	P
18	EU1215017	Haldar Pratham Narayan Geeta	A
19	EU1215003	Save Arush Ninad Supriya	A
20	EU2215012	Krishna Prathuesh Balu Shugi	A

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