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|  | Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering<br>& Technology, Baramati<br>2025-26 |  |
|                                                                                  | Industry Institute Interaction cell (IIIC)<br>Department of Electrical Engineering                 |                                                                                    |
|                                                                                  | Industrial Visit Report                                                                            |                                                                                    |

**Name of the Industry: Yuvraj Electricals & Contractors**

**Name of the Proprietor: Mr. Yuvraj Gawade**

**Date of Visit:** Saturday, 30/08/2025

**Visited by:** Faculties of Electrical Engg. Dept. VPKBIET, Baramati

**Location:** Gojubavi, Baramati.

## 1. Introduction

An industrial visit was organized for the faculty members of the Department of Electrical Engineering to Yuvraj Electricals & Contractors, a firm engaged in maintenance and repair of distribution and power transformers. The purpose of the visit was to understand the practical aspects of transformer servicing, diagnostics, and fault rectification techniques, which are crucial in the reliable operation of power systems. The MoU was signed with Yuvraj Electricals & Contractors on 25/07/2025 by Mrs. S.D. Rokade & Mrs. V.V. Deokate. (Assistant Professor, VPKBIET, Baramati).

## 2. Objectives of the Visit

- To gain knowledge of transformer **testing, inspection, and fault detection methods**.
- To observe practical processes involved in **overhauling, rewinding, and oil filtration**.
- To study preventive and corrective **maintenance practices** for transformers.
- To strengthen the **industry–institute interaction** for academic and research benefit.

## 3. About Yuvraj Electricals & Contractors

Yuvraj Electricals & Contractors is actively involved in:

- Maintenance and Repair of Transformers (distribution and small power range).
- Testing & Diagnostics: Insulation resistance, winding resistance, turns ratio, dielectric strength of oil, etc.
- Repair Services: Rewinding of HV/LV coils, replacement of bushings, gasket sealing, core and winding drying.
- Transformer Oil Filtration and dehydration to improve dielectric properties.

- **4. Key Learnings from the Visit**

Faculty members gained insights into:

- Causes of Transformer Failures: insulation breakdown, winding faults, overheating, and oil contamination.
- Maintenance Procedures: periodic inspection, preventive servicing, and condition monitoring.
- Repair Techniques: coil rewinding, core assembly repairs, replacement of accessories.
- Oil Filtration & Testing: importance of moisture removal and dielectric strength improvement.
- Safety Practices in handling high-voltage equipment during servicing.
- Discussions on recent trends like dry-type transformers and online condition monitoring.

**5. Outcomes of the Visit**

- Faculty understood the end-to-end process of transformer repair and servicing.
- Enhanced exposure to testing equipment and field practices beyond classroom theory.
- Opportunities identified for student training, workshops, and industry-collaborated projects.
- Strengthened the academic–industrial linkage for curriculum enrichment and applied research.

**6. Name of the faculties present for the industrial visit:**

- 1)Dr. Gaurav S. Gadge
- 2)Mrs. Pooja N. Jaiswal
- 3)Mr. Rohit S. Tarade
- 4)Mr. Pavan D. Upadhye
- 5)Mr. Dipak S. Yeole
- 6)Mrs. Jyoti S. Kulkarni
- 7)Mr. Sandip D. Shelar
- 8) Mrs. Vaishali V. Deokate
- 9)Mr. Ajinkya V. Golande
- 10)Mr. Akshay B. Akhade
- 11)Mr. Arnab Pal
- 12)Mr. Kunal Kumar

## 7. Conclusion

The industrial visit to Yuvraj Electricals & Contractors was highly beneficial in enhancing the practical knowledge of transformer maintenance and repair. The insights gained will support faculty members in strengthening teaching-learning practices, particularly in the areas of power systems, high-voltage engineering, and electrical machine maintenance.

## 8. Acknowledgement

We express our sincere gratitude to:

- Mr. Yuvraj Gawade, and his team members for detailed technical explanations and guidance during the visit.
- Hon. Principal Dr. S. B. Lande for his continuous motivation and support in arranging industry exposure for faculty.
- Respected Dr.G.S.Gadge(Head,EED) for facilitating this valuable industrial exposure. and all the faculties from Electrical Engineering Department, VPKBIET,Baramati.

## 9. Visit photographs:









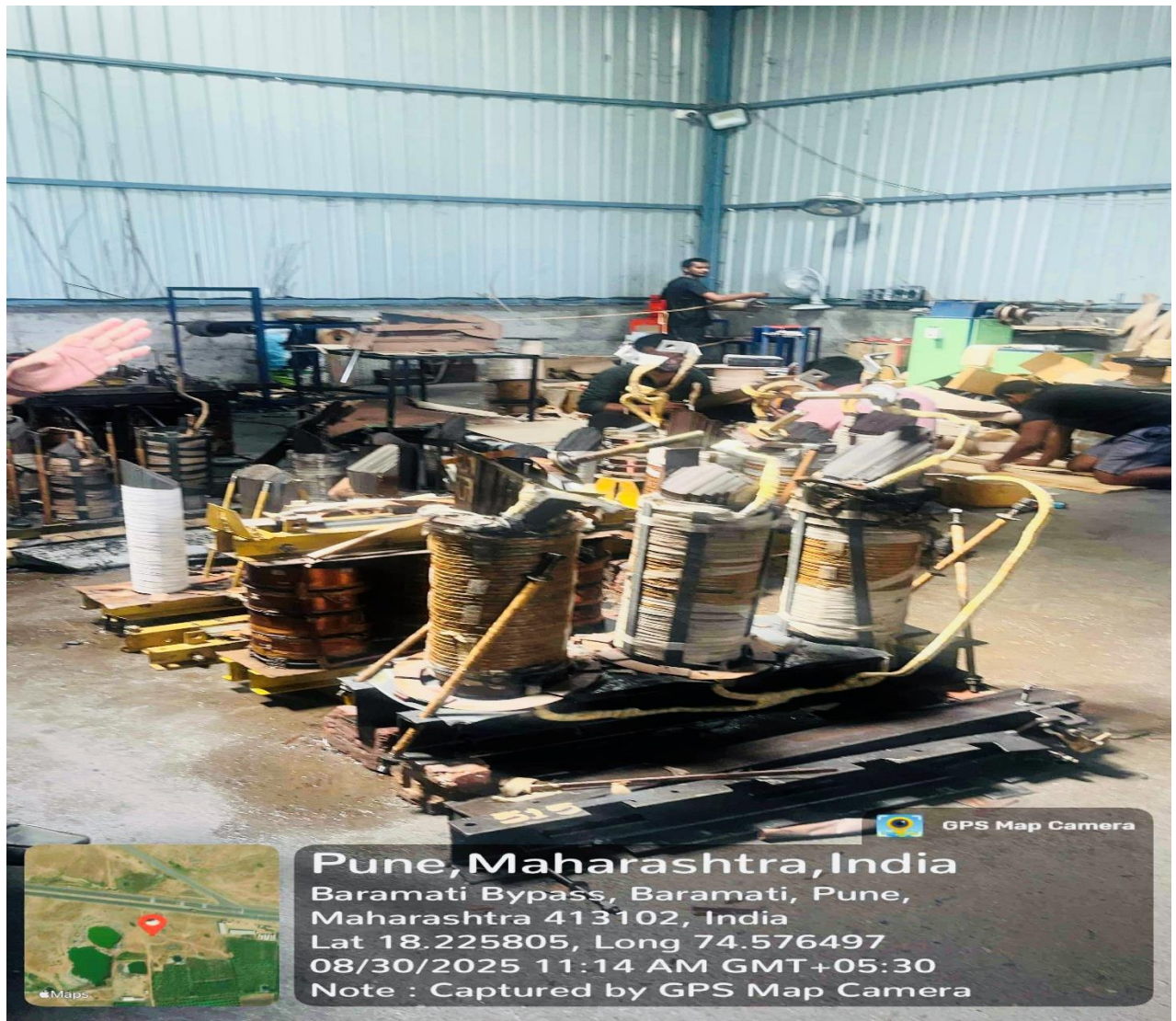
Pune, Maharashtra, India

Baramati Bypass, Baramati, Pune,  
Maharashtra 413102, India

Lat 18.225790, Long 74.576488

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