Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

Old Bombay Road, GachiBowli, Hyderabad – 500032. TS, India

Quality & Productivity Division

CPDP on

TOTAL PRODUCTIVE MAINTENANCE

10 – 13 March, 2025

(An ISO 9001:2015, ISO 14001:2015, ISO/IEC 17025:2017, ISO 45001:2018, ISO 50001:2018 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

INTRODUCTION

- In today's highly competitive business environment, staying ahead in the market is a key determinant of long-term success for any organization, large or small. Achieving and maintaining a competitive edge is critical for sustaining growth and profitability in the face of increasing competition and market pressures.

- One of the most vital functions in any organization is manufacturing, as it directly impacts product quality, cost, and efficiency. In order to meet the core goal of profitability—both now and in the future—manufacturing operations must embrace lean principles. Lean manufacturing is all about achieving more output with fewer inputs, which leads to optimized operations. This results in greater productivity, higher quality, a continuous reduction in conversion costs, and better utilization of resources. Moreover, these improvements positively impact both customer and employee satisfaction, creating a sustainable competitive advantage.

- A proven strategy for achieving all of these goals is through the implementation of Total Productive Maintenance (TPM). TPM is a comprehensive maintenance approach that works to eliminate breakdowns, accidents, and defects, thereby fully optimizing costs. TPM is built around the concept of maximizing equipment effectiveness and creating a culture of continuous improvement throughout the organization.

- The eight pillars of TPM serve as a holistic framework that addresses every aspect of manufacturing operations. From Autonomous Maintenance (Jishu-Hozen) to Education and Training (E&T), each pillar plays a critical role in reducing waste, enhancing productivity, and improving overall operational efficiency. These pillars come together to create a seamless, well-functioning system that empowers employees and drives operational excellence.

- By embracing TPM, organizations can ensure that their manufacturing processes are optimized, costs are minimized, and quality is consistently high, leading to long-term success in the market. This course on Total Productive Maintenance will provide participants with the knowledge and tools they need to implement TPM practices within their own organizations, enabling them to drive continuous improvement and maximize their operational potential.

OBJECTIVES

The primary objective of this program is to provide participants with a comprehensive understanding of Total Productive Maintenance (TPM), its principles, and how to successfully implement it within an organization. The course aims to equip participants with the tools, techniques, and methodologies necessary to foster an environment of continuous improvement and achieve enhanced productivity.

By the end of the program, participants will have a clear understanding of:

- How to implement TPM effectively in their organizations.
- The role of each of the eight pillars in driving organizational improvement.
- Techniques for maximizing equipment effectiveness and eliminating downtime.
- The practical applications of TPM in everyday operations.

COVERAGE

This course will comprehensively cover the key elements of TPM, including:

- What is TPM?: Definition, key elements, tools, and expectations for successful implementation.
- Workplace Organization with 5S: A fundamental step towards creating a clean, organized, and efficient workplace, setting the stage for TPM practices.
- Basic Concepts of TPM: An introduction to the 8 Pillars of TPM, each focusing on a specific area of improvement within the manufacturing process.

- ❖ Overall Equipment Effectiveness (OEE): Understanding the concept of OEE, how to calculate it, and how to use it as a benchmark for measuring equipment efficiency.
- ❖ Understanding the 6 Big Losses: Identifying and addressing the six major types of losses that impact equipment effectiveness and overall productivity.
- ❖ TPM Problem-Solving Tools: Practical tools and techniques for identifying problems, finding root causes, and implementing effective solutions in a TPM environment.
- ❖ Maintenance Philosophies: Different approaches to maintenance, with a focus on proactive strategies for reducing equipment failure and downtime.
- ❖ Machine Management and Quality Initiatives: Best practices for managing equipment, and how TPM can drive quality improvements at all stages of production.
- ❖ Approach for TPM Implementation: Step-by-step guidance on how to successfully implement TPM, from initial assessment to full implementation.
- ❖ TPM Implementation: Understanding the critical steps in deploying TPM across all facets of the organization, with a focus on getting results.
- ❖ A TPM Case Study: Real-world examples of TPM in action, showcasing the effectiveness of TPM principles in addressing common manufacturing challenges.

OUTCOMES:

By the end of this program, participants will be able to:

- ❖ **Understand the principles and practices of Total Productive Maintenance**: Gain a deep understanding of the TPM philosophy and how it can be applied to achieve higher levels of operational efficiency.

- ❖ **Develop and implement a TPM programme**: Equip themselves with the tools and strategies to create and roll out a TPM program tailored to their organization's needs.

- ❖ **Work towards zero losses**: Learn how to focus on eliminating downtime, defects, and losses through a structured approach to maintenance and continuous improvement.

METHODOLOGY

The course is designed to provide a comprehensive learning package through the use of formal lectures, individual exercises, interactive exercises, case studies, role playing, and group discussions.

Participants are encouraged to present case studies from their respective organizations for discussion amongst the participants.

TARGET PARTICIPANTS

The course is suitable for those involved in:

- Efficient maintenance of machinery
- Coordinators involved in continuous improvement
- Organizations at any level of a lean journey
- Engineers, Managers, Supervisors, Scientists, Entrepreneurs
- Manufacturing and Maintenance personnel

PROGRAMME VENUE, DATES & TIMINGS

Venue: Engineering Staff College of India (ESCI) Campus, Beside CARE Hospital, Gachi Bowli, Hyderabad. 500032. TELANGANA STATE, India.

Dates: **10 – 13 March, 2025**

Timings: On the first day Registration will commence at 09:45 hrs. On all other days the programme timings will be from 09:45 – 17:00hrs with breaks in between for tea and lunch.

COURSE DIRECTOR

Dr. C. S. Krishna Prasada Rao,
Head – Quality & Productivity Division, Engineering Staff College of India

LEAD FACULTY

Eminent Experts from industry and academia who have first-hand exposure to techniques of TPM will conduct the sessions and share their knowledge and expertise.

COURSE FEE

Rs. 22,000/- + 18% GST per participant. Fee includes, Soft copy of course material, course kit, twin-sharing / single AC accommodation as per availability, breakfast, lunch, dinner, tea / coffee and snacks during the actual days of training program **(Offline mode)**

Rs. 14,000/- + 18% GST per participant. Fee includes Experts Online Support and Reading Material Softcopy **(Online mode)**

DISCOUNT

Non-Residential Fee: 10% discount on course fee is allowed for non-residential participants of Off-Line mode only.

GSTIN: 36AAATT3439Q1ZV
PAN Card No: - AAATT3439Q.

MODE OF PAYMENT:

Programme fee is to be paid in favour of **"IE(I) - Engineering Staff College of India"** in the form of demand draft payable at Hyderabad.

Alternatively, the payment may be made by Electronic Fund Transfer (EFT) to ESCI – SB A/c No. 912010049234564 with Axis Bank Ltd., Gachibowli branch, Old Mumbai Highway, Cyberhills Colony, P Janardhan Reddy Nagar, Gachibowli, Hyderabad–500032, T.S., by NEFT/ RTGS/ IFSC Code No. UTIB0000733 – MICR No.500211020.

While using EFT method of payment, please ensure to communicate us your company name, our invoice reference and Programme title.

REGISTRATION

Online registration shall be available on ESCI website.

To register, manually please send your nominations giving details of name, designation, contact address, email address, mobile, telephone and fax number of the participants along with the details of mode of payment of course fee, addressed to:

Dr. C. S. Krishna Prasada Rao,
Head-Quality & Productivity Division**,**
Er. A S Vasu Kumar,
Senior Faculty, Quality & Productivity Division, ESCI,
Gachi Bowli, Hyderabad – 500 032
Direct Phones: 040 – 66304133, 66304110
Email: qp@escihyd.org Web site: www.escihyd.org

CERTIFICATE

After successful completion of the course certificate will be awarded to the participants

GENERAL INFORMATION

- ESCI encourages participants to present case studies from their respective organizations.
- ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in at 1200 hrs.) and one day after conclusion (Check-out at1200 hrs.) of the program duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation)
- Well developed Information Centre and Internet facilities are available to the participants.