



CII Virtual Session on **Robotic Manufacturing Process Automation in Industry 4.0**

13th & 14th March 2024 (Wednesday & Thursday)
02:30 p.m. to 5:30 p.m.



Introduction

Automation and Robotics is one of the key technologies comprising Industry 4.0.

Today, the use of industrial robots and automation has seen exponential growth in the manufacturing sector over recent years. With improved production efficiency, safety, and quality assurance at the forefront of companies' interests, there has been substantial ongoing investment and implementation of robotics in manufacturing facilities around the globe. In reality, when combined with human capital, the benefits of industrial robotic automation are amplified and can help ensure manufacturers meet their production goals more efficiently.

The advantages of **Robotic Manufacturing Process Automation (RMPA)** are many. A well-orchestrated RMPA training program will lower the operational costs and improve the work safety. In fact, helps to the industries to increased production output and faster the return on investment (ROI). In addition, it helps to lowers the carbon footprints to the environments.

CII Naoroji Godrej Centre of Manufacturing Excellence is organizing a virtual session on **13th & 14th March 2024 from 02:30 p.m. to 05:30 p.m. (Wednesday & Thursday)** to this effect, which will gain participants gain valuable and crucial insights on automation and robotics inducted manufacturing process.

Automation refers to a wide range of technologies that reduce human intervention in processes. Human intervention is reduced by predetermining decision criteria, subprocess relationships, and related actions — and embodying those predeterminations in machines.

Robotics is a branch of engineering that involves the conception, design, manufacture, and operation of robots. The objective of the robotics field is to create intelligent machines that can assist humans in a variety of ways. Robotics can take on a number of forms.

Benefits of Industrial Automation



Learning Objectives

- To understand the manufacturing automation process.
- Robotics as a step for automation system.
- To understand benefits of automation system.

Key Takeaways

- Practical Implementation of Industry 4.0 wrt Robotics and Automation.
- Challenges and Opportunities in this technology aspect.
- Identify use cases within their organizations.
- How to implement in a cost effective and sustainable way?

Who Should Attend?

- Decision Makers for Plant Automation Team
- Heads (Engineering / Production / IT / Automation & Robotics)
- Plant Heads / Factory Heads
- Heads of R&D / Research Engineers
- CIOs / CTOs
- Middle & Senior level managers in Production / Operations / Planning / Purchase / Supply Chain / Quality / Maintenance / Industrial Engineering / Process Engineering
- Products and Services providers in Smart Manufacturing Space / System Integrators / Consultants
- Decision Makers, Industrial Manufacturing, Automation, Robotics etc. who want to understand the "WHAT" and learn "HOW" to get their organization industry 4.0 ready would also benefit.

Content

Day

Module and Topics

**Wednesday, 13 March
2024**

Module 1: Advancements of Robotics Automation in Manufacturing Process in Industry

- Brief Introduction to Industry 4.0 - Underlying Technologies involved in Industry 4.0
- Robotics and Automation – Their evolution. Their differences. How they both influence digitalization? The importance of Robotics and Automation in Industry 3.0 and Industry 4.0
- A crucial question for Industry - Do I need Automation or Robotics?
- Key factors driving robotization.
- Move towards Industrial Automation – when and why it's important?
- Q&A Session

Thursday, 14 March 2024

Module 2: Implementation and Applications of Robotic Manufacturing

- Robotic Applications
- Virtual simulation as a first step for automation
- Future trends in robotics and automation
- Industry Use Cases
- Practical Challenges in Implementing Industry 4.0 for old factories.
- ROI and Benefit Analysis- Improvement in Profitability and Uptime.
- Q&A Session

Pedagogy (Learning Methodology) and Platform

- Power point presentation, Videos, Interaction with participation, Experience Sharing with examples of industrial life.
- Programme will be held virtually over the Microsoft Teams platform.
- The Session will be conducted in English.

FACULTY:

Mr Anil Kumar Satapathy, Cofounder and CTO of Difacto Robotics and Automation Pvt Ltd.

A **24-year veteran in the field of Robotics and automation**, Anil has completed his BTech in Mechanical engineering from NIT Calicut in the year 1999 and started his career with Fanuc India in Robotics system division where he has developed some of the best automation solutions using industrial Robots for Indian industry.

After serving for **7 years in Fanuc, he has changed his organization to General Motors Technical centre in Bangalore** where, as a senior lead engineer for Robotics he has supported the manufacturing plants of General Motors in Asia pacific and Europe region for development of their automation BIW lines. In the year 2009 Anil has joined Difacto Robotics and automation as a foundry member of the company and currently working as the CTO of the company. As CTO of the company, he is **responsible for the Technology developments and Training academy of Difacto**. Anil has hands on experience of programming of more than 3000 Robots in different manufacturing plants worldwide.

Participation Fees

Type of Organization	Fees per Participant
CII Small Scale Members (SSI)	: INR. 6,500/- + 18% GST
CII Large and Medium Scale Members	: INR. 7,500/- + 18% GST
Non-Member Companies of CII	: INR. 8,500/- + 18% GST

Special Discount:

- 5% on 2 nominations from an organization
- 10% to 3 and more nominations

Payment of fees is to be drawn in favour of "Confederation of Indian Industry". Alternatively, it can also be made by NEFT /RTGS.

Please note that:-

- Prior registration for participation by the companies is necessary
- Nominations will be purely enrolled on first come first serve basis.
- Change in nomination(s) is/ are accepted
- There will be no refund of fees or adjustment against any other program
- Soft copy of the presentation will be shared with the participants post Session
- The Session will not be recorded

For Nominations & Enquiries, Please Contact:

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