

# Hands-on Training Program in Robot Programming & Operation Date: 15 to 17 October, 2024

Venue: IMTMA Technology Centre, Bengaluru

#### **INTRODUCTION**

Robots have been proven to deliver a host of benefits in a wide variety of industrial applications including Material handling/Assembly, Arc / Spot welding, Painting, Deburring, Plasma cutting etc. Industries introducing robots to their production processes have typically seen a significant transformation in their productivity and efficiency, with higher levels of output and consistent product quality. Yet another advantage with Robots is the flexibility in automation as they can be reprogrammed, whenever new products are launched.

The market for industrial robots is rapidly growing in India, as industries are looking forward for more and more robotization. Though the robotic revolution in India is driven by the automotive industry, other applications like machine tending, foundry, medical components processing, etc., are also growing.

Keeping this in mind, IMTMA is organising a 3-day "Hands-on training program in Industrial Robot Programming & Operation", at IMTMA Technology Centre, Bangalore

#### **FOCUS AREAS**

- Types and applications of Robots
- Robot Controller and Mechanical unit.
- General Safety Precautions
- Manual jogging of robot
- Creating a program
- · Different motion instructions, J,L& C
- Simple teaching / Changing a motion instruction / Program Editing
- Hands-on practice of Robot Operation thro sample programs
- Hands-on practice of creating programs using different instructions
- Tool frame & user frame
- Robot Interface with peripheral devices
- I/O's used in robots
- Uploading and downloading of programs / Automatic Backup
- Macros
- Mastering / Robot Mastering exercise
- Position registers and offset programming using Position registers
- Different start modes: cold, hot & controlled
- Trouble shooting and alarm screens

#### **KEY TAKE AWAYS**

After undergoing the programme, the participants will be able to -

- Fundamentals about Industrial robots and their applications
- Robot specifications, Parts of Robot and controller
- Operation of Robots thro Hands-on training on Five Axes Robot & Six Axes Robots
- Programming and simulation of Robots thro Robo Guide
- Grippers to be used with robots

#### **PARTICIPATION FEE**

Rs. 13750/
+18% GST

IMTMA Members/ Micro Companies/ Individuals/
Educational Institutions / Students/ IMTMA Non

Members/ Others

USD 550/-Overseas Participants

Group Concession: 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company

# **PARTICIPANT PROFILE**

This programme will benefit Engineers & senior technicians from manufacturing industries who would like to learn about Robot programming cum operation. Engineering students interested in getting Hands-on training in Robots can also enrol and get benefitted.

# **FACULTY**

This programme will be conducted by Mr. Ramadas R. Nambi

**Mr. Ramadas R. Nambi** is an industry expert with over 30 years of experience in the area of CNC control systems, CNC machines, Industrial robots & Unmanned operations. Presentations will be accompanied by practical demonstrations and case studies. The workshop will be highly interactive where participants will be able to discuss specific problems in maintenance and solicit feedback from the expert faculty.

# **PARTICIPANTS FEEDBACK**

Good training with lot of time to practice with robots and learn - Mr. Kishan H. L., 3DPLM, Bangalore

Training was very informative and conducted well - Mr. Abhishek Joshi, Bosch Ltd., Bangalore

Practical sessions are good - Mr. G. Saravanan, Wheels India Ltd., Chennai

# **For Registration Contact**

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