Manufacturing Technology Training
An IMTMA initiative

Industrial Sensors-- Types, Selection, Applications for process Control
Date : 3 to 4 February, 2022
Time : 1340 Hrs to 1700 Hrs (Online Mode)

INTRODUCTION

Increasing demands for higher production quality, improved manufacturing efficiency, and more stringent environmental standards have led to the development of new and complex types of industrial Automation. Hence the greater need for industrial sensors. These sensor systems are finding widespread application in diverse fields as machine tools, product inspection, automotive parts and advanced composite aircraft. The sensors typically employ optical, ultrasonic, or microwave techniques to perform measuring functions.

This course provides an overall exposure to the technology of Industrial Sensors and Controls as widely seen in factories of all types both for discrete and continuous manufacturing. The course also covers a wide range of topics like Sensor data sheets, selection of a sensor, Connection techniques and measurement systems in an automation system. It also including sensors and signal conditioning, discrete and continuous variable control systems with IO-Link,

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a **Online Training on "Industrial Sensors for Concurrent Process Control"**

FOCUS AREAS

- Sensor data sheets
- Types, Applications and Selection of sensors
  - Proximity sensors
  - Photo sensors
  - Ultrasonic sensors
  - Encoders
  - Connection techniques
- Measurement systems in an automation system
- Control systems with IO-Link
- Use of Identification Technology in an Automation system.
- Bar code identification
- QR code identification
- RFIDs and its frequency ranges and few Applications examples of RFID
- **Live Demo of connection and testing of different sensors for real time applications**

KEY TAKE AWAYS

- Make sensor connections to controller
- Understand differences between discrete and analog sensors
- Selection of sensor for a given process
- Configuring sensors to a controller and addressing them
- Setup Industry 4.0 enabled IO-Link sensors, and IO-Link Master.
- Understand connection of sensor to PLC and monitoring its state/value on PLC
- Understand IO-Link capabilities with OPC UA.
- Understand industrial 4.0 advancements in sensor technologies

FEE PER PARTICIPANT (PER LOGIN)

Rs. 4500/-
+18% GST
IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others

USD 180/-
Overseas Participants

Group Concession : 20% for 3 to 5 and 30% for 6 and more delegates being nominated from the same company

FACULTY

This Program will be conducted by **Mr. Chandrashekhar C S** and **Mr.Sudhanshu Kantoor.**

Mr. Chandrashekhar C S has done Engineering Graduate from Bangalore University passed in the year 1990. Have got experience in the field of Electrical Control Design, Special Purpose Machine Design, Assembly, Integration and Testing in Vacuum Industry, Automobile Conveyor Mfg Industry, Nuclear Industry. Experience in Plant Maintenance Engineering.

Mr. Sudhanshu Kantoor is General Manager, Product Management - Factory Automation at Pepperl+Fuchs India. He is passionately involved in the field of Industrial Automation for over two decades. An avid software programmer in control automation, he brings in hands-on and supervisory experience in projects involving PLCs, Drives, Remote I/O and SCADA based systems, machines/process plants throughout India and also overseas. Avid enthusiast on technology, especially in the domain of networking and data communication. Working across the control platforms and leading implementation of I4.0 solutions for P+F Factory Automation business in India

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REGISTRATION : Prior registration with an online advance payment is must. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of participation will be issued to participants.