



## INTRODUCTION

Pneumatic, or compressed air-driven, systems have been used to achieve mechanical motion in industrial machinery for over 100 years and, in more recent times, pneumatic systems have advanced, expanding the range of pneumatic applications to include robotics, automated industrial equipment, processes and motion control in a variety of industries. The popularity of pneumatics stems from the many advantages and adaptability it brings to the table in a variety of uses and industrial applications.

Simply put, pneumatic systems provide an uncomplicated, economical and reliable way to make things move. Using compressed air, pneumatic systems move cylinders, motors or other parts on all types of automated machinery, including:

- Fabrication equipment
- Packing machinery
- Paint spraying equipment
- Filling equipment
- Robotic end of arm tooling
- Material handling machines
- Presses
- Air-powered tools
- Many other applications in a wide range of industries.

Pneumatic systems use compressed, pressurized air to create a force that, in turn, moves a load. Depending on the equipment and applications to which pneumatics are being applied, typical motions might include pushing, pulling, lifting or holding. While the operating principle of a pneumatic system is simple, the consistency and quality of the supplied air are often crucial to the performance of the equipment and machines being powered by the pneumatic system. For this reason, it's important that the system is designed properly with all the essential components.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a 2 day interactive programme on "**How to design and trouble shoot a Pneumatic circuit and Understand various elements used in Pneumatic system**".

## FOCUS AREAS

- Introduction to Pneumatic System
- Main elements of Pneumatic system
- Types of Driving, Position, Control and Signalling elements
- Design of Pneumatic Circuits
- How to read, Analyse and Understand Pneumatic circuits
- Practical and case study about Maintenance of Pneumatic system

## KEY TAKE AWAYS

**After undergoing the programme, the participants will be able to :**

- Able to identify and use pneumatic elements
- Able to Understand pneumatic system
- Able to design few simple pneumatic circuits
- Trouble shooting of Pneumatic system

## PARTICIPATION FEE

**Rs. 10450/-**

+18% GST

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

**USD 415/-**

**Overseas Participants**

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

## FACULTY

This program will be conducted by **Mr. V Madhu**.

**Mr. V Madhu** is a Mechanical engineering professional, with over 25 years of experience in the manufacturing sector. He has handled Quality audits for over 5 years and has been a Technical trainer for 16 years at Bosch providing training on manufacturing operations, Hydraulics, Pneumatics, and machine maintenance. Besides, he is a qualified HR professional with a stint in the HR function at Bosch.

### For Registration Contact

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**REGISTRATION** : Prior registration for participation is necessary. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of participation will be issued to participants.

**Important Information** : Participation fee includes, course material, working lunch and tea / coffee. Interested companies are requested to register online by clicking on 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.