

Design of Hydraulics System Date: 17 to 21 February, 2020

Venue: BIEC, 10th Mile, Tumkur Road, Madavara Post, Bangalore

### Last date for registration 13 February 2020

Early Bird Offer: Avail 10% concession by registering and paying online on or before 02 February 2020

#### INTRODUCTION

The course is structured with the introduction to basics of Hydraulics system to complete design. Design of Hydraulics is key to the effective utilization of any Mechanical Application. Hydraulics design if not implemented correctly results in poor performance & quality problems during running. Conceptualization w.r.t the actual requirement in terms of force, speed and safety is very essential during design. Selection of hydraulic elements, sizing of elements, calculations for optimization, design of entire system is very vital in any mechanical industry. Assembly of hydraulic elements, hydraulic plumbing, machine interface and troubleshooting is key requirement. The entire course is designed to address all the above and convert engineer as a hydraulic engineer. During the course, a complete hydraulic system design will be carried out from concept to final design with hands-on.

### **FOCUS AREAS**

- Basics of Hydraulics.
- Introduction of Hydraulics elements
- Introduction to Fluids, Pumps, Direction, Flow, Pressure Control Valves and Symbols
- Introduction Hydraulic Actuators, Reservoirs, Hoses, Pipings, Fittings, Modular Valves, Manifolds, Electrical Devices, Proportional Valve and Servo
- Study of customer requirement for Hydraulic power pack
- Design exercise for Hydraulic power pack
- Hands-on training using one of the popular cad tool
- Design Input-> Design Calculations-> Selection Of Hydraulic Elements- > Circuit Diagram-> BOM-> Detail Design in 2D Or 3D On CAD
- Implementation of project on the training kit
- Assembly, Maintenance and Trouble Shooting

# **KEY TAKE AWAYS**

- Comprehensive design knowledge on Hydraulics System
- Knowledge on design of simple to complex power pack
- Hands-on assembly, testing, troubleshooting
- Knowledge in systematic approach on Hydraulic design

# **PARTICIPATION FEE**

Rs. 15000/-+18% GST TMA Members / Micro Companie: +18% GST

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+18% GST 10 % IMTMA Non Members/ Other

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

## For Registration Contact

B.L Patil Programme Coordinator +91 7899799296 / 9743180085 blpatil@imtma.in

### **Contact Address**

INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION

@ BIEC, 10th Mile, Tumkur Road, Madavara Post, Bangalore - 562 123

Tel: 080-66246600 Fax: 080-6624-6658



**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.