

## INTRODUCTION

The course is structured from introduction to basics of Hydraulics systems. Hydraulics design, if not configured and implemented correctly, would result in poor performance in system reliability during their operation. Conceptualization w.r.t the actual requirement in terms of force, speed and safety is very essential during design. Selection of hydraulic elements and sizing, calculations for optimization, design of entire system is very vital in any mechanical industry. Assembly of hydraulic elements, hydraulic piping, machine interface and troubleshooting is a key requirement.

Keeping this in view, IMTMA has designed the course on "Hydraulic System Development for Industrial Applications – A Practical Approach" to address all the above and prepare an engineer as a hydraulic system engineer. This course would be ideal for engineers from Design, Assembly and Maintenance / Trouble shooting functions of industry.

### **FOCUS AREAS**

- Basics of Hydraulics system
- Introduction of Hydraulic elements like Fluids, Pumps, Direction, Flow, Pressure Control Valves and Symbols
- Introduction Hydraulic Actuators, Reservoirs, Hoses, Piping, Fittings, Modular Valves, Manifolds, Electrical Devices, Proportional Valve and Servo
- Study of customer requirement for Hydraulic power pack
- Hydraulic power pack development Practical exercise.
- Design Input-> Design Calculations-> Selection Of Hydraulic Elements- > Circuit Diagram-> BOM-> Detail Design in 2D Or 3D On CAD
- Assembly, Maintenance and Trouble Shooting of Hydraulic systems
- An outlook on hydraulic circuits for complex applications

#### **KEY TAKE AWAYS**

- Comprehensive design knowledge on Hydraulics System
- Knowledge on design of simple to complex power pack
- Demo on assembly, testing, trouble shooting
- Knowledge in systematic approach on Hydraulic design
- Thorough knowledge on Hydraulics design fundamentals.
- Develops full confidence on Hydraulics circuits Design, Maintenance and Trouble shooting

# FEE PER PARTICIPANT (PER LOGIN)

#### Rs. 8000/-

+18% GST IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others

## FACULTY

This program will be conducted by Mr. N Swaminathan & Mr. Satish.

Mr. N Swaminathan, is an industry expert with over 30 years of rich experience in the field of Oil Hydraulic/Lubrication/Fluid Handling technology.

Mr. Satish, Senior Engineer YUKEN India Limited. He has more than 10 Years' experience in manufacturing of hydraulic elements.

#### **For Registration Contact**

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