

INTRODUCTION

The course is designed with an intent of bringing a greater insight into fixtures and their application across all manufacturing processes. Comprehensive learning on fixtures for machining, welding, inspection and assembly is the main focus in the programme. Machining fixture are most complex in nature due to customer’s stringent requirements from the part accuracy (both dimensional and geometrical) and productivity point of view. Basics of fixture design, if not implemented correctly results in poor productivity & quality problems. Set-up time and cycle time reduction, increased accuracy on components, deskilling the job setting operation are the obvious advantages of a good fixture. Competence in right fixture differentiates excellent organizations.

Complete fundamentals and the process of fixture design is described from concept to final design in the programme. Pre-design activities like design input, conceptualization, process planning, accuracy consideration, cycle time estimation, POKAYOKE, 3D modelling of parts and assembly are demonstrated systematically with case studies. It will be highly interactive and covers entire 360° view on all fixtures.

FOCUS AREAS

- Fundamentals of fixtures
- Fixtures for various manufacturing processes
- Design considerations for machining fixture
- Systematic study on component drawing for part accuracy, cycle time, location, clamping for machining process
- Design exercise for simple fixtures – case study
- Introduction to hydraulic and pneumatic fixtures with case study
- A demo project on fixture for an auto component – case study
- Basics of Assembly, Welding and Inspection fixtures
- Case studies on all types of fixtures will be reviewed for better understanding

KEY TAKE AWAYS

- Comprehensive knowledge fixtures
- Systematic approach for designing a simple to complex fixture
- What to be considered from Machine tool to design a machining fixture
- An experience in fixture design
- Knowledge on pneumatic and hydraulics
- Comprehensive learning on assembly, welding and inspection fixtures

FEE PER PARTICIPANT (PER LOGIN)

Rs. 13500/-
+18% GST

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

USD 500/-
Overseas Participants

Group Concession : 10% for 3 to 5 and 30% for 6 and more delegates being nominated from the same company

FACULTY

This programme will be conducted by - **Mr.S K Gupta and Mr. BL Patil**

S K Gupta, has worked as an Assistant General Manager, Machine Design & Business Development, Tata Motors - Machine Tools division, Pune. He has over 3 decades of professional experience in the field of Machine Tools and Fixturing practices.

BL Patil, Asst.Director at IMTMA, is Mechanical engineering graduate, has a professional experience over 28 years in manufacturing domain as designer of machines and fixtures. He worked in Kinetic and Avasarala Automation, Bangalore.

For Registration Contact

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