Manufacturing Technology Training
An IMTMA initiative

Essential Skills for Smart Mechanical Designers
Date : 22 August to 3 September, 2022
Time : 0940 Hrs to 1300 Hrs (Online Mode)

INTRODUCTION

Programme is intended to develop the design skills which plays an important role developing a first time right product. Fundamentals brings an approach for making the design most optimized and error free design of any product. The quantitative design approach helps to address the right material, geometry, kinematics for simplified design. The systematic design approach reduces the design lead time, product cost, DFMA, design for cost, design for quality and design for reliability.

In view of this, IMTMA organizing a 10 days comprehensive programme on “Essential Skills for Mechanical Design Engineers” across the product domain. The programme will be held virtually, facilitates ease of participation at lower cost.

FOCUS AREAS

- Manufacturing drawing standards on global perspective
- Limits, Fits and Tolerances - what why and how
- Geometric Dimensioning and Tolerancing GD&T
- Machine Kinematics, Bearings, belt drives, chain drive, cam mechanism, gear drives,
- Engineering materials and Heat treatment
- Antifriction bearings – Types, selection and application
- Ball screw - Types, selection and application
- LM Guide - Types, selection and application
- Motor Analysis and selection for specific application
- Servo motors - Types, selection and application
- Hydraulics – What, why and How?
- Pneumatics – What, why and how?
- Electrical and Electronics for Mechanical engineers

KEY TAKE AWAYS

- Comprehensive knowledge in Machine Design aspects
- Knowledge on design of machine elements
- Develops full confidence for machine design task
- Knowledge on Hydraulics and Pneumatics
- Knowledge on critical selection factors for mechanical systems
- Knowledge on optimized manufacturing drawings for first time right product
- Reduction and optimization of design lead time
- How to make error free design and drawings
- How to make cost effective product design

FEE PER PARTICIPANT (PER LOGIN)

Rs. 22500/-
+18% GST
IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others

USD 900/-
Overseas Participants

Group Concession : 10% for 3 to 5 and 15% for 6 and more delegates being nominated from the same company

FACULTY

Mr. H V Rajashekara, Advisor - IMTMA

He has over 35 years’ experience on Machine design and development from HMT Bangalore and Johnson Electric Group, Hongkong. In addition, he has 7+ years’ experience from Training domain at IMTMA.

Mr. Ganapathi K N, Advisor - IMTMA

Is presently working as Advisor at IMTMA, having 16 years of industrial and 16 years of academic and training experience. He is a mechanical engineer with post-graduate in metal casting science and engineering. Prior to IMTMA, Ganapathi has worked at various capacities in manufacturing companies. He has a thorough knowledge of Materials, Metallurgy, Metal casting and heat treatment processes. He has carried out many specialized programmes on metal casting technologies, Metallurgy and heat treatment for industries. He has also taught these topics to post-graduate engineering students. At IMTMA his role is to develop and introduce new programmes for enhancing the competitiveness of Industries.

Mr. M A Khallaq

With over 3 decades of expertise in Machine Design and fixturing. An ex-HMT as Dy Genral Manager, servered the R & D dept. He now runs his own Industry "XL CNC Machine" at Peenya. Manufactures of GPMs and SPMs.

Mr. Shiva Kumar

Former Joint General Manager, HMT (R&D), Bangalore. He is an industry expert with over 25 years of rich experience in Design & Development of CNC Machines. Presently Mr. Shiva Kumar is a Technical Consultant to THK India Pvt Ltd and has been associated with THK Co, Ltd., for the past over 20 years.

Mr. P. Aruna Kumar

Mr. Arunakumar Is a Postgraduate Mechanical Engineer with a Machine tool specialization. He comes with over 36 years of domain expertise in Machine tool design, Assembly, Inspection, Testing and Motor and pump selection

He is a former DGM, Designs and development, HMT Machine tool division, Bangalore. He has a rich experience in Gear design, Gear cutting machine design, Gear metrology and also and Motor and pump selection. He has also worked in the field of assembly and testing machine tools.

Mr. Balkrishna Deshpande

Mr. Deshpande has Domain expert knowledge with more than 38 years of hands-on experience in machine controls design, assembly, & commissioning. He is an expert in hydraulics, pneumatics, bearings lubrication & mechatronics (focus on factory automation). He has vast experience in circuit building, system designing, commissioning & fault finding. He has delivered extensive hands-on training in hydraulics and pneumatics to more than 2000 industry professionals across India. He represented India as Mechatronics trainer & expert of Mechatronics World Skills international Competition 2013 & Jury for Russian hi-tech World Skill competition 2014.

Mr. Ravi Shankar Nadig

Mr. Nadig holds a Bachelor’s Degree in Mechanical Engineering, is a Manufacturing and Dimensional Management Professional with 27 years of experience in Machine tool, Automotive and Aerospace industries, He has worked as a Scientist in Central Manufacturing Technology Institute (CMTI), Bangalore (9 years) and as a Consultant in Tata Consultancy Services (TCS) for 15 years His core competency is in Design and Manufacture of precision machine elements for Defence and Space applications, Manufacturing Engineering support for Fabrication of sheet metal parts of Aero Engine assemblies, Dimensional Management -Tolerance Stack Analysis of Automotive and Aero engines, GD&T practice and training, and Rapid Prototyping.
He is a Senior GD&T professional certified by ASME (Y14.5-2009).

Mr. Sendilkumar

After completing his Bachelor in Engineering, he pursued his Masters in Human Resource. Currently he works with FESTO India and has over 22 years of experience as a trainer in Industrial Automation. He has also worked as a Senior Training Officer for 4 years. He was also the Principal of a training institute for 5 years. He has vast experience in the field of Pneumatics, Hydraulics, PLC, Mechatronics, Industry 4.0 etc.

Mrs. Uma HN

Mrs. Uma is graduated in Electronics from Bangalore University. She served in HMT R&D center and Precision Machinery Division, in various capacities, for nearly 30 years and was superannuated during 2010 . Mrs. Uma was responsible for development of a variety of machines including CNC Machines, and various defense projects. Her main role was electrical & electronics system design, interfacing and commissioning at customer end. She was one of the main faculty for HMT MECHATRONICS programme at HMT Limited.

For Registration Contact
Amarendu Debnath
Programme Coordinator
+91 9977133067
amarendu@imtma.in
B.L Patil
8088251077
blpatil@imtma.in

Contact Address
INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION
Plot 249F, Phase IV, Udyog vihar,Sector - 18,
Gurgaon - 122015
Tata no- +91-124-6463101
Tel : 0124 4014101 - 04
Fax : +91-124-4014108

imtmatrainning.67038796@hdfcbank

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.