Manufacturing Technology Training
An IMTMA initiative

Online Training on Machine Tool Spindles - Design Approach
Date : 7 June, 2020
Time : 1000 Hrs to 1300 Hrs (Online Mode)

INTRODUCTION

The Machine tool spindle is most sophisticated member in machine tool and plays a vital role for better performance, higher efficiency and accuracy. Design of spindle is very important and a critical activity of machine tool design process. Spindles are integral part of the machine tool and responsible for quality of the final product produced and overall productivity of the machine tools. Sizing of the spindle for machine capability in terms of dimension, power, speed, force and accuracy are the key challenges for machine designers for right machine and right application. Understanding the spindle design process is the first step for overall machine success.

FOCUS AREAS

- Introduction to Spindles
- Types and application
- Bearing selection and arrangements
- Bearing pre load, why and how?
- Design concepts & Calculations of power speed and torque
- Spindle materials and heat treatment
- AC Servo spindle characteristics
- Design of work holding/tool holding system
- Typical spindle drawings

KEY TAKE AWAYS

- Knowledge on types and application of spindles used in metal cutting machines
- Design fundamentals of spindle
- Principles of bearing selection and application
- Understand different configuration of spindles
- Spindle for different application in machine tools
- Understand Bearing selection & pre loading for spindles
- Scientific approach for design of spindles
- Develops confidence on spindle design

FEE PER PARTICIPANT (PER LOGIN)

Rs. 1500/-

+18% GST

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

FACULTY

This programme will be conducted by **Mr. H V Rajashekara**, Advisor IMTMA.
Mr. H V Rajashekara has over 27+ years' experience on Machine Tool design and development from HMT-Precision machinery division Bangalore and As Engineering Specialist at M/s Johnson Electric Group, Hongkong. He was Senior Director – Design Institute IMTMA and has 7+ years' experience in training machine design skills for fresh engineers to make them industry ready.

For Registration Contact

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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.