

## INTRODUCTION

Spindle is the most sophisticated member in machine tool and plays a vital role for better performance, higher efficiency and responsible for quality of machined components and overall productivity.

Assembly and Maintenance of spindle in Metal Cutting or Industrial Machinery is critical and skillful function. Engineers / Technicians involved in Assembly / Maintenance of spindles typically require special skills, specific toolings, a thorough knowledge of bearing applications with intense Training and relevant inputs.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a 6 day programme on **Hands-on Training in Spindle Assembly and Maintenance** on **24 - 29 February 2020** at **Bangalore**.

## FOCUS AREAS

- Basics of Machine Tool Spindles & Selection
- Bearing types & their application in metal working and industrial machinery
- Bearing nomenclature & equivalent selection
- Assembly / Mounting – dismounting of precision bearings, pre& post Mounting procedures
- Spindle Bearing preloading
- Tools, tackles & assembly techniques
- Bearing lubrication systems
- Spindle failure & reconditioning
- Testing of assembled spindle units
- Preventive maintenance of spindles
- Why do spindles fail - Case studies and examples
- Plant tour for live Demo of Spindle assembly and Maintenance\*

\*Note: Plant tour of participants will be subject to the approval of the hosting industry.

## KEY TAKE AWAYS

After undergoing the programme, the participants will be able to -

- Understand types of spindles and their construction / selection
- Learn the step by step procedure for spindle Assembly / maintenance
- Understand Preloading of bearings, Fits and tolerances for housing and spindles
- Learn about Spindle testing using proper methods
- Learn configuration of different types of Bearing mountings

## PARTICIPATION FEE

Rs. 15000/- +20% GST IMTMA Members / Micro Companies / Individual	Rs. 17000/- +20% GST IMTMA Non Members	Rs. 15000/- +20% GST Educational Institutions / Students / Individuals	Rs. -/- +20% GST 5 % IMTMA Members / Micro Companies	Rs. -/- +20% GST 5 % IMTMA Non Members/ Others	Rs. -/- +20% GST 10 % IMTMA Members / Micro Companies	Rs. -/- +20% GST 10 % IMTMA Non Members/ Others
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## PARTICIPANT PROFILE

This program will benefit will benefit Assembly / Maintenance Managers and Engineers, Production Engineers and Design Engineers from Automobile & auto ancillaries, Aerospace, Machine tool, Defense & Railway units, General Engg. and other CNC Machine user industries

The program will be highly interactive where participants can solicit feedback on specific technical issues from the expert faculty.

## FACULTY

This programme will be conducted by industry experts from **IMTMA Technology Centre**.

### For Registration Contact

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### Contact Address

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**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.