

INTRODUCTION

A CNC machine has several sub-systems that make up for the entire machine tool. Among the several sub-systems, the spindle is the heart of the machine tool, which allows the machine to function. Maintenance of spindles in metal cutting or industrial machinery is a critical function of a maintenance engineer. Any potential spindle failures can be costly to repair, cause unwanted downtime and stall production. Technicians maintaining them typically require special diagnostic tools and intense technical training to keep the spindle in great working condition. Spindle maintenance requires a thorough knowledge of bearing application, lubrication, assembly tools and techniques. To the maintenance routine, adding small checks and scheduling of preventive spindle maintenance can ensure long spindle life and increase productivity.

Keeping this in mind, IMTMA is conducting a detailed classroom training program on 'Classroom / Hands-on training on **Spindle assembly and maintenance**'.

FOCUS AREAS

- Bearing types & their application in metalworking and industrial machinery
- Bearing lubrication systems
- Spindle failure & reconditioning
- Tools, tackles & assembly techniques
- Testing of assembled spindle units
- Bearing failure
- Bearing nomenclature & equivalent selection
- Spindle Bearing preloading
- Preventive maintenance of spindles
- Why do spindles fail - Case studies and examples
- Plant tour for live Demo of Spindle assembly and Maintenance*

KEY TAKE AWAYS

After undergoing the program, participants will be able to:

- Understand types of spindles, and their construction/ selection
- Learn the step by step procedure for spindle assembly/ maintenance
- Understanding 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/-
+18% GST

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

USD 600/-
Overseas Participants

Group Concession : 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company

PARTICIPANT PROFILE

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

FACULTY

This programme will be conducted by Mr. M Khallaq, Mr. Hanumanth Kulkarni and Mr. Rajesh Mandlik.

Mr. M Khallaq, MD, M/s Excel CNC machines. Mr. Khallaq has 40+ years of high quality experience in Machine tool design, spindle design, assembly & maintenance from HMT. He currently runs a design unit for machine tools and accessories.

Mr. Hanumanth Kulkarni comes with over 34 years of rich experience in bearing industry. Having associated with SKF, Timken, FAG and NBC, Mr. Hanumanth Kulkarni brings in expertise in the areas of Design & Development, Manufacturing, Application Engineering and Technical training.

Mr. Rajesh Mandlik is Managing Director of Setco Spindles India, having 30 plus years of experience in spindle manufacturing, testing and re conditioning. He is instrumental in setting up green field projects at Pune, Chennai and Manesar (Gurgaon) for undertaking spindle testing, re conditioning services.

For Registration Contact

Ramesh P
Programme Coordinator
9845277682
ramesh@imtma.in

Contact Address

INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION
@ BIEC, 10th Mile, Tumkur Road, Madavara Post,
Bangalore - 562 123
Tel : 080-66246600
Fax : 080-6624-6658



imtmatraining.67038796@hdfcbank

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.