

## INTRODUCTION

The LM guides & Ball screws is one of the most commonly used machine element which provides highly reliability, high speeds, higher precision, very low friction, easy replaceability and easy maintenance. These are used in building equipment in all fields of engineering and machine tools. Hence, there is a need for knowhow in types of LM guides and ball screws, selection, design and its assembly.

## FOCUS AREAS

- Types of Linear Motion Guide ways
- Applications of LM guides
- Accuracies and types of loads
- Selection criteria of LM guides for specific applications
- Validation of LM guides for expected life w.r.t selected LMG and loads
- Mounting methods & alignments LM guides
- Types of Ball screws and their applications
- Application of ball screws
- Accuracies of ball screws
- Ball screw analysis for load torque, buckling , critical speed, rated torque, accelerated torque and inertia.
- Selection criteria of Ball screw for a specific application.
- Mounting methods and alignment of Ball screw
- Assembly procedure of Ball screw and LM Guides
- Ball screw alignment w.r.t LM Guides
- Trouble shooting of ball screws & LM Guides

## KEY TAKE AWAYS

- Acquire knowledge about LM guides & ball screws
- Basic analysis of application data
- Selection & basic design know-how
- Basic assembly know-how

## FEE PER PARTICIPANT (PER LOGIN)

**Rs. 5500/-**  
+18% GST

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

**USD 220/-**  
**Overseas Participants**

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

## FACULTY

This Program will be conducted by **Mr. Shivakumar.**

He has extensive experience having worked in HMT R&D for over 25 years in development of CNC machine tools. Further, he is associated with THK for over 20 years as Technical advisor by providing technical assistance in selection and use of LM guides in various fields of engineering.

### 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.