Manufacturing Technology Training
An IMTMA initiative

Antifriction Bearings - Types, Applications, Selection, Maintenance and Trouble Shooting Aspects
Date : 10 to 12 November, 2021
Time : 1340 Hrs to 1700 Hrs (Online Mode)

INTRODUCTION

Antifriction bearings are precision mechanical elements in any machines and equipment for the reliable functioning of rotary motions. It defines the speed, magnitude, and direction of the loads, deflections, and minimal vibration of the shaft with pre estimated life. Lack of bearing awareness can lead to premature bearing failures, unexpected machine breakdowns, and loss of production. The basic knowledge about bearings can avoid these losses and bring in huge savings & benefits to the organizations. Roles of the antifriction ball or roller bearings in machine tool spindles are highly responsible for the overall performance of the machine as they are reproductive in nature. The type, accuracy, and size are the key feature in the selection and unless otherwise not selected appropriately for the said application, the product would fail in meeting the performance requirements which is set as an objective. Knowledge of the types of bearings, the accuracy of the bearings, preloads of the bearings for machine tool spindle application is very essential for designers and assembly engineers.

Keeping this in view, IMTMA is organizing an online training on **"Antifriction Bearings - Types, Applications, Selection, Maintenance, and Trouble Shooting Aspects".**

FOCUS AREAS

- Fundamentals of antifriction bearings,
- Types of bearings – Features & Benefits
- Selection considerations of bearings
- Bearing identifications – Part numbering system
- Right methods of mounting and dismounting of bearings
- Bearings for machine tool spindles
- Bearing mounting methods and their advantages
- Stiffness enhancement through bearings pre load – Fundamentals
- Advantages of different pre loads
- Causes of excessive pre load
- Spindle bearing lubrications
- Bearings application in Machine Tool Spindles
- Spindle stiffness calculation and role of bearings.

KEY TAKE AWAYS

- Enhanced knowledge about various bearing types and their application details
- Understanding of bearing numbering system helps to procure the right bearings
- Proper handling of bearings to prevent early failures and increase bearing service life
- Better understanding of lubrication to avoid premature bearing failures
- Spindle optimization through right bearings selection and installation
- How to enhance the rigidity of spindles and rigidity of machine tools
- Distinguishing between the roller and ball bearings with justification.

FEE PER PARTICIPANT (PER LOGIN)

Rs. 6000/-
+18% GST
IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others

USD 220/-
Overseas Participants

Group Concession : 20% 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. Hanumanth Kulkarni** and **Mr. HV Rajashekara.**

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.
Presently he is running his own company in training and consultancy services.

Mr. HV Rajashekara, Advisor IMTMA has 28 years' experience on Design and Development of Metal cutting machines from various industry like M/s HMT Machine Tools, M/s Johnson Electric International Limited, HongKong and 7 years as Senior Director, IMTMA Design Institute. He has overall experience of 35 Years from both shop floor and training.

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.