# TRAINING FOR FRESHERS ON BASIC INDUSTRIAL REQUIREMENTS, ALIGNMENT TECHNIQUE - INCLUDING LASER ALIGNMENT, VIBRATION ANALYSIS, THERMOGRAPHY - 04 WEEKS CONDUCTED BY

### **Maintenance Analytics & Training Services**



Interested Candidates shall reach us from the below details.

Email: trainignvib@gmail.com Contact: +91- 86677 26498

Website: vibrationtrainign.co.in

#### PROGRAMME OVERVIEW:

This program is developed with a mission to enhance the knowledge of a graduate in an industry by practically training them on Basic Industrial Requirements, Fundamentals of Basic Maintenance Activities, Tools used for Maintenance Activities, Alignment Concepts along with advanced Laser Alignment Techniques, Thermography, Vibration Analysis, Diagnostic Studies and In-Site Dynamic Balancing of Rotors and also enhance with some of the soft skills and computer knowledge which is an essence of this era.

#### **COURSE CONTENTS (04 Weeks)**

First Week		Second Week	
Types & Applications of	<ul> <li>Bore Gauge</li> <li>Center Gauge</li> <li>Vernier Tooth Gauge</li> <li>Grinding machine</li> <li>Drilling Machine</li> <li>Welding &amp; Welding rods to be</li> </ul>	Precision Instruments  • Dial Gauge Indicators,  • Micrometer & Its Types  • Vernier caliper  • Depth Gauge  • Vernier Height Gauge  • Vernier Depth Gauge	Various types of  • Drill bits,  • Tap & Dies  • Reamer & Thread Extractor  • Gears & Bearings  • Pumps & Compressors  • Fan, Blower & Accessories
Vice Clamp	used	Vernier Bevel protractor	

#### **Third Week**

#### **Alignment Concepts**

- About Couplings & Types of Couplings
- Basics of Alignment & Effects of Misalignment
- Deducting Soft Foot & solving
- Types, Causes for Misalignment
- Advantages of Good Alignment
- Alignment methods including RAP Method
- Pre-conditions of Alignment & Alignment Tolerance

#### Thermography - Practice

#### **Basics of Vibration**

- Define Displacement, Velocity, Acceleration, Frequency, Phase & Spectrum
- Measure and record data using vibration analyzer
- Understanding Frequency & Phase Analysis of Unbalance, Bent Shaft, Looseness & Coupling Misalignment
- Vibration due to coupling and shaft misalignment
- Factors that affect natural frequency

Vibration Transducers & its Selection Methods ISO Standards

#### **Vibration Analysis**

- Approach to Vibration Analysis.
- Analysis of defects in Bearings, Belt, Gearbox, Coupling.
- Analyzing electrical problem.
- Beat, resonance

#### Balancing

- Single Plane Balancing
- Prevention and correction of unbalance
- Single plane vs. Two plane unbalance
- Spectral analysis for unbalance
- Preventing unbalance due to assembly errors

#### **Fourth Week**

The Practical Session on Dial gauge Alignment & also Laser Alignment, Vibration Analysis & Balancing shall be conducted. The practical session will be followed by Review and Certificate.

## M/s. Maintenance Analytics & Training Services (INTERNATIONAL REPRESENTATIVE OF M/s. VIBRATION INSTITUTE, USA)

263, 17th East Street, South Avenue, Kamaraj Nagar, Thiruvanmiyur, Chennai - 600 041.

Mobile: +91 86677 26498

Email: trainingvib@gmail.com Website: www.vibrationtraining.co.in

#### **TERMS & CONDITIONS**

#### **COURSE FEES:**

The course fees for the Training Session is Rs. 30,600\*/- only. GST of 18% applicable

#### This above Fees is inclusive of:

Course Material / Course Book

#### **Other Payment Terms:**

- Payment terms: Payment at least 01 Week in advance before the start of course.
- Our Bank details are as follows:

#### **Account Details:**

Bank Details: NAME: HDFC BANK Account Number: 50200049396784

IFSC / NEFT / RTGS CODE: HDFC0000010 Branch: BESANT NAGAR CHENNAI

#### **COURSE OUTCOME**

- To Gain Knowledge on the various types Tools used in industry and their Operating Principle, purpose.
- To gain knowledge about Machine Elements used in the Equipments in Industries.
- To gain knowledge about various Process, Machineries used in the different industries like Cement, Power, Sugar, Pharmaceutical, Paper etc.
- To have knowledge about various problems occurring in Machineries and their Diagnosis
- To update the latest technologies used in Maintenance Field.

- To understand Vibration from Basics to Advanced level (Diagnosis of problem using spectrum)
- To identify the Problem of equipment using Vibration Analysis.
- To gain knowledge in the Coupling, different alignment techniques and latest trend in Alignment (Practical experience in Laser alignment)
- To gain practical experience in Dynamic Balancing of Machineries.
- To get experienced in Thermal image capturing to Problem Identification.

#### OTHER DETAILS ABOUT THE COURSE

- TOTAL NUMBER OF CANDIDATES 08 Only.
- Classes being conducted by experts in relevant field with more than 30 years of hands-on experience.
- Evaluation on weekly basis on the performance will be conducted.
- In-Situ Dynamic Balancing Calculations, procedure and hands-on training.
- On completion of Training, they will have to attend written exam & Practical exam including Dynamic Balancing.
- CERTIFICATE / Internship Certificate will be provided.

#### **Facilities during Training:**

NOT MORE THAN 08 candidates for the course as Individual focus in training required.

#### **For Star Performers:**

On successful completion of the training, if the candidate has performed beyond expectations, they will be hired by the company as a direct employee with a CTC of Rs. 15,000/- per month + Allowances.

MAINTENANCE ANALYSTICS & TRAINING SERVICES, CHENNAI RESERVES THE RIGHT TO ACCEPT OR REJECT NOMINATION OF CANDIDATES FOR TRAINING.

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