SERBA DINAMIK SDN. BHD.(266724-K)
(A member of SERBA DINAMIK Group)

Practical Approach To Precision Balancing Methods

Introduction

Unbalance is one of the most common cause of machinery vibration and is present to some degree in all machines. Unbalance cause vibration of the entire rotor assembly which is thru, causes excessive wear in bearings, bushing, seals, shafts, gears, couplings etc.

Thus understanding the correct way to counter this unbalance force is important to reduce the unbalance to acceptable limits and improve the overall performance of the machine.

Objectives

1. To provide participants with practical knowledge of the unbalance problems in machinery.
2. To expose and guide the participants on step-to-step procedure of carrying out unbalance rectification and correction.
3. To provide participants with knowledge in the latest state of art technology, skills and experience in solving unbalance problems.

Who Should Attend

√ Engineers
√ Supervisors
√ Senior Technician

Course Instructors

Lead Instructor
En. Afandi Abdul Hamid

With 20 years experience in Oil & Gas maintenance activities, Afandi is the key person in Serba Dinamik Operation & Maintenance activities globally. Since joining Serba Dinamik in 2002, he has been involved in all major maintenance and upgrade projects that Serba Dinamik had undertake throughout Malaysia, Indonesia & Middle East region. Among projects that he had managed are rotating equipment & accessories overhaul during shutdowns in MLNG, ABF, PFKSB, PP(M)SB, PGB, CUF, NUR Kulim, Sejingkat Power, Oman LNG, Das Island LNG plant, SABIC plants in Saudi Arabia, GPC plant in Bahrain, PT Pindo Deli plants in Indonesia and Qatar Gas LNG plants in Qatar.

Earlier in his career, he was trained as Vibration Specialist in various Petronas OPUs and along his tenure, he was certified as Vibration Specialist Category II by Vibration Institute, USA. His tasks during those period was to plan, set-up and execute Condition Based Maintenance programs in plants like PP(M)SB and Petronas Carigali PMO region, among others. Work scope includes training of operations & maintenance personnel on related applications and execution of CBM programs, condition evaluation and fault analysis, trouble shooting of rotating equipment problems and factory acceptance testing of new and repaired machinery. He was also responsible in supervising contractors in execution of maintenance work & evaluating their performance. Among CBM hardware & software systems that he had worked with are SKF's Prism2, Prism4 & Machine Analyst, CSI's MasterTrend & RBMWare, EntekIRD's E-Monitor Odyssey and Bently Nevada's ADRE & DM2000.

Asst. Instructor
En. Mokhtar Mohd. Tahir

The Reliability Manager with Serba Dinamik Sdn. Bhd. who has 20 years of experience in the oil and gas industry including constructions, commissioning, troubleshooting and maintenance. Comprehensive knowledge of static and rotating equipment with particular expertise in condition monitoring, vibration analysis, troubleshooting and overhaul for rotating equipment

- Actively perform maintenance and repair of rotating equipment during planned and unplanned shutdown, and assist instrumentation calibrate and setting vibration probe during turnaround
- Lead troubleshooting activities on turbomachineries nationwide in Malaysia inclusive of rectification machine problem such as in situ balancing
- Collection of condition maintenance data and analysis work on it thereafter

Cancellation & Transfer

If you are unable to attend, a substitute participant is welcome to attend in your place at no additional charge. A full refund, less 10% administrative charge, will be given if cancellation is received in writing at least 14 working days prior to the course. A 50% refund and documentation will be given if cancellation is received less than 7 days prior to the course.

Venue

SDSB Training Room / Hotel

Course Methodology

1. The entire course shall focus on the subjects that are relevant and important
2. Practical exercise on training kits shall be provided to reinforce the theoretical understanding through written questionnaires
3. Case studies

Kindly send your registration form and cheque or bank draft, payable to:-
Serba Dinamik Sdn. Bhd.
7-5, Pusat Dagangan UMNO Shah Alam, Lot 8, Persiaran Damai, Seksyen 11, 40100 Shah Alam, Selangor.

Registration is on receipt of payment.
Kindly ensure early booking for the limited seats to avoid any inconvenience

Content

Day 1

- **Understanding Unbalance**
- **Theory of balancing**
- **Definitions**
- **Standards**
- **Causes of Unbalance**
- **Types of unbalance : Static, moment & dynamic unbalance**
- **Heavy spot & High Spot**
- **Determine Balancing Quality**
- **Balancing Procedure**
  - Single Plane Balancing
  - Principle
  - Trial Mass
  - Measurement check
  - Measured value & balance weight value.

- **Exercises**
- **Practical on single Plane Balancing**

Day 2

- **Continue on practical training using training kits on single plane balancing**
- **Balancing Procedure**
  - **Two-Plane Balancing**
    - >Principle
    - >Trial Mass
    - >Measurement check
    - >Correction weight

- **Balance correction weight distribution**
- **Exercises**

Day 3

- **Continue on practical training using training kits on 2-Plane Balancing**
- **Balancing procedure**
  - Multiplane Balancing
- **Principle**
- **Trial mass**
- **Measurement check**
- **Correction weight**
- **Balance weight distribution**
- **Exercises**

Registration Form

Course Fee : RM2,200.00

☐ Yes! Please register the following participants for course
"Practical Approach To Precision Balancing Method"

☐ I am unable to attend but please put me on your mailing list

No.	Name (Dr/Mr/Mrs/Ms)	Designation

Approving Manager/Contact Person:
Designation:
Company Stamp: