

#### **Course objectives**

- To recognize resonance vibration problems
- To test and identify machine and structure natural frequency
- To be able to perform operating deflection shape analysis
- To be aware of motion amplification technology and its difference to ODS results
- To be able to perform modal analysis
- To calibrate and compare modal analysis results measurement and calculation
- To be able to recommend structure modification options when required

# **Practical Modal Analysis**

#### **About**

Modal analysis knowledge and skill is important to machinery analyst in order to see the whole picture of machinery and associated structure vibration. Resonant vibration is one of the most common problems in the field which can result in excessive vibration amplitude and fatigue failure.

#### **Contact Us**

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## MACHINOSIS COMPANY LIMITED

your machinery diagnosis partner



#### **Course duration**

3 days

#### Venue

Machinosis's training center/Pattaya

Online w/instructor led

Onsite/Private in-house

#### Fee

Contact training center

### **Agenda**

- Introduction to modal analysis
- Operating deflection shape (ODS) analysis
- Using high-speed camera for structure vibration analysis
- Case study: ODS analysis
- Case study: piping vibration analysis
- Experimental Modal analysis
- Case study: modal analysis examples
- Analytical modal analysis
- Case study: modal analysis of vacuum pump
- Case study: modal analysis of vertical pump
- Case study: modal analysis of cooling oil pipe of transformer
- Dynamic stiffness and transfer function measurement
- More case studies



"Let's see the whole picture of machinery and its associated structures vibration"

#### Our reference customers

Available upon request