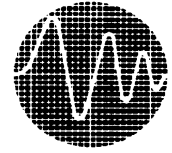


Around the Institute



News about the Vibration Institute, an organization for the dissemination of practical information on evaluating machinery behavior and condition

Volume 12, Number 2

May 2007

CHAPTER CHATTER

Arizona IPdM

Contact Doug Hanbeck (602/548-8101) for information regarding upcoming events.

Baton Rouge

See Gulf Coast Chapter.

Central New York

The April meeting featured a tour of Canandaigua Wine production and cellar areas.

Chesapeake

Contact Joe Humphrey (310/669-8087) for information regarding upcoming events.

Chicago Area

The March speaker was Todd Hutchinson from Philadelphia Mixing Solutions who discussed the design, application and use of industrial mixers and the factors that affect mixer service and reliability. The next meeting is scheduled for September 18. Contact Tim Smith (815/942-7354) for further information.

Cincinnati Tri-State

Contact Fred Hery (937/226-4053) for information regarding upcoming events.

Coastal Bend

Students from Texas A&M Kingsville spoke at the April meeting. They discussed an expansion valve measuring device, a surveying sled team, and a human powered water still. Maintech was the social sponsor.

Colorado

The June meeting will feature a Vendor Day.

Connecticut

Contact Al Bowers (203/597-8806) for information regarding upcoming events.

Delaware Valley

Contact Dave Butchy (215/698-0800) for information regarding upcoming events.

Eastern Michigan

Jack Field of IOtech discussed signal analyzer/data collector theory at the April meeting. Officer nominations were also held. The May meeting was "Bring Your Spouse/Significant Other Night." John Lefeber of Ann Arbor MultiVision discussed infrared.

The results of the May officer election are: Chairman, Israel Salinas; Vice Chairman, Jeff Olsen; Treasurer, Tom Drain; Secretary, Mark Malanyn; and Membership Chairman, A.J. Fynan.

Georgia

The September 7 meeting will be a three chapter meeting with Tennessee River and Piedmont. See Piedmont announcement for description.

Gulf Coast

Contacted Lyle Breaux (Program Chairman) for information).

Heart of Illinois

Contact Mike Thornton (309/579-3510) for information regarding upcoming events.

Houston

Ray Kelm and Malcolm Leader presented a multistage centrifugal compressor case history at the March meeting. This discussion analyzes the process of a severe reliability problem that involved a system review.

Hudson/Mohawk

Vibo-Rama was held March 28. The exhibit hall was sold out and three technical sessions were held. Topics included using vibration to determine structural stress, better thermography, using telemetry to extract data from spinning shafts, PC-based vibration data collection, and case histories.

New Jersey Metro

Contact Joe Deery. (973/764-2716) for information regarding upcoming events.

New Orleans

See Gulf Coast Chapter.

Niagara Frontier

The "Big Event," our Predictive Maintenance Trade Show, is the major PdM supplier show in the area. It was held April 26-27. On April 26 courses were held on vibration and bearings, followed by the trade show. April 27 featured an ultrasonic workshop and an oil analysis course.

The topic of the May meeting is wireless technology. John MacDougall of Phoenix Contact will explain wireless technology and its uses, as well as related standards.

North Texas P/PM

Contact Frank Bartolic (972/372-2273) for information regarding upcoming events.

Northern California

Contact Sam Terry (925/372-0770) for information regarding upcoming events.

Northern New England

Contact Rick Smith (603/659-6868) for information regarding upcoming events.

Northern Ohio

Don Rainey and Steve Scheeran of Azima spoke on a comprehensive approach to machinery health monitoring at the March meeting. The talk included a demonstration on transmitting FFT and time waveform data via wireless over the plant network and via cell phone to be viewed over the internet. The April meeting featured John Primeau of Hughes-Primeau Controls with an overview on magnetic couplings and what benefits they offer. James Robinson of Emerson Process Management discussed the analysis of vibration data from slow speed machinery using Peak Vue™ time waveform and PeakVue™ spectra data and autocorrelation coefficient. Several case studies were presented.

Old Dominion

Contact Skip Hartman (540/967-3886) for information regarding upcoming events.

Pacific Northwest

Contact Martin Bradley (425/337-9365) for information regarding upcoming events.

Piedmont

The May meeting was held at Trident Technical College in North Charleston, SC. The Thursday morning session featured Scott Ouellette and Derrick Little of Rexnord Industries discussing the selection, maintenance and troubleshooting of various types of shaft couplings and Mike Cannon of DLI Engineering speaking about automated vibration analysis. Bob O'Bannon of Allied

Reliability/Life Cycle Engineering discussed PdM program maturity and Jim Berry and David Kessler of Technical Associates spoke about operating deflection shape and modal analysis at the Thursday afternoon session. The Friday sessions featured the same speakers presenting a one-hour review of their Thursday session.

The September 7 meeting will be a Three Chapter Meeting – Tennessee River, Georgia, and Piedmont Chapters. During the morning session of the meeting, Ron Eshleman of the Vibration Institute will present case studies and Ralph Buscarello of Update International will discuss the most unusual places to find resonance. Jim Berry of Technical Associates will discuss detection of induction motor electrical problems using vibration and motor current analysis during the afternoon session.

Saginaw Valley

Mark Bringold and Bill Gardner of GMPT-SMCO discussed thermal bearing analysis at the March meeting followed by case histories. A social meeting was held in April for the nomination of officers. Brian Miska of Consumers Energy presented thermal and vibration case histories at the May meeting.

Southern California

Guil Cornejo of RPM will speak on balancing high synchronous vibration of fan-gearbox at 5 IPS during lift take-off and landing maneuvers at the May 23 meeting.

Southern Indiana

Fifteen people attended the April meeting. Dan Rains gave a short presentation on unusual structural problems he has encountered, followed by a group discussion about new vibration problems and successes. Dan Patterson of Flanders Electric discussed NEMA Standard MG 1-1998 as it pertains to vibration limits. The goal of standardization of testing of repaired motors and various scenarios were explored.

Tennessee River

The September 7 meeting will be a three chapter meeting with Tennessee River and Piedmont. See Piedmont announcement for description.

Triplex

Examples of vibration in gearing was discussed by Ed Martin of Lufkin Industries at the March meeting.

Upper Midwest

Contact Jason Haugen (651/484-5533) for information regarding upcoming events.

West Michigan

The May meeting featured Tom and Jason Spettel discussing bearing detection and sensor mounting; Steve Johnson of PCB Group spoke on vibration transmitters; Bob Martin of Emerson Process Management discussed waveform analysis; Walt Huysman of Polaris Labs addressed good sampling practices; and Paul Lever of Sullair Compressors discussed vibration analysis of screw compressors. Case histories were presented by various speakers.

Western Pennsylvania

Contact Bill Ciaramitaro (724/733-6706) for information regarding upcoming events.

Wisconsin

The 9th Annual Training Conference was held in April. James I. Taylor and Ioan Oprea of Vibration Consultants discussed time and frequency analysis techniques, gear physics and specifications, gear vibration theory and fractional gearmesh frequency. A vendor showcase was also on the agenda.

PHOTOS WANTED

The Vibration Institute is issuing photo ID cards to certified members of the Institute. If you are certified, please send your photograph (passport size) or an electronic .TIFF or .JPEG file to the Institute at your earliest convenience.

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AROUND THE INSTITUTE

Editor/Loretta G. Twohig
Production/Barbara K. Solt

**NATIONAL TECHNICAL TRAINING SYMPOSIUM SCHEDULE
(31th ANNUAL MEETING)**

June 19-22, 2007
San Antonio, Texas

Tuesday, June 19

7:00 A.M.

**Registration for BMV course and one-day training
Continental Breakfast**

8:00 A.M.

Basic Machinery Vibrations (four-day course)

Instructors: Jack D. Peters, Connection Technology Center
David B. Szrom, Mechanical Consultants, Inc.

Modal Testing (one-day training)

Instructor: Robert J. Sayer, P.E., Sayer & Associates

Balancing of Rotating Machinery (one-day training)

Instructors: Nelson L. Baxter, ABM Technical Services
Kevin R. Guy, Delaware Analysis Services

ASC S2-09 Meeting

9:00 A.M.

**Vibration Institute Committee Meetings
Exhibitor Setup**

10:00 A.M.

Morning Break

12:00 noon

Luncheon

1:00 P.M.

ASC S2 Mechanical Shock & Vibration

3:00 P.M.

Afternoon Break

4:00 P.M.

**Vibration Institute Chapter Meeting
Exhibits Open**

Wednesday, June 20

7:00 A.M.

**Registration
Continental Breakfast/Exhibits**

8:00 A.M. – Opening Session

Update on Vibration Institute Certification Program
Dave Corelli, PCB Piezotronics, Inc.
Chairman, Vibration Institute Certification Committee

KEYNOTE ADDRESS

Annular Gas Seals and Their Impact on Rotor Dynamics

Dara W. Childs, Ph.D., P.E.
The Leland T. Jordan Professor of
Mechanical Engineering
Director of the Turbomachinery Laboratory,
Texas A&M University

INVITED PAPERS

Flow-Induced Vibration Problems: Concepts and Case Histories

Lyle Breaux, P.E., Stress Engineering Services, Inc.

Whirl Motion of a Seal Test Rig with Squeeze-Film Dampers

E.J. Gunter and M.P. Parker, RODYN Vibration Analysis

10:30 A.M.

Morning Break/Exhibits

11:00 A.M.

The Effect of Structural Support Conditions on the Vibration Characteristics of Machinery

Robert J. Sayer, P.E., Sayer & Associates

Time Waveform Analysis

Kevin R. Guy, Delaware Analysis Services, Inc.

12:30 P.M.

Symposium Luncheon

1:30 P.M.

Gearbox Design, Manufacture, and Installation

Ken Beckman, Lufkin

Monitoring Applications – Permanent, Periodic, Wireless

Kevin R. Guy, Delaware Analysis Services, Inc.

3:00 P.M.

Afternoon Break/Exhibits

3:30 P.M.

Bearings and Gears

Case Study Analysis of Two-Stage Planetary Gearbox Vibration

Ken Singleton, KSC Consulting, LLC

PeakVue™ Application in a Paper Mill

Jim Robinson, Emerson Process Management

Robert Cook, International Paper

Discussion Group:

The Ideal Predictive Maintenance System

Chairman: William D. Marscher, P.E.

Mechanical Solutions, Inc.

6:00 P.M.

Exhibits/Social Hour – Hors d'oeuvres

Thursday, June 21

7:00 A.M.

Continental Breakfast

8:00 A.M.

Proximity Probes 101: Basics of Protecting Rotating Machinery with Proximity Probes

Bruce Weathersby, Invista

An End-User's Guide to Pump Vibration

William D. Marscher, P.E., Mechanical Solutions, Inc.

10:00 A.M.

Morning Break

10:30 A.M.

Balancing Rotors without Trial Weights in the Field Using Calibrated Rotor-Dynamic Models

Aly El-Shafei, Ph.D., RITEC

Pulsations and Vibration in Reciprocating Compressors

Ken Atkins, Engineering Dynamics, Inc.

12:30 P.M.

Symposium Luncheon

1:30 P.M.

Processing Shaft Vibration Data

William T. Pryor, VibrAlign, Inc.

Pulsations and Vibrations in Piping

Ken Adkins, Engineering Dynamics, Inc.

3:00 P.M.

Afternoon Break

3:30 P.M.

Case Histories I: Rotor-Dynamics

Malcolm E. Leader, P.E., Applied Machinery Dynamics

Panel: Wireless Technology

Chairman: Dave Corelli, PCB Piezotronics, Inc.

Friday, June 22

7:00 A.M.

Continental Breakfast

8:00 A.M.

Case Histories II

Acceptance Testing of Constant-Speed Centrifugal Fans when Bearings, Alignment, or unbalance are NOT The Problem

Tom Spettel and Jason Spettel

Predictive Maintenance Services, Inc.

Machine Analysis

Conditions Under Which Displacement, Velocity, or Acceleration Should Be Used for Diagnostic Vibration Monitoring

Howard Gaberson, Ph.D., P.E.

Discrimination of Unbalance and Misalignment Components from Vibration at Operating Speed

David Gluzman, CRE, Temple-Inland Corp.

10:00 A.M.

Morning Break

10:30 A.M.

Case Histories III: Induction Motors

Bill Branca, Renewable Energy Systems

12:30 P.M.

Symposium Luncheon

1:30 P.M.

Vibration Institute Annual Meeting: Report to Members

Ronald L. Eshleman, Ph.D., P.E.

Saturday, June 23

7:00 A.M.

Continental Breakfast

8:00 A.M.

Certification Examinations: All Categories

8:00 A.M. - 10:00 A.M. (Category I)

8:00 A.M. - 11:00 A.M. (Category II)

8:00 A.M. - 12:00 noon (Category III)

8:00 A.M. - 1:00 P.M. (Category IV)

Balancing Certification Examination: Category I

8:00 A.M. - 11:00 A.M.

SELF STUDY PROGRAMS IN VIBRATION ANALYSIS
from
the Vibration Institute

Self study with a Vibration Institute correspondence course has advantages:

- * Organized study of vibration analysis
- * techniques, case histories, and workshops
- * Study at your personal pace
- * Help with questions and explanations by telephone or e-mail
- * Learning methods that work
- * Benefit of exposure to experienced vibration analysts
- * Credit for continuing education on re-certification

The following Correspondence Courses are available:

Introduction to Machinery Vibrations
Basic Machinery Vibrations
Machinery Vibration Analysis
Rotor Dynamics and Balancing

Contact the Institute at 630/654-2254 or <http://www.vibinst.org>