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WEBINAR

March 16, 2011 / 12:00 p.m. CST

Bearing Damage Analysis

Bearing maintenance and proper analysis are the keys to keeping equipment up and running, optimizing performance and decreasing downtime.

Bearing damage is caused by:

- Insufficient maintenance practices
- Mishandling
- Improper installation and adjustment practices
- Inadequate lubrication

The purpose of this webinar is to help identify some of the more common types of bearing damage, explain possible causes, and discuss corrective actions in relation to the list above. Damage analysis is confounded by the fact that there may be more than one type of damage mode.

The types of bearing damage we will cover include:

- Wear from foreign material
 - Pitting / Bruising / Grooving
- Corrosion/False brinelling
- Fatigue spalling
- Excessive preload or overload
- Handling and installation damage/ True brinelling
- High spots and fitting practices/Misalignment

We will also discuss some of the methods we use to discover the root causes of bearing damage and how that relates to improving the performance of bearings and bearing systems.

Cost to attend:

\$39/\$59, member/non-member

Course cost includes: reading and/or reference materials relevant to the subject matter, recording of the event.

Visit www.stle.org/university for more information, or visit the STLE Store to reserve your seat!



Dr. Paul Shiller,
The Timken Co.
Canton, OH

Biography

Paul Shiller received a Ph.D. degree in Physical Chemistry from Case Western Reserve University in Cleveland, OH studying the surface reactions at fuel cell electrodes. He holds an M.S. degree in Chemical Engineering also from Case Western Reserve University where he studied the characteristics of "Diamond-like films". He received a BE degree in Chemical Engineering from Youngstown State University. He joined The Timken Company as a Product Development Specialist for lubricants and lubrication in 2004. His current position is a Tribological Specialist with the Tribology and Next Generation Materials group at the Timken Technology Center in North Canton. At Timken he studies how the chemistry of lubricants affects bearings especially how additives can be used to extend bearing life. Before coming to Timken he managed a polymer analytical chemistry lab at the Packard Electric division of DELPHI. He started at Packard Electric as a quality control engineer in the ignition cable department when Packard Electric was a division of General Motors. He was a Process Engineer on the thin film deposition processes for liquid crystal display products at PanelVision in Pittsburgh. Paul worked as a Research Engineer at The General Tire Company in Akron studying polymer extrusion and molding and the performance of tennis balls. He started his lubrication career as a Summer Intern at The Penn State University.

Paul has received a Professional Promise Award from AIChE and the Shell Lubricants award for Instructor Excellence from NLGI. He is also currently an Adjunct Professor of Chemistry at Kent State University. Paul is a member of STLE, ACS, and SOR.

This webinar will also be worth 1 CEU (Continuing Education Unit), which can be applied to recertification. Please contact us for more information, and for the requirements to do so at www.stle.org/university