

Mike Johnson, CMRP

CURRICULUM VITAE

AREAS OF SPECIALIZATION

- Lubricant Selection
- Lubricant Application
- Program Development
- Grease Analysis
- Used Lubricant Analysis
- Analysis Program
- Development
- Filtration
- Contamination Control
- SOP's Development
- Electric Motor Lubrication
- Fluid Circulation Systems
- Lubricant Marketer QC Practices
- Training
- Machine Failure Analysis
- Gap Analysis

CAREER SUMMARY

I have 20 years experience performing machine reliability improvement, lubrication engineering consulting, lubrication program development, public and private education. I have provided lectures and presented papers at conferences throughout the United States and in the UK. Currently I am President of Advanced Machine Reliability Resources Incorporated (AMRRI), which provides training, educational curricula development, benchmarking, program development and plant reliability engineering support to a variety of industries.



CONSULTING AND WORK

Noria Corporation, June 2001 to April 2006. Noria Corporation is an internationally recognized machine reliability consulting and training company, with special focus on the field of applied Tribology. As a senior level manager I was responsible for a variety of activities on an ongoing basis, including the following:

- Senior Technical Consultant (2001 to present)
- Sr. Technical Editor for Machinery Lubrication Magazine (06/01 to 03/06)
- Sr. Technical Editor for Practicing Oil Analysis Magazine (10/04 to 03/06)
- Director of Field Services (2003)
- Noria Educational Content Developer (2002 to 03/06)
- Writer, Speaker (2001 to 03/06)

BROWNSVILLE, TX.

Editing, speaking, consulting and content development roles comprised daily responsibilities. Special projects included:

Project Review

August 2004 to December 2005

Corporate Benchmarking Project

Designed and managed multi-site operating practices assessment and gap analysis project for a multi-national lubricant manufacturing and marketing organization. The analysis focused on state of standing practices against the clearly defined model. The project involved management of several associate consultants during short periods of intensive activity, and was completed on time during each segment of activity. References available.

January 2004 to October 2004

Field Services Manager

Assumed managerial responsibility for a struggling contract technical services group. Provided technical support, worked to develop systematic practices and upgrade plant personnel. Division was sold in October and I resumed other responsibilities.

November 2004 to April 2006 Project Management

Capital Improvement Project: designed and managed equipment modifications on 130 drive trains using combination of union and non-union contractors. The project was successfully completed on time. References available.

March – October, 2001 Benchmarking & Gap Analysis Project Designed and managed multi-facility gap analysis of lubrication centered maintenance and operations practices for a multi-national paper products manufacturer. Analysis focused on technical and managerial improvements, analysis of capital investment requirements for, and cash flow improvement opportunities from, improvements in site lubrication programs. References available.

As Sr. Technical Editor of the two flagship magazines, I was responsible for preparing all papers and articles for publishing. In this role I interfaced with practitioners from around the world, selected and approved content for each publication, and provided editorial support and writing services for select individuals when necessary.

OTHER WORK HISTORY

Entek International, 1998 to 2000

Territory Manager – Responsible for developing Central Florida machinery vibration analysis and rotor balancing systems business. Sales were doubled from territory baseline in one year in the territory.

Manufacturing Resources, Incorporated
1995 - 1998

President for a regional Industrial Supply and Consulting Company. Founded, developed and operated the business for 3 years. Provided machine reliability solutions and products, and application consultation and support to Fortune 1000 manufacturers in North America. Castrol Industrial, Performance Products Division

Regional Manager
1991 – 1995

Provided field administration, sales and technical management for a \$2.7 million dollar regional business employing 12 sales engineers and technical service representatives. Managed a reorganization that produced a 12% reduction in operations cost. Responsible for budgeting, forecasting, training and implementation of strategic plans. Achieved profit and sales targets through 4 consecutive years in region.



Area Manager

1990 - 1991

Introductory field management position. Managed \$1.2 million dollar sales area employing 4 sales engineers and technical service representatives and managed a territory. Consistently made sales targets.

Account Manager

1987 to 1990

Produced 425% total growth in territory, developed 2 of the 3 largest accounts in the region, developed technical service and support knowledge sufficient to operate without benefit technical service personnel. Results justified continued expansion of sales territory and promotion.

EDUCATIONAL EXPERIENCE

Pedagogy

I have developed content and presented short courses on industrial machine lubrication for manufacturing concerns and public education (AA degree level). The content is in the form of one to four day lecture style presentations with problem analysis and case studies to support the content. I have developed an administered a pre-certification exam that consists of a 100 multiple answer test (randomly selected from a bank of 500 test questions) that address the nine parts of the International Council of Machinery Lubrication Certification Exams for Level 1 and Level 2 certification.

Additionally, I presented the very popular Best Practices in Machinery Lubrication, Level 1 and Level 2 courses between July 2001 and March 2006 to public and private audiences.

During this time I participated in edits, additions and deletions of content to fit 2, 3 and 4 day presentation windows, and customized the content to audience requirements.

Additionally, in 2004 I developed 6-week 'boot camp' immersion style training session, including lesson plans, homework assignments, quizzes, tests, and comprehensive exams.

Test and certification results from and following the course suggest that the course effectively developed student knowledge to an advanced state.

Published Books and Chapters

"Lubrication Scheduling and Program Development," in the forthcoming CRC Tribology and Lubrication Engineering Handbook, 2nd Edition. G. Totten, Editor "Introduction to Machinery Lubrication – Supplemental Text". Produced to augment the course text for the Colorado based Red Rocks Community College Machinery Lubrication Level 1 course.



Published Papers and Articles

- (Pending) "The Past, Present and Future of Oil Analysis: An Expert Panel Discussion", Tribology and Lubrication Transactions, and STLE Publication. April and May, 2007
- "Real Options' Analysis Method for Flexible Project Analysis" 20th International Maintenance Conference, December 2006.
- "Large Journal Bearing Lubricant Selection Analysis - Parts 1 and Part 2". Uptime Magazine, October and November 2006
- "Practical Tips to Improve Oil Analysis Effectiveness". Uptime Magazine, August 2006.
- "Fishing with Fourier Transform Infrared Spectroscopy". Uptime Magazine, July 2006.
- "Viscosity: A lubricant Selection Analysis". Uptime Magazine. June 2006
- "Pick that Low Hanging Fruit: Level Inspection, Re-supply". Reliable Plant Magazine. May 2006.
- "Price or Cost? - A Question of Value". Machinery Lubrication Magazine. March 2006.
- "When Standard Practices Aren't the Right Practices". Reliable Plant Magazine. March 2006.
- "Best Practices for Flushing Gearboxes and Bearing Housings". Machinery Lubrication Magazine. March 2006.
- "Lubrication 101: Solid Film Lubricants". Machinery Lubrication Magazine. March 2006.
- "Time for an Oil Test". TAPPI Front Line Focus, Volume 2, Issue 2. February, 2006.
- "Lubed, Reliable and Lean". Reliable Plant Magazine. January, 2006.
- "Stirring the Pot". Machinery Lubrication Magazine. January 2006.
- "Cro-Magnon LubeTech". Independent Lubricant Manufacturer's Association (ILMA) - Compoundings Magazine. December 2005.
- "Product Analysis: Microtrac's Tri-Laser Particle Sizer". Practicing Oil Analysis Magazine. November 2005.
- "Mr. Millimeter Knows...". ILMA - Compoundings Magazine. September 2005.
- "The Truth About Aftermarket Additives and Oil Conditioners". ILMA- Compoundings Magazine. June, 2005.
- "Lubrication Basics - the 5 R's". TAPPI Front Line Focus. Volume 1, Issue 6. June 2005.
- "Banker in a Bottle: The Promise of Specialty Lubricants". ILMA - Compoundings Magazine. May, 2005.
- "A Lesson on Cleanliness from the Civil War Battlefield". Independent Lubricant Manufacturer's Association (ILMA) - Compoundings Magazine. April, 2005.
- "Bama Foods Improves Lubrication Program". Machinery Lubrication Magazine. March 2005.
- "Lubrication Best Practices Help Reduce Risk of Injury". ILMA - Compoundings Magazine. March, 2005.
- "Audit Finds Problems Lurking". Machinery Lubrication Magazine. November 2003.
- "Journal Bearing Pre-Lubes During Turbine Startup - Beware the Risks". Machinery Lubrication Magazine. March 2003.
- "Is it Time to Buy 'Quiet'? - Perfecting Grease Cleanliness". Machinery Lubrication Magazine. January 2003.
- Co-authored with N. Samman, Petro-Canada
- "High-Temperature Greases". Machinery Lubrication Magazine. May 2002.
- Co-authored with N. Samman, Petro-Canada.



"Common Deficiencies in Pulp and Paper Industry Lubrication". Machinery Lubrication Magazine. May 2002.

Co-authored with D. Hodge, Pacific Fluid Systems.

"The Modern Art of Lubricating Mining Equipment". Machinery Lubrication Magazine. March 2002.

Coauthored with Wm. Scott Evans, Lubrication Management Systems.

"Selecting a General Purpose Grease Without Compromising Performance". Machinery Lubrication Magazine. January 2002.

"Primary Metals Industry Round Table - Lubrication Lessons from Weirton Steel, Alcoa and Iron Ore of Canada". Machinery Lubrication Magazine. January 2002.

"How to Write a Top-Drawer Lubrication Procedure". Machinery Lubrication Magazine. November 2001.

"GM Invests in Lube Program Updates". Ghost writer for Ed Bohn, GM-Linden, Linden, NJ. Machinery Lubrication Magazine. September 2001.

"Sleeve Bearing Lubrication". Machinery Lubrication Magazine. September 2001.

"ISO Viscosity Grades". Machinery Lubrication Magazine. July 2001.

Presentations at Conferences and Symposia

"Real Options Project Analysis Method". 21st International Maintenance Conference. December 2006.

"Dime for a Dollar: Finding Value in Precision Lubrication". 20th Annual Pulp and Paper Reliability and Maintenance Conference. October 2, 2006.

"Constructing a World Class Lube Room". Co-presented with Scotty Lippert, Clopay Corporation. Lubrication Excellence Conference and Exhibition. April 2005.

"Lubricant Vendor Contamination Control and Product Integrity Practices". Lubrication Excellence Conference and Exhibition. 2005.

"Lubrication Best Practices in a Lean Workforce: Prepare for Doing More with Less". 19th Annual Pulp and Paper Reliability and Maintenance Conference. October 2005.

"Setting Target Cleanliness Levels". Prepared and Presented at the Nuclear Maintenance Applications Center (NMAC) conference on Lubrication and Bearing Reliability, Charlotte, N.C., November, 2004.

"How to Write an Effective Preventative Maintenance Lubrication Procedure". ½ day Workshop. Lubrication Excellence Conference and Exhibition. 2004, 2005.

"How to Construct A Lube Supply Agreement". Co-written with Dan Moss, Maintenance Manager, Bowater Paper Company, Calhoun, Tennessee. Presented by M. Johnson at the 2004 Technical International Conference, Atlanta, Georgia

"How to Develop an Effective PM Lube Program". Technical Association of the Pulp and Paper Industry (TAPPI) Pulp and Paper Reliability Conference and Exhibit. October, 2003.

"Improve Mill Profits through Precision Lubrication". TAPPI Paper Expo 2005. May, 2005.

"Best Practices for Flushing Gearboxes and Bearing Housings". Lubrication Excellence Conference and Exhibition. April 2003.

"Selecting a General Purpose Grease without Compromising Performance". Lubrication Excellence Conference and Exhibition. April 2003.

"The Pre-requisites to Oil Analysis Success: Lubrication Fundamentals". Practicing Oil Analysis Conference. September, 2001.



Developed Courses and Instructional Seminars

"Lubrication Technician Training for the Pulp and Paper Industry – 3 Day Short Course". Prepared for a private audience, October 2006.

"Introduction to Machinery Lubrication for Machine Operators – 1 Day Short Course". Prepared for a private audience, December 2006.

"Best Practices for Electric Motor Re-Lubrication". 1-day Instructional Seminar. Noria Corporation, 2003

"Machinery Lubrication Immersion Training" 6 week intensive workshop. Noria Corporation, 2005.

"Best Practices in Machinery Lubrication Level 1, II". Contributing editor. Noria Corporation, 2001 – 2006.

CERTIFICATIONS AND PROFESSIONAL ASSOCIATIONS

Society of Tribologists and Lubrication Engineers (1995 to Present) Society of Manufacturing Reliability Professionals, Certified Maintenance and Reliability Professional (CMRP), Registration No. 04011. (2004 to Present) International Council of Machinery Lubrication (ICML), Level 1 Certified, Contributing Writer (2001 to Present) Technical Association of Pulp and Paper Professionals (TAPPI) (1991 to present) Dixie Engineering and Maintenance Association (DEMA) (1990 to present)

PERSONAL INFORMATION

Married, three children, one dog

B.A. 1983, Auburn University, Auburn, Alabama.

M.B.A. 2001, Crummer Business School, Rollins College, Winterpark, Florida.

