

Maintenance and Reliability Management

A Best Practices Seminar to Help You Reduce Costs and Improve Performance



SPECIAL DISCOUNT

Since an effective maintenance and reliability program involves many different managers in your organization you are encouraged to bring a team to the seminar to achieve even better and faster results. To help make this possible take advantage of the special discount:

Send three people and the fourth is free.

Learn How to Establish and Sustain a Best Practices Organization Following the 7-Step Model

- 1.** Build a Solid Foundation
- 2.** Communicate Clear Expectations
- 3.** Develop Processes and Procedures
- 4.** Invest in Your People
- 5.** Utilize Tools
- 6.** Manage Change
- 7.** Secure the Future

DATES	LOCATIONS	DATES	LOCATIONS
February 5-6, 2008	Savannah, GA	April 3-4, 2008	Austin, TX
February 7-8, 2008	Huntsville, AL	April 8-9, 2008	Hartford, CT
February 19-20, 2008	Baltimore, MD	April 10-11, 2008	Harrisburg, PA
February 21-22, 2008	Columbus, OH	April 15-16, 2008	Louisville, KY
March 4-5, 2008	Houston, TX	April 17-18, 2008	Nashville, TN
March 6-7, 2008	Indianapolis, IN	April 22-23, 2008	Scottsdale, AZ
March 11-12, 2008	Cleveland, OH	April 24-25, 2008	Tulsa, OK
March 13-14, 2008	Rochester, NY	May 20-21, 2008	Des Moines, IA
April 1-2, 2008	Denver, CO	May 22-23, 2008	Minneapolis, MN

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Register Today! Call Kay James at 864.656.2200 or register on-line at www.clemson.edu/success

Maintenance and Reliability Management

A Best Practices Seminar to Help You Reduce Costs and Improve Performance

CLEMSON HAS BEEN HELPING *organizations maximize operational and maintenance performance for more than 15 years.*

Here is what your colleagues say about this seminar:

“Attending this program gave me information to make me passionate about going back to attack the low-hanging fruit! It explained the ‘why you need to improve’ approach to delivering comprehensive maintenance best practices information.”

—Allyson Taylor, Process Engineer
AZ Electronic Materials
Martin, SC

“Clemson University’s Maintenance Management training was professional, timely, and it provided detailed information—a good useable seminar and information. A Roadmap to success which will allow us to streamline and improve our entire maintenance process at Lanxess.”

—Bill Bradford
Director of Plant Maintenance
Lanxess, Orange, TX

“Excellent... shows how to do maintenance the right way. Excellent workbook which will allow me to refer back to needed information.”

—Brian Leven
Maintenance Manager-Electrical
Tamko Roofing Products, Dallas, TX

An Overview of This Powerful Seminar

The maintenance and asset management practices in your organization determine whether your operation is considered to be a financial drain but a necessary evil, or a well-run business unit which operates utilizing principles and tools developed to ensure safety, improve productivity and increase profits.

If you want your operation to enjoy the pride of being recognized as a core part of your organization and a key contributor to its success, then this intensive two-day workshop will help you achieve your goal.

Designed to help you optimize the value of your maintenance operation, this interactive program will boost your understanding of maintenance and reliability principles, outline the performance roadmap you need to drive improvement, and equip you with the tools and knowledge to develop a plan... a Plan of Improvement which you can immediately begin to apply upon your return to the workplace.

Review the comprehensive two-day agenda outlined on the next page and take the next step by registering to attend this seminar. The practical knowledge you gain from participating in this seminar will propel you on your journey to building a competitive and cost effective organization!

Who Should Attend

To achieve maximum value from this seminar everyone who has a stake in developing and executing a plan to maximize total performance should attend. Send a team from maintenance, operations, management, materials, human resources, purchasing, accounting, quality, safety and engineering. See the back cover for information on team discounts.

Special Benefits

- You will receive a comprehensive notebook, complete with charts and valuable information developed specifically for this seminar for use during the seminar and as a valuable reference tool when you return to work.
- You won't leave this seminar simply having heard a lot of talk about maintenance and reliability. You will bring knowledge and tools back to the workplace which you can utilize immediately to identify and implement improvements in your organization.
- This is an intensive two-day seminar. The amount of time you spend away from your workplace is limited. This seminar is specifically focused on making the best use of your valuable time.
- You will earn 1.4 CEUs (Continuing Education Units of Credit) from Clemson University at the completion of the seminar. The CEU is the nationally recognized standard unit of credit you earn by participating in qualified programs, such as this one, in a non-credit environment.

COMING THIS SPRING

Maintenance Planning and Scheduling...

Clemson's renowned 4-day seminar will be presented in the following locations:

Apr 29 - May 2, 2008 Washington, DC

May 6-9, 2008 Rochester, NY

May 13-16, 2008 Chicago, IL

In this course you will be involved in group discussions, role playing, several hands-on exercises, and question and answer sessions. Topics range from the philosophical, such as discussions on how to convince non-maintenance “customers” to cooperate with a Maintenance Management Program, to the practical, including how to effectively utilize the maintenance craftsman. Additionally, you will spend in-

depth time on work order control, planning techniques and scheduling - daily, weekly, and small projects.

**Call Kay James at
864.656.2200
for more information or
register on-line at
www.clemson.edu/success**

To Register, Call Kay James at 864.656.2200 or

MAINTENANCE AND RELIABILITY MANAGEMENT PROGRAM AGENDA

PROGRAM TIMES: 8:00 am - 4:30 pm each day. A registration desk will be located outside the meeting room at 7:30 am the first morning of the program.

- Assessment, Gap Analysis
- Plan of Improvement
- Education for all - This is not simply a Maintenance thing!
- The Vision Statement
- Integrating the Vision
- The Mission
- Core Values
- Developing Partnerships and Commitment
- Building the Business Case (Return On Investment)
- Management's View – Show Me the Money!
- Creating a sustainable environment for change
- Communication

People

- Learning to manage people
- Creating a strong vibrant workplace
- People fundamentals
- Supervising people
- Training

Leading the Change

- Where does the time go?
- Exercise: Resource utilization
- Proper job/work planning
- Scheduling and Coordination
- Organizational structure

MEET YOUR INSTRUCTORS

Dave Bertolini

Dave is a Managing Principal of a firm specializing in changing cultures from reactive to proactive through the optimization of people and processes. With more than 30 years experience in improvement initiatives, he has built a solid foundation of training principles in support of operational, maintenance and mission objectives.

Leading all aspects of site and corporate reliability improvement strategies to educate and execute the implementation of Best Practices, Dave's training techniques work well from corporate level understanding and support to on-the-floor execution. His certification as a Master Instructor and seminar leader has led to his involvement in over 250 improvement initiatives and CMMS implementations utilizing 38 different software packages.

Dave routinely has articles published in trade publications for facilities, municipalities and manufacturing plants.

Measurement

- Typical Maintenance Key Performance Indicators (KPIs)
- Critical Maintenance KPIs
- Often overlooked KPIs
- Leading and lagging indicators
- Sources for KPI data
- Reporting information
- Costing information
- Benefits of costing information
- Equipment history review
- Ensuring history review validation
- Understanding the cost of Maintenance
- Defining Maintenance and Operations costs
- Cost of ineffectiveness exercise

Processes and Procedures

- Workflows
- Required and supporting workflows
- Auditing
- Loss elimination
- Continuous improvement
- Processes
- Procedures
- Preventive Maintenance (PM)
- Lubrication practices
- Operations equipment care

Tools

- Role of a CMMS/ EAM

- Predictive Maintenance (PdM) Technologies
- Reliability Engineering
- Equipment and process design

The Future

- Getting the foundation established for success
- Lean
- Six Sigma
- Total Productive Maintenance (TPM)
- Reliability Centered Maintenance (RCM)
- Root Cause Failure Analysis (RCFA)
- Failure Modes and Effects Analysis (FMEA)
- Single Minute Exchange of Die (SMED)

Summary and Wrap-Up

ON-SITE TRAINING OPPORTUNITIES

Put the Clemson tradition of providing maintenance and reliability training to work in your organization.

Clemson University is a results-oriented resource and leading provider of maintenance and reliability initiatives. You can benefit from Clemson's experience of presenting hundreds of on-site training and consulting sessions for large and small companies. Contact Anne Copeland at (864) 656-1601 or acopela@clemson.edu for more information.

Satisfied clients include Alcatel, Proctor & Gamble, Motorola, Uniroyal, DirecTV, Ainsworth Engineered Products, Lockheed Martin, City of Akron, City of South Bend, Old World Industries, Cornell University and Northrop Grumman.

Dave is an annual speaker for the National Facilities Management and Technologies Conference (NFM&T).

Jeff Shiver

Jeff has more than 20 years of manufacturing and facilities experience with a global manufacturer. His work spans four separate manufacturing sites across the U.S. and two regional assignments in 15 North American manufacturing locations.

Jeff is known for driving cultural change by engaging people and utilizing proactive processes in all facets of a manufacturing environment. His experience includes project and controls engineering, information technology, maintenance and operations in manufacturing and corporate management roles.

As the overall site maintenance manager, he led a change improvement effort that reduced maintenance costs by nearly 20% and returned over \$30 million dollars (GSV) in potential capacity and reduced product waste at the manufacturing site.

He is a Certified Maintenance and Reliability Professional (CMRP) from the Society of Maintenance and Reliability Professionals (SMRP) and a Certified Plant Maintenance Manager (CPMM) from the Association for Facilities Engineering (AFE).

"This program gave a comprehensive look at the various management techniques when dealing with maintenance issues.... All of our supervisors are now on the same page to begin to address some maintenance processes and develop a maintenance plan. Clemson's program was of very high quality. Thanks!"

—Lisa Vickery, Management Analyst
Santa Clara Valley Transportation Authority
Santa Clara, CA

register on-line at www.clemson.edu/success

5 WAYS TO REGISTER



Email

ODCEREG-L@clemson.edu



Internet

www.clemson.edu/success



FAX your registration

request to: (864) 656-7351



Call Kay James at

(864) 656-2200



Mail

Clemson University

P.O. Box 912

Clemson, SC 29633-0912

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“Enlightening! Brought together all aspects of Maintenance.”

—Kirk Madsen
Director of Property Management Services
Littleton Public Schools
Littleton, CO

CLEMSON
UNIVERSITY
P.O. Box 912
Clemson, SC 29633-0912

Your Benefits are Guaranteed!

We are confident your organization will gain important insights from this program. If you're not satisfied with this seminar, you will receive an immediate refund of your entire registration fee.

Registration Fee Includes ...

...comprehensive program materials, continuing education credits, certificate of completion, refreshment breaks and networking luncheons. Lodging and other meals are not included. A registration desk will be located outside the meeting room at 7:30 am the first morning of the program.

Registration Form

Please duplicate this form for more registrations

Yes. I/we will attend (Please check one):

Fee: \$875 per person - 4th person is FREE.

- | | | | |
|---|------------------|--|-----------------|
| <input type="checkbox"/> February 5-6, 2008 | Savannah, GA | <input type="checkbox"/> April 3-4, 2008 | Austin, TX |
| <input type="checkbox"/> February 7-8, 2008 | Huntsville, AL | <input type="checkbox"/> April 8-9, 2008 | Hartford, CT |
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| <input type="checkbox"/> April 1-2, 2008 | Denver, CO | <input type="checkbox"/> May 22-23, 2008 | Minneapolis, MN |

Name #1 _____

Title _____ E-mail _____

Name #2 _____

Title _____ E-mail _____

Name #3 _____

Title _____ E-mail _____

Name #4 _____

Title _____ E-mail _____

Phone # () _____ Fax # () _____

Organization _____

Address _____

City _____ State _____ Zip _____

Approving Manager _____ Title _____

Processing Fee

A \$25 processing fee will be applied should you need to cancel and want a refund. Registration payments will be held on account for one year for cancellations received less than 5 business days before the conference. Substitutions can be made at any time.

Please return this ENTIRE page

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