No other industry event offers extensive networking opportunities and in-depth learning sessions covering today's trends, technologies and issues.

Attend. Learn. Apply.
EXCELLENCE BEGINS AT RELIABLE PLANT 2020

For over 20 years, the Reliable Plant Conference & Exhibition has proven to be the only place to find technical excellence, cutting-edge technologies and proven solutions for the maintenance and reliability industry. For 2020, Reliable Plant is racing back to the city which is famous for bourbon, baseball and the Kentucky Derby.

With an established and global reputation for technical excellence, Reliable Plant brings together key plant and maintenance managers, as well as reliability and lubrication professionals, from across the world.

Spanning four days, Reliable Plant 2020 includes workshops, learning sessions and case studies designed to upgrade the skills and knowledge of attendees. The conference will also feature approximately 130 exhibitors inside the Kentucky International Convention Center.

In 2019, more than 1,060 attendees from 40 states, 32 countries and 131 exhibiting companies came together to share ideas, solutions and information. Join us in Louisville as we celebrate 21 years of providing maintenance and reliability solutions to our industry.

SCHEDULE

**Monday, April 6**
- 8:00 am - 11:30 am Pre-Conference Workshops
- 1:00 pm - 4:30 pm Pre-Conference Workshops

**Tuesday, April 7**
- 7:30 am - 8:00 am Continental Breakfast
- 8:00 am - 9:20 am Opening Keynote
- 9:30 am - 10:50 am Exhibit Hall Grand Opening
- 11:00 am - 11:50 am Learning Sessions
- 12:00 pm - 1:20 pm Lunch
- 1:30 pm - 2:20 pm Learning Sessions
- 2:30 pm - 3:20 pm Learning Sessions
- 3:20 pm - 4:20 pm Refreshment Break
- 4:30 pm - 5:20 pm Learning Sessions
- 5:30 pm - 6:30 pm Meet and Greet Reception
- 9:30 am – 6:30 pm Exhibition Hours

**Wednesday, April 8**
- 6:45 am - 8:00 am Offsite Prayer Breakfast
- 7:30 am - 8:30 am Continental Breakfast
- 8:30 am - 9:05 am Learning Sessions
- 9:15 am - 9:50 am Learning Sessions
- 10:00 am - 10:50 am Refreshment Break
- 11:00 am - 11:50 am Learning Sessions
- 12:00 pm - 1:20 pm Lunch
- 1:30 pm - 2:20 pm Learning Sessions
- 2:30 pm - 3:20 pm Learning Sessions
- 3:20 pm - 4:20 pm Refreshment Break
- 4:30 pm - 5:20 pm Learning Sessions
- 5:30 pm - 7:30 pm Networking Reception
- 9:30 am – 12:00 pm Exhibition Hours

**Thursday, April 9**
- 7:30 am - 8:00 am Continental Breakfast
- 8:00 am - 8:50 am Learning Sessions
- 8:50 am - 9:20 am Refreshment Break
- 9:20 am - 10:10 am Learning Sessions
- 10:20 am - 11:10 am Learning Sessions
- 11:30 am - 12:00 pm Giveaways
- 8:50 am - 12:00 pm Exhibition Hours
TOP 10 REASONS TO ATTEND

Reliable Plant covers every facet of reliability in one four-day event. Realize immediate bottom-line results by obtaining real-world information and processes that you can put into practice as soon as you get home.

1. **Improve your plant’s reliability** – learn about real-world deployment processes to sustain your plant’s reliability program
2. **Develop powerful connections** – exchange ideas with peers, share best practices and expand professional relationships
3. **Stay up-to-date on new technologies** – make your job easier
4. **Become more valuable to your company** – learn processes to reduce downtime and control costs
5. **Discover solutions that you can implement immediately** – address specific issues
6. **Save money** – deduct conference expenses on your taxes
7. **Find new customers, suppliers and resources** – generate leads and develop partnerships
8. **Attend specialized half-day workshops** – offered before the conference
9. **Share what you learn with co-workers** – technical papers and presentations provided
10. **Invest in your company** – capture information and apply what you’ve learned on the job

WHO ATTENDS?

As a reliability professional, you value best practices to ensure bottom-line results. Whether you’re entry-level or a seasoned member of your plant’s management team, you’ll benefit from the comprehensive schedule of sessions, case studies and peer interactions. Make plans now to attend the 21st annual Reliable Plant Conference & Exhibition to network with and gather information from the following attendees:

- Asset Care Planners
- CBM Coordinators & Specialists
- Chief Engineers
- Design Engineers
- Engineers & Engineering Managers
- Facility Managers
- Hydraulic Specialists
- Industrial Maintenance Supervisors
- Industrial Mechanics
- Infrared/Vibration Technicians
- Lab Managers
- Lube Analysts
- Lubrication Technicians & Specialists
- Machinery Engineers
- Maintenance Engineers & Managers
- Maintenance Planners
- Managers of Maintenance & Reliability
- Mechanical Engineers
- Operations Managers
- PdM Analysts & Specialists
- Planners & Schedulers
- Plant Managers & Engineers
- Project Leaders
- Quality Managers
- Reliability Coordinators
- Reliability Engineers
- Reliability Team Leaders
- Reliability Technicians
- Safety Managers & Directors
- Senior Reliability Engineers
- TPM Coordinators & Facilitators
- ... and more

“Reliable Plant brings a good cross section of people to learn from others. Everybody has pumps, assets and a big deal is lubrication. This is the No. 1 conference for me.”

- Doc Palmer, Managing Partner, Richard Palmer & Associates
Lee Rubin is an emerging voice. His unique ability to understand and articulate winning principles with tremendous clarity and practical application makes him a highly sought-after speaker and teacher. He is a frequent speaker and panelist at corporations, conferences and schools throughout the country.

Lee holds a bachelor’s degree in speech communications with a minor in business from Penn State University. He received a full athletic scholarship to play football for the Nittany Lions and was a three-year starting free safety as well as a team captain.

Born in Honolulu, Hawaii, Lee was raised in central New Jersey. He and his lovely wife, Carmen, have two beautiful daughters.

Machines are evaluated based on the output of the entire unit, not the impressiveness of their individual parts. Extraordinary teams, like great machines, require certain components that hold their pieces together. While most organizations focus exclusively on building the skills of their individual members, elite organizations invest in the “stuff” that transforms a collection of talented individuals into extraordinary, machine-like teams.

This keynote is packed with insights, examples, and humor that will keep attendees engaged. Attendees will leave informed and energized, eager to take their respective teams to a higher level.

Learning Objectives:
> Review the need for a COMPETITIVE attitude in order to drive team members toward constant improvement
> Discuss how and why individuals on great teams make sacrifices in order to achieve a COMMON GOAL
> Understand the importance of engaging in open and honest COMMUNICATION, which is the foundation for trust amongst coworkers
> Learn the importance of coming together during times of adversity to develop CHEMISTRY
> Discover how to develop a daily discipline that builds CONSISTENCY
Show Prize Giveaway

Reliable Plant Conference & Exhibition celebrates its 21st installment in April and for 2020, we are giving away 15 fabulous prizes!

In addition to the grand prize, 14 Reliable Plant attendees will have the opportunity to win amazing giveaways. A few prizes you could win are:

- Makita Cordless 6-Pc. Combo Kit
- DEWALT Max Cordless Drill Combo Kit
- Bose Wireless Headphones
- Apple iPad and Pencil
- Microsoft Xbox One S Console Bundle
- $2,000 cash
- Reliable Plant 2021 Voucher
- Machinery Lubrication 2020 Voucher
- And more!

Show Prize Giveaway Sponsors (as of 1/15/2020)

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SDMyers, Inc.
SEC of America (SHINKAWA Electric)
SGS North America (OCM)
Specialty Manufacturing, Inc.
Swift Filters, Inc.
TTI - Todd Technologies Inc
Y2K Filtration

Learn more at conference.reliableplant.com/giveaway
Certificate Programs

Enhance your learning experience by adding a certificate program to your Reliable Plant 2020 registration. Presented by industry experts, each certificate program offers a customized learning path consisting of a half-day pre-conference workshop and four learning sessions on key topics in that specific program of focus. All attendees who complete the program will receive a certificate of completion.

**New for 2020:** To improve the learning experience, learning session topics in each certificate program have been categorized as analytical, tactical, applicable and strategic. **Analytical** learning sessions will review past practices to help make the necessary adjustments, while **tactical** sessions will concentrate on those things that can be done for immediate change. **Applicable** sessions will focus on learning lessons relevant to one’s role/position, and **strategic** sessions will be forward thinking to help attendees determine the right direction and where resources should be allocated. Through each of these programs, attendees will gain analytical, tactical, applicable and strategic learning objectives for implementation at their facilities.

For 2020, the four certificate programs are:

> Change Leadership
> Predictive Maintenance
> Maintenance Management
> Reliability Engineering

Visit [conference.reliableplant.com](http://conference.reliableplant.com) for more information, pricing and details for the certificate programs.

“I felt like I needed the training and resources. I felt this would step me in the right direction and help me out in my position. The conference has been great. It’s given me more resources to help me out with my position. I’ve already told my boss I’m coming to Reliable Plant next year.”

- Kelly Main, H-P Products
### Change Leadership

Enhance your registration by adding the Change Leadership certificate program to your registration. Presented by industry experts, the Change Leadership certificate program consists of a half-day pre-conference workshop and four analytical, tactical, applicable and strategic learning sessions on key topics in change leadership. With this certificate program, attendees will learn the common challenges leaders face when implementing change along with the key steps that he/she can take to convert resistance into successful project implementations.

**Who Should Attend?**
- Senior leaders
- Mid- to upper-level managers
- Any individual(s) who regularly faces change in his/her facility
- Any individual(s) who is currently in (or moving into) a leadership role

**Pre-Conference Workshop**

**Steps for Successful Change: Leading Your Team into the Future**
- Chris Christenson, Noria Corporation

One of the biggest hurdles when trying to implement a reliability or lubrication program is that people naturally choose the path of least resistance or effort. This principle can be a powerful influence. At times, it will inspire those involved to create innovative solutions that unleash great efficiencies. However, it can also be a force that holds your team in old habits, ruining attempts by leadership to move to new processes. This workshop will reveal the most effective strategies for steering your next improvement project toward long-term success. You will learn how to make a compelling case for change, communicate your vision, obtain buy-in, avoid common pitfalls, empower action and build an implementation plan.

**Monday, April 6, 8-11:30 a.m.**

**Learning Session Topics**
- Analytical Session: Is your organization change-ready?
- Tactical Session: Build the ultimate team to inspire change
- Applicable Session: Overcoming resistance to change
- Strategic Session: Incorporating kaizen events into your department

### Maintenance Management

Enhance your registration by adding the Maintenance Management certificate program to your registration. Presented by industry experts, the Maintenance Management certificate program consists of a half-day pre-conference workshop and four analytical, tactical, applicable and strategic learning sessions on key topics in maintenance management. Through this certificate program, attendees will gain the knowledge needed to lift his/her maintenance organization out of mediocrity with effective leadership tactics to increase productivity and reduce costs.

**Who Should Attend?**
- New or current maintenance managers
- Engineers
- Supervisors
- Facility managers
- Any individual(s) responsible for building and sustaining a world-class maintenance program

**Pre-Conference Workshop**

**Building a Foundation in Maintenance and Reliability Best Practices**
- Jeff Shiver, People and Processes

Many maintenance and operations managers struggle to drive reliability and availability while controlling costs, ensuring quality, and improving safety and environmental compliance. This workshop will create a roadmap for implementing maintenance and reliability best practices, including how to align and develop a maintenance organization. Join Jeff Shiver as he helps attendees understand both the fundamental and more advanced concepts in maintenance and reliability, such as how to build management support, determine the return on investment for proactive practices, leverage key performance indicators to deliver business objectives and manage proactive work execution.

**Monday, April 6, 8-11:30 a.m.**

**Learning Session Topics**
- Analytical Session: How optimized are your PMs?
- Tactical Session: Proper maintenance planning and scheduling
- Applicable Session: How to plan/manage a plant shutdown/turnaround
- Strategic Session: Transitioning into TPM
Certificate Programs

**RELIABILITY ENGINEERING**

Enhance your registration by adding the **Reliability Engineering** certificate program to your registration. Presented by industry experts, the Reliability Engineering certificate program consists of a half-day pre-conference workshop and four analytical, tactical, applicable and strategic learning sessions on key topics in reliability engineering. With this certificate program, attendees will find out how they can positively impact the reliability of their equipment and optimize their maintenance resources through specific design and engineering decisions.

Who Should Attend?

> Managers
> Supervisors
> Engineers
> Any individual(s) responsible for improving asset and capacity reliability

**Pre-Conference Workshop**

**Integrating Operators into Machine Reliability**
- Chris Endruhn, Reliability Solutions

When equipment failures occur, who performs the initial root cause analysis? Only one group is there 24 hours a day, seven days a week and knows what occurred prior to failure. Operators (those on the plant floor) are the front line for reliability gains in both failure control and life-cycle improvement. This workshop explains how you can capitalize on the experience of operators to gain greater asset reliability. Join Chris Endruhn as he outlines a strategy for sustainable "operations asset reliability," including a four-phased approach that can provide huge gains in reliability and cost performance reductions.

**Monday, April 6, 1-4:30 p.m.**

**Learning Session Topics**

> Analytical Session: Conducting FMEA or FRACAS
> Tactical Session: Basic elements of RCM
> Applicable Session: Guidelines for responding to impending/precipitous failures
> Strategic Session: How to develop a reliability culture

**PREDICTIVE MAINTENANCE**

Enhance your registration by adding the **Predictive Maintenance** certificate program to your registration. Presented by industry experts, the Predictive Maintenance certificate program consists of a half-day pre-conference workshop and four analytical, tactical, applicable and strategic learning sessions on key topics in predictive maintenance. Through this certificate program, attendees will discover the benefits of a comprehensive condition-based maintenance program with learning sessions covering the latest and most important technologies.

Who Should Attend?

> Maintenance managers
> PdM managers
> Maintenance professionals
> Any individual(s) responsible for managing a PdM program

**Pre-Conference Workshop**

**How to Leverage Multiple PdM Technologies in Concert**
- Matt Adams, Noria Corporation

Troubleshooting plant equipment can be a daunting task depending on the complexity of the assets and the nature of the problem. Often by applying multiple predictive maintenance (PdM) technologies, you can minimize the difficulty of identifying root cause failure mechanisms. This workshop will investigate several common component failures and show how thermography, vibration and oil analysis each has a role to play in detection. Attendees will gain a better understanding of several PdM technologies and see how they can work together to achieve far more than when implemented independently.

**Monday, April 6, 1-4:30 p.m.**

**Learning Session Topics**

> Analytical Session: How to perform a criticality analysis
> Tactical Session: Determine your optimum reference state
> Applicable Session: Utilizing the right IIoT sensors/data
> Strategic Session: Using OEE to establish maintenance practices
Learning Sessions

Here's a quick look at some of the more than 70+ learning sessions. New learning sessions are being added weekly, so stay up-to-date by visiting conference.reliableplant.com.

Case Study: Why Maintenance Is a Marathon, Not a Sprint
Michael Mazur, Schwan's Global Supply Chain

Maintenance managers looking for a “quick fix” to problems can often lead to an ad-hoc firefighting culture. Using the analogy of running a marathon, this session will highlight the importance of training, coaching, maintaining good habits and following through to achieve better outcomes with your maintenance actions. Join Michael Mazur as he shares his insights from more than 30 years of experience as a technician and supervisor in the military and in industrial plants to help you break the barriers of an ingrained culture. You will learn how to ensure personnel maintain their proficiency in performing tasks, as well as how to provide the tools, space and time to "self-train" your team.

Case Study: A Back-to-Basics Journey to Re-establish Effective Maintenance Processes
Daryl Leggett and Mark Drejza, Braskem America

After implementing a new maintenance work process, the Braskem America plant in Marcus Hook, Pennsylvania, had regressed to where its team could no longer drive the process successfully. Input on priorities was lacking or last minute, the planning backlog was increasing, and weekly schedules would often "blow up." This case-study presentation will describe how the team reset the process by going back to the basics. Daryl Leggett and Mark Drejza will share the triumphs and setbacks encountered throughout this journey, including the impact of the reset and how the results have affected performance and culture at the site. Attendees will also hear where the plant currently stands with its improvement process and what work still needs to be done.

Empowering Maintenance and Operations Personnel to Increase Performance
Joe Lonjin, Cohesive Solutions

The foundation of every organization lies in its people, but sadly this truth is often overlooked. This session will explore how maintenance organizations can develop, connect with, and retain the knowledge and passion of their key personnel. Find out how to increase human capital, from connecting personnel with business objectives to communication plans that increase transparency and performance, as well as how subcultures in your organization actually drive or hinder performance. You will also hear case-study examples of how empowered and connected technicians can uncover and jump-start potential improvements.

Pros and Cons of Rerating vs. Purchasing New Air Compressors
Matthew Shaner and Barbara Ross, FS-Elliott

Centrifugal compressors are used to supply compressed air for a variety of applications in a wide range of industries, from food and beverage processing to oil refining. However, when plant demands change or compressors are moved to different locations, users are often faced with a decision to either purchase a new compressor or rerate an existing one to meet the new conditions. This session will reveal the key factors that should be considered as well as the pros and cons of rerating an existing air compressor versus purchasing a new compressor. With this knowledge, attendees will be able to perform an accurate assessment in their plant to determine which path is best for them.

Exploring the Future of Maintenance: 2020 and Beyond
Jeremy Wright, Advanced Technology Services

Many factors will help guide the future of maintenance, including automation, staffing shortages, big data, artificial intelligence, sensor technology, constrained budgets, cultural shifts, etc. In this special roundtable discussion, Jeremy Wright of Advanced Technology Services will explore the current status of several of these key issues and speculate what the future will usher into the maintenance industry. By joining this conversation about the future of maintenance, you will be better prepared for the upcoming changes and understand how to capitalize on them if and when they occur.

How to Reduce the Duration of Shutdowns and Improve the Bottom Line
Rick Phelps, Radical Profitability LLC, and Wendell Simpson, ProChain Solutions

Plant shutdowns can cause major business disruptions when they don’t go as planned or finish on schedule. Reducing the duration of a shutdown while improving its quality can significantly impact an organization’s top and bottom line. This session will detail a proven methodology for shortening the length of shutdowns while minimizing the chances they get off schedule. Attendees will learn how to simplify a shutdown before optimizing it, how to leverage human assets and gain buy-in for continuous improvement, and how anyone in an organization can be the catalyst for change and improvement.
How to Design the Right Maintenance Strategy for Your Plant

Michael Meehan, Worthington Industries

This case-study presentation will provide attendees with the basic tools to develop and implement the best maintenance strategy for their organization. Join Worthington Industries’ Michael Meehan as he offers proven tips to make the maintenance strategy development process less confusing. You will discover how to select a base model from which to build your strategy, how to design a maintenance strategy that is aligned to your organization’s objectives to gain executive support, how to choose improvement elements to include in your strategy, and how to translate the overall strategy into actionable plans.

The Role of Continuous Improvement in Sustaining Plant Reliability

Don Shoemaker, Synovos

Plant management often struggles in developing a strategic approach for managing parts and services, missing opportunities for efficiency gains in process improvements. While implementing an integrated supply program is a step in the right direction, program champions rightfully ask: "Is there more we should be doing?" The answer is yes. This presentation looks at the maintenance, repair and operations (MRO) supply chain from the plant's perspective. You will discover how to identify continuous improvement opportunities, navigate the roadblocks to implementing improvements and recognize when outside help is needed.

Case Study: Strategies for Filling the Maintenance Skills Gap

Don McDaniel, Worthington Industries (Steel Division)

Four years ago, the Worthington Industries plant in Columbus, Ohio, identified a gap in filling its skilled maintenance technician positions. This session will describe how the plant began a training program with local trade schools and colleges to build a pool of skilled talent. Discover how Worthington developed this pipeline of talent for the future, which has resulted in several students being hired and the maintenance department becoming fully staffed. Attendees will hear how students are shown what to expect firsthand, how to work as a team and how to take ownership, as well as how new employees are paired with senior technicians for continued learning.

From Firefighting to First-class Maintenance: A Never-ending Battle

George Miconi and Don McDaniel, Worthington Industries (Steel Division)

This case-study presentation will provide a detailed roadmap to a sound maintenance program so you can improve machine uptime at your organization. Join Worthington Industries’ George Miconi and Don McDaniel as they share the path their company took to transition from being reactive to becoming more proactive and achieving greater uptime. You will hear why communication is key, how to determine the root cause of problems, why change is your friend and how anyone can develop a team of first-class maintenance technicians.

The Power of the Right Maintenance Schedule

Frank Pereira and Marco Juarez, Coleman Consulting Group

In many plants around the world, the traditional operations and maintenance schedules are Monday through Friday, with technicians returning on the weekends to work overtime. This not only costs the company money but also takes a toll on the maintenance crew’s morale and quality of work. This presentation will explain why it’s time to rethink scheduling and how a proper maintenance schedule can reduce operating costs and improve the quality of your service or product. Attendees will discover how to improve employee morale and retention through predictable work schedules, as well as how a customized schedule can save millions.

Motion Amplification: A New Way to Assess Machine Vibration Issues

Jeff Hay, RDI Technologies

Traditional vibration can be costly and cumbersome to scale. Techniques such as operating deflection shape (ODS) analysis are often time-consuming, and many times the results don’t reveal the root cause, which might be structural in nature. This presentation will explain how motion amplification allows users to see the motions that are occurring at the asset and become aware of the issues that are causing excessive vibrations or failing components. Several case studies will be included with real-life examples to help attendees understand this new approach to vibration and how it is being implemented in facilities today.

Why Equipment Fails and What You Can Do to Prevent It

Ray Garvey, Asset Analytix

Why do machine components fail? Is there anything you can do to prevent it? This session will describe eight of the most common failure mechanisms and how they can be offset to increase equipment reliability and availability. Ray Garvey will explain why periodic assessments should be employed to evaluate asset condition monitoring for reduced risks and improved decision making. Attendees will learn which types of equipment apply to each failure mechanism, along with the contributing factors, proactive measures and condition monitoring options to determine when components are in various stages of progressive failure.

How to Apply PdM Tools and Practices in Your Maintenance Program

Kevin Grider and Paul Kimble, PM Tech

The lack of sound predictive maintenance (PdM) practices is quite common in industrial plants across the country. In this case-study presentation, PM Tech’s Kevin Grider and Paul Kimble will explore the use of predictive tools and practices in a maintenance program and how they can provide unique insight that can be vital to an operation. Attendees will gain a better understanding of sound predictive technologies, applications, practices and tools, as well as the importance of monitoring, trending and reporting the results.
How to Apply Predictive Technologies to Design for Reliability
Marie Getsug, Jacobs Engineering Group

Design for reliability is a strategic approach that can be used to optimize any plant’s total cost of ownership (TCO) and ensure a reliable and sustainable product supply. This presentation will show how predictive technologies fit within the context of design for reliability to support asset management. You will gain a better understanding of predictive technologies and how they can be applied as design for reliability elements, as well as how an organization’s reliability culture and stakeholder engagement can be positively affected by integrating these technologies.

How to Set Effective KPIs and Metrics for Your PdM Program
John Pucillo, Life Cycle Engineering

Are your predictive maintenance (PdM) efforts providing the expected value and positively impacting your overall operations? Managing a successful PdM program requires more than a disciplined deployment of the appropriate technologies. It also requires key performance indicators (KPIs) and metrics to assess the program’s value. This session will explain how to determine if your PdM program is performing at an optimal level and helping your facility achieve the desired organizational goals and objectives. You will learn the best metrics for judging a PdM program’s effectiveness, what data is needed and where to find it, how to perform periodic program self-assessments, and how to use equipment history and failure modes to improve your PdM approach.

Case Study: How Saudi Aramco Combines PdM Techniques for Early Fault Detection
Muhammad Ali Qureshi, Saudi Aramco

This case-study presentation will outline the predictive maintenance (PdM) techniques and proactive maintenance strategies that Saudi Aramco used to detect machine faults at an early stage. Join Muhammad Ali Qureshi as he describes how the company integrated its lubricant condition monitoring system with ultrasonic analysis to minimize equipment downtime and repairs while saving significant costs simply by trending and monitoring basic oil properties. Attendees will gain a better understanding of oil condition monitoring and ultrasonic analysis along with the benefits that can be achieved by employing multiple PdM techniques.

Getting the Most Out of Your Oil Analysis Reports
John Sexton, BASF

Oil analysis reports contain a wealth of information, but without a basic knowledge of what the tests are and what the results mean, you may find the reports complex and confusing. Many end users just want their lab to tell them if their oil is good or bad and miss out on information that could prevent unnecessary oil changes or catastrophic failures. This presentation will review common oil analysis tests and detail what their results can tell you about your oil and equipment. After this session, attendees will be able to quickly review their oil analysis reports, pick out the important information and know what actions should be taken.

Stay up-to-date by visiting conference.reliableplant.com.
Learning Sessions

Why Your PdM Program Is Not Increasing Equipment Reliability
John Pucillo, Life Cycle Engineering
Predictive maintenance (PdM) programs have been tremendously effective in finding failures and recommending repair actions. However, on their own, these programs do not improve equipment reliability. This presentation will explain how shifting your focus from managing failure to eliminating it can add true reliability to your program. You will learn which data and information to track as well as how to collect it, how to incorporate root cause failure analysis as a main component of your PdM program, and helpful techniques to add to your program to eliminate common failure modes.

Predictive Maintenance vs. Corrective Maintenance: Choosing the Right Strategy
Michael D. Holloway, 5th Order Industry
Planned maintenance and maintenance work performed in response to a failure require very different procedures and protocols. By choosing the appropriate strategy, you can help increase equipment availability and optimize staff utilization. This session will outline the duties and tasks associated with predictive maintenance versus corrective maintenance, as well as how to convey the differences to personnel. Attendees will learn how to set task intervals, develop clearly worded procedures, establish safe work practices and maximize reliability while satisfying operational requirements.

Condition Monitoring Techniques for Reciprocating Compressors
Amir Basyouni, Baker Hughes
Reciprocating compressors are among the most expensive assets in a plant. Despite their criticality and importance, they often are overlooked by condition monitoring teams because the primary predictive maintenance tool is not well-suited for these types of machines. This results in the overall machine health being ignored and not diagnosed until damage occurs. This presentation will explore why condition monitoring should not only be used to protect reciprocating compressors from catastrophic failure but also to predict and diagnose any equipment abnormality to sustain reliability. You will learn how this can be accomplished by monitoring all machine components simultaneously and recording their performance along with the operating parameters and overall machine health.

Reliability Leadership: Why It’s All About Taking Ownership
Dr. Nathan Wright, Transformational Performance Solutions, LLC
The latest trend in maintenance and reliability is to take shortcuts. This approach, which rarely succeeds, often is determined at the senior leadership level and without the knowledge necessary to make the right decision. Eventually, these leaders will be forced to choose whether they wish to remain victims of their bad decision or take ownership and repair the damage. This session will outline what maintenance and reliability professionals can do to educate and guide their organizations to prevent these types of failed approaches. You will find out how to have these discussions and win them, why all reliability efforts must start with qualified leaders and owners, and what it takes to be an owner and not a victim.

How to Collect Vibration Data on Critical Machinery: A Case Study
Paul Kimble, General Motors/Marion Metal Center, and Joe Hugh, General Motors
Collecting vibration data on critical machinery can be challenging, especially if it rotates at high speeds, stops and then rotates in the opposite direction. This case-study presentation will describe how the General Motors metal-stamping plant in Marion, Indiana, was able to better monitor its motors and gearboxes and find numerous anomalies, which led to planned repairs and less downtime. Discover how precise timing in the collection of time waveforms was accomplished using a trigger with an online vibration system. Attendees will leave with a better understanding of the latest techniques for collecting, calculating and properly applying vibration data.

Efficiency or Effectiveness? Why Reliability Initiatives Often Fail
Joe Anderson, ReliabilityX, and George Williams, B. Braun Medical
This session aims to pinpoint the root cause of why so many maintenance and reliability initiatives fail. By helping attendees get back to the fundamentals and refocus on achieving reliable assets, Joe Anderson and George Williams will explain how to do all the right things, such as developing a proactive maintenance strategy, having systems and processes in place, getting operators involved, and setting priorities for what should be the maintenance department’s true focus. You will learn the difference between efficiency and effectiveness, what can set your organization up for success, and how to work with other departments for plant-wide reliability.
# How to Ignite Passion and Performance for Improved Reliability

**Jeff Shiver, People and Processes**

Many organizations have embarked on the journey to improve their asset performance and reliability, but most struggle with the implementation of the improvement initiative. In this session, Jeff Shiver will break down how to implement a reliability improvement initiative using an approach that enables site management and corporate leadership to win the hearts and minds of those executing the work. Drawing on his experiences and insights from successful and not-so-successful organizations across the world, he will share practical methods for developing an actionable roadmap, gaining executive support, leveraging education to paint the vision of the future state, building true partnerships and other components for implementation success.

# Reliability Information Management: The Secret to PdM Success

**Forrest Pardue, 24/7 Systems**

# Why Oil Cleanliness Is the Key to Equipment Reliability

**Saeed Asiri, SABIC**

# 6 Major Challenges Facing Industrial Plants and How to Overcome Them

**Alan Ross, Electric Power Reliability Alliance, and Chip Angus, SDMyers**

# How to Improve the Reliability of Common Plant Equipment

**Terry Harris, Reliable Process Solutions**

# Using Smart Technologies to Improve Lubrication and Vibration Analysis

**Jeremy Drury and Will Tudoroff, IoT Diagnostics**

# The Future of Manufacturing: Connecting Humans and Machines

**Lawrence Whittle, Parsable, and Lincoln Hughes, Manufacturing Services and Analytics, American Axle & Manufacturing (AAM)**

# A Blueprint for Deploying the IIoT Within Your Organization

**Brian Alessi, Everactive**

# Turnaround Maintenance Planning and Scheduling: A Case Study

**Omar Alarifi, Saudi Aramco**

# How to Conduct Effective Planning and Scheduling Meetings

**Owe Forsberg, IDCON**

# Proven Planning and Scheduling Techniques from an Experienced Maintenance Planner

**Steven J. Tuttle, Critical Assets**

# Job Mapping: How to Develop Great Job Plans

**James Kovacevic, Eruditio**

# Case Study: How to Map Out Your Maintenance Workflow

**Ryan Botelho, LeachGarner**

# How to Keep Your Maintenance Backlog from Becoming a Black Hole

**James Kovacevic, Eruditio**

# 5 Things Every Hydraulic Troubleshooter Must Know

**Jack Weeks, GPM Hydraulic Consulting**

# How to Optimize the Life of Hydraulic Oil

**Nnamdi Achebe, Petrosave Integrated Services**

# Fault Analysis and Troubleshooting Basics for Critical Systems

**Michael D. Holloway, 5th Order Industry**

# How to Build a Successful Grease Analysis Program

**Rich Wurzbach and Richard Janosky, MRG Labs**

# Establishing a Lubrication Program: Where to Start

**Joe Goecke, Petro-Canada**

# Case Study: Cost-Saving Methods to Optimize Open Gear Lubrication

**Mario Guilherme Silva Rupf, FLSmidth**

# Case Study: Proactive Ways to Prevent and Eliminate Oil Contamination

**Scotty Briner, Advanced Composites**

# The Truth About What’s Hiding in Your Oil Filters

**Henry Neicamp, Polaris Laboratories**

# A 7-Step Journey to Prescriptive Maintenance

**Kevin Price, Infor**

# Improving Asset Reliability Through Bad-Actor Management

**Assem Alghamdi, SABIC/SAFCO**

# Tools and Technologies to Enhance Plant Safety and Maintenance Operations

**Bhanu Srilla, Grace Engineered Products**

# Managing the Knowledge Drain from Retiring Workers

**Dr. Holger Streetz, Bathan AG**

# Strategies for Determining the Root Cause of Varnish in Turbines

**Marcello Gracia, Confialub, and Andy Lantos, Laboratorio Dr. Lantos - Wearcheck Argentina**

# The Secrets for Implementing a Clean Lubricants Program

**Rebecca Zwetzig, Chevron**

# Strategies for Removing Water from Specialized Lubricants

**Steffen Nyman, C.C. Jensen & CleanOilConsult**

# Designing a Lubrication Room to Increase Machine Reliability

**Marcello Gracia, Confialub, and Rodrigo Werneck, CMOC - COPEBRAS**

# Using Real-time Data to Predict an Oil’s Useful Life

**Joe Lisowski and Martin Migliori, Airline Hydraulics**

# How to Plan and Schedule a Seasonal Maintenance Outage: A Case Study

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For more information, visit conference.reliableplant.com

Interested in exhibiting?
Contact:
Teresa Dallis
918-392-5056
tdallis@noria.com

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Show Prize Giveaway 436

Show Office

ENTRANCE
Networking

MEET & GREET RECEPTION
Tuesday, April 7, 5:30-6:30 p.m.
Gather with fellow attendees and exhibitors for the evening reception in the exhibit hall.
> Appetizers, bar and entertainment
> Open to all Reliable Plant attendees and exhibitors

NETWORKING RECEPTION
Wednesday, April 8, 5:30-7:30 p.m.
Join us for an evening of networking, fun and food with colleagues.
> Appetizers, bar and entertainment
> Open to all Reliable Plant attendees and exhibitors

TOP 10 MUST-DOS IN LOUISVILLE

1. As the home of the Kentucky Derby since 1875, Churchill Downs is the #1 stop for anyone travelling to Louisville.

2. Every day is Derby day at the Kentucky Derby Museum! Immerse yourself in the history of the Kentucky Derby with two levels of family-friendly interactive and permanent exhibits.

3. Swing by the Jim Beam Urban Stillhouse where you can fill, seal and even stamp your own bottle, or enjoy a guided “Taste of History” bourbon tasting.

4. Inspired by the hometown hero himself, the Muhammad Ali Center features two levels of award-winning exhibits, a theater, interactive boxing run, art galleries and more.

5. Experience history in the making at the Louisville Slugger Museum & Factory. See where the world-famous bats are made, view the world’s biggest bat and create a bat with your name on it.

6. Headed to historic “Whiskey Row?” Be sure to visit the Evan Williams Bourbon Experience, which features tours, educational tastings and more.

7. Explore local history and architecture at the Conrad-Caldwell House Museum, located in the heart of Old Louisville on St. James Court.

8. Seeking diverse food? Make lunch or dinner plans for Sokolowski’s University Inn, a cafeteria-style restaurant featuring authentic Polish cuisine.

9. Boasting daily, live historic performances, the Frazier History Museum features three floors of exhibits, a tournament ring, an education center and rooftop garden.

10. Opened in 1969, the Louisville Zoo currently boasts more than 1,100 animals in a variety of habitat areas such as Glacier Run, Australian Outback and Gorilla Forest.
The 2020 Reliable Plant Conference & Exhibition will be held at the Kentucky International Convention Center in Louisville, Kentucky. Specially rated blocks of rooms are reserved at the Galt House Hotel. You can take advantage of these discounted rates by booking your room(s) directly with them using the group code “RELIABLE PLANT 2020” at the time of your reservation. Availability is limited, so you are encouraged to make reservations early.

GET A FREE NORIA TRAINING COUPON
Valued at $1,495*

Full-conference registration includes a $1,495 training coupon which can be used toward Noria’s lubrication or oil analysis training courses. Use it yourself or give it to a co-worker. It’s like attending the conference and getting Noria training for free!

GET TO KNOW LOUISVILLE

Louisville, Kentucky, was founded in 1778 by George Rogers Clark and named after King Louis XVI. It lies on the Ohio River near the border with Indiana. The city is best known for the Kentucky Derby, the most popular event in horse racing and known as the “most exciting two minutes in sports.” Join us in Louisville where you can network with global reliability experts spanning multiple industries such as automotive, manufacturing, electric, lighting, etc.

Galt House Hotel in Downtown Louisville
140 N Fourth St, Louisville, KY 40202
1-800-843-4258

> Call toll-free 1-800-The-Galt to reserve your room by March 5, 2020
> Single occupancy is $179
> Use group code: RELIABLE PLANT 2020
> Make all hotel reservation changes and cancellations directly with your hotel
> Visit conference.reliableplant.com for a shortcut to the hotel registration site

*Terms and Conditions: Only one coupon issued per person. No cash value. Coupon is transferable within your organization and must be presented when registering for the training. Coupon is valid for Noria public training courses in the United States taking place between April 2020, and April 2021, or online courses purchased prior to April 2021. Coupons are given to full-conference (Tuesday-Thursday) attendees who pay their conference registration fee and attend the conference. Speakers and exhibitors are not eligible unless paying full conference registration fees. Coupons may not be used for private onsite training.
## 2020 Pricing & Discounts

### REGISTER NOW & **SAVE $200** (UNTIL MAR. 5)

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**Add a Certificate Program**

- **$245**

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- **Online:**
  - Find the most up-to-date information by visiting [conference.reliableplant.com](http://conference.reliableplant.com)

- **Phone:**
  - Give us a call Monday – Friday, 8 a.m. – 5 p.m. (CST)
  - 918-392-5038

- **Fax:**
  - Fax your completed registration form to:
  - 918-746-0925

### WHAT’S INCLUDED?

**FULL-CONFERENCE REGISTRATION INCLUDES:**

- Admission to all conference sessions
- Conference proceedings
- Opening general session and keynote address
- Exhibition hall access
- Daily breakfasts, refreshments and lunches
- Networking receptions
- FREE Noria training coupon, valued at $1,495
- Plus much more!

### BRINGING THE CREW? GET A DISCOUNT.

- **3 to 9 attendees:** Get three or more full-conference registrations for only $995 each.
- **10 or more attendees:** Get 10 or more full-conference registrations for only $895 each.

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**100% SATISFACTION GUARANTEE**

Noria stands behind Reliable Plant 2020. If you’re not satisfied with the information and insights you gain at this event, we’ll refund 100% of your paid registration fee.

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Registrations canceled before February 19, 2020, will receive a full refund. Cancellations made after February 19, 2020, are subject to a $75 administrative fee. Cancellations after March 5, 2020, are not eligible for refunds. However, you may send a colleague in your place. If you are unable to send a colleague, the entire registration fee will be forfeited.
WANT TO SPONSOR?
Sponsorships at Reliable Plant 2020 are the optimal way to set your company apart from the competition on the exhibit hall floor. Extending your brand visibility beyond the square footage of your booth, these packages are sold on a first-come, first-serve basis and sell out quickly. Reliable Plant 2020 offers high-impact sponsorships to fit every budget and every need.

READY TO EXHIBIT?
Prime booth locations go fast, so reserve your exhibition space now! As a forum where experts and experienced leaders can educate and interact directly with those searching for solutions, Reliable Plant inspires machine reliability through knowledge sharing, hands-on product exposure and networking among peers. This global event is a magnet for drawing all levels of maintenance and reliability leaders who share a common goal of seeking products, services and solutions that only you can provide. Solidify your voice in the marketplace and join other industry-leading companies by exhibiting at Reliable Plant 2020.

For more information, call 1-800-597-5460 or visit conference.reliableplant.com.
### Highlights
- 90+ Learning Sessions
- 130+ Exhibitors
- 30+ Case Studies
- Four Certificate Programs
- Multiple Networking Opportunities
- Plus Much More!

### Register Now & Save $200 (Until Mar. 5)

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