Prevent Mechanical Failure —
Train Personnel — Maximize Efficiency…
All In One Comprehensive Program.
Fragmented Programs Lead to Ineffective and Inaccurate Lubrication Practices

Ineffective and inaccurate lubrication practices are widespread in industry today and cost companies millions of dollars each year, yet they represent one of the easiest cost categories to streamline and control. Many organizations take a casual approach to lubrication excellence. While improvements may have been made in certain areas based on information from suppliers, magazine articles or training classes, few if any companies take a critical look at their lubrication practices as a whole. This typically results in a fragmented program, with improvements made in one area negated by poor practices in others. The reasons for this usually are not due to a lack of desire but rather the magnitude of the task and an inability to find time among competing priorities.
Our Expertise

Mechanical wear and corrosion (chemical degradation) make up approximately 70 percent of industrial machine failures, costing companies millions of dollars each year. Both wear and corrosion can be mitigated or prevented by proper lubrication.

Most organizations conduct maintenance that includes lubrication, but few recognize the serious potential of comprehensive analysis, training and implementation of excellent lubrication practices – particularly those that are proactive.

Noria can give your organization an individualized lubrication system, personnel training on best practices and continued access to a network of industry experts – all in one comprehensive program.

Program Results:

- **Significant Cost Savings**: Operational costs decrease, fewer necessary repairs, less downtime, more profit

- **Greater Efficiency**: Achieve ROI ahead of schedule, increase life and functionality of plant machinery

- **More Knowledgeable Staff**: More skilled maintenance staff, more organized lubrication tasks, personnel able to handle lubrication issues in-house, major cultural shift to better performance

Our Passion: About Noria

Since 1997, Noria has been delivering world-class lubrication programs for a wide variety of customers and industries, including power generation, food and beverage, heavy manufacturing, mining, etc. Major lubricant manufacturers turn to Noria to train their teams, design world-class lubrication programs and solve lubrication problems.

As a trusted advisor to the world’s leading organizations, Noria has a staff of technical specialists dedicated to consulting, training and publishing in the core competencies of tribology, lubrication, oil analysis, contamination control and machine reliability. Our services are disseminated through top-quality training courses, consulting services, publications, webinars, videos and books.

Our mission is to inspire change through education by providing tools, resources and expertise so the industrial world can realize the tremendous potential that lubrication excellence has to offer.
Our Services

Lubrication Program Development (LPD)

Achieving lubrication excellence translates into major benefits for a company, but it can be an overwhelming endeavor for busy plants that need effective, sustainable solutions they can use immediately. With Lubrication Program Development (LPD), Noria delivers just that, guiding clients through each of the program’s four steps to create the individualized, high-performing system they need.

ASSESS – Noria assesses a client’s existing lubrication practices and prepares a report outlining potential gains and specific recommendations.

DESIGN – Noria develops a detailed system of lubrication procedures, machine modifications and oil analysis to maximize mechanical efficiency.

IMPLEMENT – Noria coordinates the implementation process, including procuring necessary hardware, installation, training, etc.

SUSTAIN – Noria provides continuing lubrication education for a skilled workforce and access to its network of industry experts.
Assess

The Benchmark Assessment is a gap analysis process in which Noria experts spend three days evaluating a facility’s lubrication practices based on a 600-point assessment survey. For facilities that don’t have an existing lubrication program, the assessment serves as a detailed guide for personnel to build one. In addition to the survey, Noria experts interview facility stakeholders, inspect lubricant storage, and observe lubricant handling and application in practice. Finally, Noria personnel compile a report highlighting good current practices and recommending new hardware and procedures. The report is then presented to the plant’s management. Noria also hosts a half-day Lubrication Awareness training for facility personnel. The assessment process is designed to either create or transform a lubrication program to deliver significant return on investment.

The Benchmark Assessment report provides:

- Executive Summary SWOT Analysis Overall Compliance Level Assessment of 40 Elements including:
  - Current Maturity Grade
  - Current Best Practices
  - Improvement Recommendations
  - Metrics and KPI Recommendations
  - Periodic Review and Audit Recommendations
  - Priority Next Steps
  - Cost Benefit Analysis

Platform (P)
Lubrication Program Management (M)
Key Performance Indicators (K)
**Design**

Noria strategically engineers every procedure from a proactive maintenance mindset, seeking to eliminate the root causes of machine failure that stem from poor practices.

Each procedure includes a job plan and complete description for each task. The full procedure is a “how-to” guide with step-by-step instructions that new technicians can learn quickly. Empowered with these tools, technicians can complete tasks with confidence and precision.

To ensure optimum lubricant quality, Noria designates proper lubricant storage and handling to protect these crucial materials (and the machines) from the harmful effects of contamination and degradation.

**Why Procedures?**

**Work Scope.**
Procedures clearly specify the work an individual is expected to perform.

**Consistency.**
Documented procedures bring uniformity to the lubrication task while keeping everyone on the same page.

**Best Practices.**
A procedure creates the framework for standardizing best practice and disseminating expertise among employees.

**Training.**
Procedures form the basis for training lubrication personnel, serving as a natural curriculum for task-based training and evaluation.

**Implement**

Noria has performed extensive technical reviews of all lubrication products to ensure they meet our rigorous standards. LPD experts can assist you in selecting hardware and mechanical accessories that best address your needs.

**Engineered Lubrication Program**
As part of your facility’s assessment, Noria experts will design a new or improved lubrication program as the basis for the procedure and hardware recommendations you will see in the final report. This guarantees that all suggested parts are top quality, purchased at a competitive price and complement each other for best results.

**Vendor Neutrality**
Noria’s vendor neutrality ensures an impartial, unbiased presentation of the requirements necessary for hardware implementation. Noria will never recommend one supplier’s products over another’s, maintaining the strictest vendor-neutral integrity.

**Customer Support and Partnership**
Noria has procurement specialists dedicated solely to managing the ordering, logistics and delivery of your implementation. Ongoing email, telephone and web-conference support by our technical team can also be provided.
Sustain

Maintaining lubrication excellence beyond Noria’s Lubrication Program Development means personnel must seek continuous improvement. Noria addresses this need by providing access to its technical team for as-needed consulting, failure investigation, training, job skills assessments and diagnostic support.

Task-based Training and On-the-Job Coaching

Achieving the cultural change necessary for lubrication excellence can be difficult, which is why Noria strives for management support and a knowledgeable, motivated lubrication team. Bringing Noria’s acclaimed training programs onsite can help those charged with new lubrication practices to understand the importance of their work.

Monitoring Program Success

Noria’s extensive knowledge of oil analysis means clients have access to world-class monitoring practices. Noria can support ongoing best practices by implementing testing and training to interpret data within the context of individual plants and goals.

Success at Sinclair, WY

What they do:
The Sinclair refinery processes three different types of crude oil with a daily output of around 80,000 barrels.

The problems:
1. Frequent bearing and seal failures
2. Reactive maintenance
3. Poor storage and handling

The solution:
Noria’s Lubrication Program Development benchmark assessment offered a clear path forward and outlined which issues to address first. Following Noria’s instruction, machinery lubrication best practices were implemented, and the Sinclair refinery shifted from a reactive to a proactive maintenance approach. Lube oils were correctly stocked and warehoused. Proper oil sampling and analysis based on LPD staff training led to detection of root causes and dramatically fewer failures.

The result:
Machine breakdown frequency went from once every 3 years to once every 5.25 years. Sinclair’s lubrication consumption was reduced by 20,000 gallons, translating to savings of approximately $500,000. Sinclair was awarded the 2013 ICML John R. Battle Award for lubrication excellence.
Customer List

Many of Noria's customers view our services as a competitive advantage, so we can't provide a complete list of everyone with whom we have worked. Here's a small sample of the companies we have helped:

Cargill  Cummins  John Deere  Duke Energy  Southern Company
MillerCoors  Lilly  Alcoa  Campbell's  Lockheed Martin
Weyerhaeuser  Holcim  ExxonMobil  Goodyear

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