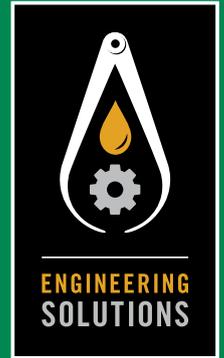




ASSESSING OPPORTUNITIES, DELIVERING RESULTS

EXPERT CONSULTANTS PROVIDING CUSTOM-TAILORED
SOLUTIONS FOR HEAVY DUTY CUSTOMERS





START HERE TO LOWER YOUR COSTS AND EXTEND THE LIFE OF YOUR EQUIPMENT

GETTING STARTED IS EASY



Optimizing your current maintenance program begins with a simple phone call to review your operation and determine your objectives. When you begin the program, our Engineering Solutions team conducts a comprehensive analysis to establish where your operation is today — then they offer a detailed assessment of where it can be in the future. And every step of the way, they provide the guidance, recommendations, and tailored solutions to enhance all aspects of your maintenance program.

Lowering the cost of operations and extending the life of equipment—they're two of the most challenging objectives facing maintenance managers today. And even though these problems can sometimes be simple, their solutions can be complicated. The answer? Our Engineering Solutions team. With over 200 years of combined experience in lubricant analysis and maintenance management, these seasoned consultants can develop tailored programs that can streamline your efforts, reduce your costs, and maximize your equipment life.



A FULL COMPLEMENT OF SERVICES

BRINGING HEAVY-DUTY EXPERIENCE TO YOUR INDUSTRY

Considering the enormous expenditure your company has made in its Heavy Duty equipment, you want only the most knowledgeable professionals to help you protect this investment. Rest assured, our consultants have extensive backgrounds and proven experience in today's key HD segments. These include:

- Concrete/Ready Mix
- Construction
- Energy
- On-Road Fleets
- Mining/Quarries
- Refuse



ONE PROGRAM, MANY BENEFITS

Our maintenance-consulting program can deliver a full spectrum of benefits to enhance your company's revenues and productivity. These may include:

- Lower maintenance costs
- Lower overall operating costs
- Extended equipment life
- Improved fluid cleanliness and handling
- Improved inventory management
- Reduction of lubricant waste
- Better trained maintenance staff
- Improved workplace safety



A DISTINCTIVE TEAM WITH EXCEPTIONAL QUALIFICATIONS

The group of consultants that comprise our Engineering Solutions team are renowned for their experience and knowledge. For starters, this eight-person team has over 200 years of combined experience in the lubricants industry. Many of these consultants have worked for major HD equipment OEMs or as HD equipment maintenance managers. Their industry credentials and certifications include:

STLE / CLS	Certified Lubrication Specialist
STLE / OMA I	Oil Monitoring Analyst
ICML / MLT I & II	Machinery Lubrication Technician
ICML / MLA I, II & III	Machinery Lubricant Analysis
CATERPILLAR	CAT Applied Failure Analysis
AGMA	American Gear Manufacturers Association
Metso	Advanced Industry Training
Allison	Advanced Industry Training
MSHA	Mine Safety & Health Administration Compliance



CONSULTING SERVICES THAT WILL KEEP YOU AHEAD OF THE CURVE



Our Engineering Solutions team offers an array of services to help you avoid problems and stay ahead of the curve. Should issues ever arise, our consultants are at your side and at your service. To help you enhance your preventive maintenance program, we offer the following:

USED OIL ANALYSIS (UOA) PROGRAM REVIEW

After reviewing your current UOA program, our consultants provide recommendations to help you make the best decisions regarding product selection, correct drain intervals, and even component selection. Utilization of this service can lead to dramatic savings through UOA program efficiencies.

USED OIL ANALYSIS RESULTS INTERPRETATION TRAINING

We provide the training to help your staff interpret sample results and then use this information to take the appropriate steps to protect equipment. Preparing your staff to effectively determine what's happening with a particular fluid and helping them understand the condition of source components can optimize service intervals, lower maintenance costs, and prevent equipment failure.

FLUID HANDLING AND CLEANLINESS RECOMMENDATIONS

Our consultants follow the entire path of your lubricants — from delivery, to storage, to installation. Monitoring this process from start to finish can lead to recommendations for best practices. And implementing these practices can improve fluid cleanliness, which increases efficiency and extends equipment lifespan.

SITE SURVEY

We work with your organization to provide maintenance evaluations for each of your sites. Your entire operation is evaluated against a set of industry best practices. Areas that are reviewed include: safety, housekeeping, required documentation, storage, inventory management, and environmental. If problems are identified, our consultants provide on-site training with the goal of creating the most efficient, cost-effective maintenance program possible.

PRODUCT TRIAL

This service provides a methodical evaluation of the lubricating fluids used in your machinery. Product trials may include lubricants you're currently using or new products under consideration. As a deliverable, you'll receive an objective, third-party evaluation to help you verify a product's performance claims and ascertain its suitability before fully committing to purchase and implementation.

LUBRICATION FAILURE ANALYSIS

This service can help you determine whether or not a failed component was the result of lubrication problems. To identify a failure cause, we review maintenance practices, component history, UOA results, and component parts after tear down. This forensic process can be helpful in the defense of warranty claims and can also help you assess current maintenance practices.

ON-SITE TRAINING

Our consultants design and deliver custom, on-site training that covers a myriad of topics, including: basic lubrication techniques, used oil analysis, data interpretation, and best-practice opportunities.