

Ferrographic Wear Particle Analysis Service

MACHINE WEAR CONDITION MONITORING

PREDICT/DLI OFFERS A STATE-OF-THE-ART FERROGRAPHIC WEAR PARTICLE ANALYSIS SERVICE

Rotating equipment and contact between surfaces cause wear and the generation of wear particles. By monitoring the concentration and formations of particles in lubricating oils and greases, it is possible to detect the accelerated wear preceding component failure. Through the technology of Ferrography, it becomes possible to extend component life by taking mitigating actions when abnormal wear is found.

What Is Ferrographic Wear Particle Analysis?

Ferrographic Wear Particle Analysis extracts, classifies, and visually analyzes wear particles and solid contaminants contained in used lubricant samples. The process involves collecting periodic used lubricant samples (typically monthly) from

an optimal lubrication system sample point on the equipment. Samples are shipped directly to PREDICT/DLI's laboratory, where they are coded into a laboratory information system containing comprehensive equipment data, entered at the time of program setup. Wear particle, size, shape, concentration, and composition as well as contaminants are classified. A trained Machine Condition Analyst considers these factors coupled with trend analysis and information about the equipment type, application, and operating environment to produce a final report, complete with tables, graphs, particle images, and text. Included in this report are recommendations based on all of the available data, and a Normal, Marginal, or Critical rating of the current equipment condition. Analysts quickly communicate Marginal or Critical ratings to end users by phone, fax, or e-mail.



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"But I'm already getting oil analysis"

Oil analysis is a catchall term used to describe everything from a no cost visual inspection to very sophisticated R&D tests normally used to develop new lubricants. Lubricant suppliers frequently offer simple emission spectroscopy at *no charge* with FT-IR and viscosity packages. These tests fall at the lower end of a testing program range. Programs of this type offer limited test data and depending on the quality of the laboratory, little, if any, analysis. Equipment condition evaluation is virtually nonexistent and lubricant evaluation is usually left to the end user to decipher.

Test Data via the Net

Testing is possible with *PREDICT/DLI's* service program. The entire text, tables and summaries of *PREDICT/DLI's* laboratory reports are available via the internet. The end user can retrieve reports by typing in an internet address and access information using a personal identification number. *PREDICT/DLI* also supplies VISA software which allows users to download entire reports including graphics and images. This MS Windows compatible software allows the user to manipulate the report formats, print in color, as well as cut & paste information into other Windows software packages.

What's Included in *PREDICT/DLI's* Ferrographic Wear Particle Service Program?

- Detailed wear condition analysis formatted into easily understood "plain language" reports
- Consultation with the most experienced Machine Condition Analysts in the industry
- Overnight delivery of samples shipped from anywhere in the continental U.S.
- 48 hour turnaround time
- Sample bottles, bottle labels, shipping containers
- Immediate notification on samples rated Marginal or Critical
- Digital microscope images with captions on sample reports rated Critical
- Windows compatible software for electronically receiving, storing, and managing report information
- Capability of receiving reports electronically via the internet
- Complete trend history stored and generated for user upon request
- Fast, friendly customer support via *PREDICT/DLI's* TOLLFREE number

PREDICT/DLI Offers-State-of-the-Art Ferrographic Wear Particle Analysis Service

For over 15 years, *PREDICT/DLI* has been setting the standards for fast, accurate and reliable wear particle analysis, equipment condition information, advanced analysis and predictive maintenance consultation. Our laboratory, located in Cleveland, OH, is the largest and most experienced commercial wear particle analysis facility in the world. Precise and timely information provided by our Analysts has resulted in over \$40,000,000 of recorded end user cost savings.



Visit us on the web at www.Predict-DLI.com

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