

# WEAR PARTICLE ANALYSIS TRAINING CLASS

**SPACE  
IS LIMITED**  
REGISTER TODAY!  
262.691.9336

September 10-12, 2024  
Pewaukee, WI

This course is designed to provide attendees with a working knowledge of Ferrographic analysis and its relationship to used lubricant analysis. Attendees will work side-by-side with some of the industry's best analysts in a hands-on, practical, and personalized learning forum.

- Learn proven techniques to effectively maintain your equipment
- Hands-on, practical training that can be implemented at your facility
- Gain proven strategies for increasing machine availability.
- Discover the secrets to running a world class wear particle analysis program.

**TRICO**  
www.tricocorp.com

## Attendees Will Receive Hands-on Training to Identify:

- Particle type
- Abnormal wear and wear debris
- Contamination type
- Red oxides and sand
- Equipment condition
- And more

To maximize your learning experience, we encourage you to bring up to 10 oil samples (can be new and/or used) any historical testing information or trended data, equipment information and operating environment details for each equipment for real life case study discussions.

A certificate of completion will be provided to each attendee. This certificate can be submitted to a certifying organization and may apply toward credits for certification or recertification.



## Agenda:

Tuesday – Thursday  
8:00 am to 3:00 pm

Each day will include laboratory testing, hands-on analysis utilizing the latest technology, course instruction and group discussion.

Visit [www.tricocorp.com](http://www.tricocorp.com) for more information or call us at 262.691.9336.



## WEAR PARTICLE (FERROGRAPHY) ANALYSIS

This course is designed to provide attendees with a working knowledge of Ferrographic analysis and its relationship to used lubricant analysis. Attendees will work side-by-side with some of the industry's best analysts in a hands-on, practical, and a personalized learning forum.

You will fine-tune your equipment condition analysis skills while you perform tests on up to 10 of your own samples, from the initial testing all the way to the final analysis. This dynamic learning session will help you uncover real world issues, allowing you to order maintenance procedures as soon as you return to your plant.

Once you observe abnormal wear particles, wear debris, and contamination firsthand under a microscope, you will get the full flavor of the power of wear particle analysis. You will be able to differentiate between the various abnormal wear particle types to better help pinpoint where the wear is occurring in the unit.

Wear Particle Analysis will complete your training as a machine condition analyst. It will hone your skills, enhance your ability to diagnose equipment problems, and empower you to make smart decisions based on real data.



## Attendees will:

- Learn how to effectively use an optical microscope.
- Learn analytical Ferrography techniques and how they apply to equipment conditions.
- Expand on your wear mechanics knowledge.
- Perform analytical Ferrography on samples and differentiate between normal and abnormal wear.
- Incorporate the direct reading results with analytical Ferrography and come up with a realistic visualization of the condition of the unit being tested.
- Be able to rate their equipment and make intelligent next-step recommendations.
- Learn how to determine whether particle type, size and the amount of particles are detrimental to the equipment being analyzed.
- Uncover the secrets to identifying abnormal wear.
- Discover practical applications for each test and run each test.

This course will help you analyze used oil analysis reports, interpret the test results, make effective decisions, and correct equipment issues before they become a problem. It will teach you to think like a machine condition analyst and will help you become the onsite used lubricant testing analyst expert at your facility.





Dear Colleague:

Welcome to the toughest job on the planet! You don't need a reliability expert to tell you what a difficult challenge it is to manage equipment asset today, because you're living it.

Getting your equipment to run effectively and reliably hasn't gotten any easier over the years. It's become more difficult because of the reduced workforce, reduced spending and the global push to do more with less. It's unbelievable just how much a maintenance and reliability professional has to know in order to get the job done right, and to get ahead.

That's why we've developed a series of training courses that cover the critical areas to maintain your critical assets. You and your team will get up to speed in all the areas of asset management including: Lubrication Strategies, Lean Lubrication Management, Effective Oil Analysis and Machine Condition Monitoring.

We've packed these courses with the tools you'll use for years to come. The format is highly-interactive, which means you get hands on applications, stimulating learning forums to share your successes and learn from industry peers, build your network connections, and take part in insightful exercises you can put to use immediately.

Can you afford to maintain your equipment through trial and error? Invest an hour, a day, or a full week with us, and you'll return to work empowered with skills and proven solutions you need to implement world class practices at your facility.

I personally stand behind Trico's training solutions with great confidence because I've experienced the value of the tools, techniques, and tips you'll gain. Call our Pewaukee facility: 262.691.9336 to reserve your space today in these great training events.

Sincerely,

Robert D. Jung  
CEO/President  
Trico Corporation

P.S. When we say guarantee, we mean it. These training events are entirely risk-free. If you're not satisfied with the comprehensive training you receive, we'll refund your investment in full. I am that confident that this course will deliver the powerful results you need!

### Attendees Rave About Our Training:

*"Ray is a really good speaker who keeps your attention."*

N.K., Gerdau Ameristeel

*"It was a very helpful course and well organized. Thank you all for sharing very good information with us."*

J.C., Alcoa

*"Ray seemed to know his craft and it showed through his teachings."*

R.C., Conhagen



### MEET THE GUY THAT WROTE THE BOOK

Ray Dalley

WEAR PARTICLE ANALYSIS TRAINER

Ray Dalley has been performing research, manufacturing, sales and marketing with ferrography (wear particle analysis) for the past 30 years.

In addition to organizing many training courses, he gives lectures worldwide for:

- Electric Power Research Institute
- Society of Automotive Engineers
- National Lubrication Grease Institute
- Joint Oil Analysis Program Conference
- Society for Maintenance & Reliability Professionals
- Society of Tribological Lubrication Engineers

Dalley is also the Vice Chair for the ASTM D2-96-6 Condition Monitoring Group. He has published numerous technical papers and reports in the areas of lubricants and wear particle analysis, and holds memberships in STLE, ASTM, AFE, American Society of Metals and is an executive member of the SMRP.

### These Companies are Already Benefiting from our World-Class Training:

AKZO NOBEL • ALCOA • ARMSTRONG WORLD INDUSTRIES • ATLAS FOUNDRY COMPANY • BOWATER PAPER INC. • CITGO CORPORATION • CPS ENERGY • DUPONT • FORMOSA • GERDAU AMERISTEEL • GENERAL MOTORS • GEORGIA PACIFIC • HARLEY-DAVIDSON • INTERNATIONAL PAPER • LAFARGE • LOCKHEED MARTIN • LOUISVILLE GAS & ELECTRIC • LUMINANT • MCCAIN FOODS • MICHELIN TIRES • MILLENNIUM CHEMICALS • ONTARIO POWER GENERATION (OPG) • ORANGE COUNTY SANITATION DISTRICT • PREMCOR • PPG INDUSTRIES • RENEWABLE ENERGY • RRI ENERGY • SAMSUNG • SHELL OIL PRODUCTS • SIMPSON STRONG TIE • SPHERAL SOLAR POWER • SUNCOR • SUNOCO • TEMBEC PAPER • TESORO REFINING • UNITED STATES GYPSUM CO • VALERO REFINERY • WE ENERGIES • WEYERHAEUSER • WHIRLPOOL

The Wear Particle Analysis course will be held in Pewaukee, WI at:  
Trico Corporation  
1235 Hickory St  
Pewaukee, WI 53072

**Wear Particle Analysis:**  
September 10-12, 2024

**Hotel Recommendations:**  
Milwaukee Marriot West  
W231 N1600 Corporate Court  
Waukesha, WI 53186  
262-574-0888


Wildwood Lodge  
N14 W24121 Tower Place  
Pewaukee, WI 53072  
262-506-2000

Holiday Inn  
N14 W24140 Tower Place  
Pewaukee, WI 53072  
262-506-6300


**Registration Policy:**  
Registration is easy. Choose any of the methods listed to secure your seat at this important event. Seating is limited, register today.


COST  
**\$1,495**  
USD

**Ways to Register:**

 **Phone:**  
262.691.9336 or 800.558.7008, ext 105

 **Fax:**  
262.691.2576

 **E-mail:**  
Fill out this PDF form and email to [jtomfohrde@tricocorp.com](mailto:jtomfohrde@tricocorp.com)

 **Mail:**  
Send this form to: Trico Corp  
Attn: Jill Tomfohrde  
1235 Hickory Street  
Pewaukee, WI 53072

September 10-12, 2024

**Attendee Information:**

1. Name: \_\_\_\_\_  
Job Title: \_\_\_\_\_  
\*E-mail: \_\_\_\_\_  
Phone: \_\_\_\_\_

2. Name: \_\_\_\_\_  
Job Title: \_\_\_\_\_  
\*E-mail: \_\_\_\_\_  
Phone: \_\_\_\_\_

**Company Information:**

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
\*Phone: \_\_\_\_\_

\*E-mail address and a phone number are required so that we can provide you with your registration confirmation and important information about the event.

**Payment Information:**

- Check enclosed: Made payable to Trico Corporation
- Invoice my company: Attach PO to registration form
- Credit Card     Master Card     Visa     American Express

Card Number: \_\_\_\_\_

Name on Card: \_\_\_\_\_ Exp Date: \_\_\_\_\_

Billing Information:  Same as Company

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_



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