

In This Issue

1 LECO Global Support Center Opens

2 Meet Corporate Metallurgist David Coulston

3 News & Updates

3 Information on Metallography Classes

Much More!

A positive attitude may not solve every problem but it makes solving any problem a more pleasant experience.

—Grant Fairley

LECO Opens New Global Support Center



Over 70 employees have now moved into LECO's brand-new Global Support Center, located at 1444 Hilltop Rd. in St. Joseph, MI. The 5,000 square-foot building has been under construction for the past 12 months and is now officially home to employees from the Service, Customer Training, and Consumables departments. The new building will also house LECO's three mobile laboratories.

Facilities inside the Service portion of the building include spacious offices, cubicles with personal lockers, cafeteria and break areas, and a number of service benches with gas, water, and power lines for convenient instrument hook-ups. An updated phone system and wireless technology all ensure the best possible communication is made with the customer.

"Modern technology has been incorporated with ample space to give our service technicians the room and equipment they need to properly address the service concerns of our customers,"

said Craig Peacock, Service Manager. "With analytical, metallographic, and spectroscopy service professionals all located in one central area, we are much more accessible to each other and our customers."

Customer Training staff members have moved into the new building as well, and all Customer Training classes will now take place at the Global Support Center. Several areas have been designed exclusively for customer use, including a separate customer entrance, large auditorium and training room, cafeteria, and customer-designated restrooms. The auditorium and training room are equipped with the latest multi-media and internet technology, further enhancing the training experience.

Consumables will be the last group to move into the building. Located in downtown St. Joseph for many years, the department has been temporarily working out of the LECO Ceramics facility on Yore

Avenue in Benton Harbor while awaiting completion of their new area. Their new home will offer plenty of storage room and large work areas.

While the Service and Customer Training departments have wanted to maximize their services by being located together under one roof for a while now, the need to develop an entirely new building was identified when the Consumables department needed a new location for production and warehousing.

"By consolidating into this new building, we are able to alleviate some of the overcrowding that was going on in our original area," Peacock said. "Now we are able to continue offering the best in service, support, and consumables to our customers—something we've been committed to since 1936—all from one convenient location."

Optical service will remain in its current building, however they will relocate to space that has now been freed up by the recent move. ■

Product News

GPX-Series Gives You Complete Grinding/Polishing Solutions

Keep your metallography lab running smoothly with the new state-of-the-art GPX-Series Grinding/Polishing system. Two models are available with a number of options for complete freedom within your metallography lab.

The new GPX-Series is the result of LECO's desire to create a versatile polishing system for its customers. Both the GPX200 and GPX300 have a variety of options to suit the needs and budget of just about every customer.

The GPX200 features a 0.75 HP base motor and either an 8- or 10-inch wheel base, while the GPX300 has a 2.0 HP base motor with either a 10- or 12-inch wheel base. Both models come with a standard polishing head that accepts single or fixed specimen holders. For added convenience, an automatic fluid dispenser is also available, holding up to 4 bottles of fluid with peristaltic operation, flush, and stirring capabilities. The system's small footprint fits easily onto any countertop, and its lowered working height offers improved ergonomics.

All of LECO's Metallography products come with LECO's team of support professionals, ready to answer your questions or to provide you with assistance should you ever need it. In addition, a variety of fine consumable products are also available to help you get the most out of your GPX. Contact us today for more information, or if you would like a demonstration.



Who's Who in Met/Optic

Meet David Coulston

Corporate Metallurgist David Coulston is the newest addition to LECO's metallography staff. Coulston has been with LECO since September and has almost 30 years of experience in the metallurgical field. His main responsibilities include preparing and analyzing samples for customers who may be considering the purchase of our metallographic preparation or analysis equipment, as well as helping the customer achieve the best results with their equipment by choosing the most appropriate procedures and techniques for the job.

Coulston has a Bachelor of Science degree in Metallurgical Engineering from Michigan Technological University in northern Michigan. His original plans were to enter the Mechanical Engineering field like his father, but that changed

when he met a metallurgy professor from Michigan Tech during "College Night" at his high school.

"He (the professor) challenged me by saying that studying metallurgical engineering at Michigan Tech was too tough for most students," he says. "That was all he had to say!" Coulston accepted the challenge, and after graduating from Michigan Tech, spent a year working in the metallography lab at Westinghouse in Pittsburgh, PA. After that, he returned to Michigan to work at National-Standard in Niles. He spent 28 years at National-Standard, holding a variety of positions in research and development, process engineering, sales, and quality, before coming to LECO.

In addition to working with customer samples,

Coulston will also be conducting customer seminars, workshops, and training classes beginning in March of 2006. These helpful customer classes focus on metallurgical methods, applications, and procedures for various LECO equipment.

Coulston finds the LECO environment refreshing and relaxed, and a nice change of pace. He especially enjoys the day-to-day interaction with people of various backgrounds and performing a variety of metallographical tasks and challenges. He also prefers to be working in the lab over sitting in front of a computer screen all day.

"Every day is always different here," he says. "There's always a new challenge to face or new application that can be performed. I'm not just doing the same thing day after day." ■



David Coulston is the newest addition to LECO's metallography department.

New Product Information

- LECO's AMH43 Automatic Hardness Testing System now includes software updates for the welding industry
- A new series of sectioning machines, the MSX432, will soon be available. The MSX432 will come with a standard 17-inch wheel
- A video highlighting the features and advantages of the PAX-it™ Image Analysis and Management system is now available. Contact a sales engineer to obtain a copy of the video, or use the handy fax-back form on the back side of this newsletter. You can also use the fax-back form to get more information on other LECO metallography products



News & Updates

LECO and Olympus®—A Perfect Match for All Your Microscopy Needs

For over thirty years, LECO optics has been a direct, and exclusive, distributor of Olympus® products. Today, that partnership continues as we carry distributorship rights to a number of Olympus metallographs, upright and stereo microscopes, and digital cameras. Purchasing an Olympus product directly from LECO offers a number of advantages, according to Tim Pallett, Optical Product Specialist.

"Our experienced sales team matches the customer with the right Olympus product for the job," says Pallett. "In addition, our knowledgeable service team has over 80 years of combined experience with optical products, and offers excellent technical support and service to our customers who have purchased an Olympus product."

LECO's staff of qualified service specialists is available to offer advice and answer questions at no extra charge. The exceptional quality of Olympus products, combined with outstanding service and support from LECO, ensure that your laboratory always has the right optical product for the job, and if you should have any problems with your product, LECO is there to help you.

Metallography Classes Ready to Roll for 2006

Did you know that LECO offers up-to-date, comprehensive instruction for those working in the metallography, metallurgy, or failure analysis fields? Classes are held throughout the year in our fully-equipped Metallography Laboratory, featuring an amphitheater-style lecture facility that provides an environment for instruction that is second-to-none. Course materials, lunches, and transportation to and from the hotel are all offered to ensure you have a hassle-free training experience.

Currently, LECO offers three Metallographic Applications classes—**Basic Metallographic Techniques** covers a complete range of metallographic specimen preparation, micro/macroidentation testing, grain size determination, and photomicrography; **Principles of Metallurgy** is an all-lecture class with daily quizzes covering basic metallurgy principles, binary phase diagrams, TTT diagrams, heat treatment of steel, inclusion classification, and microstructure identification; **Fractography and Failure Analysis** teaches students basic fractography and how to conduct a proper and effective failure analysis. Cost for each class varies.

For a complete class schedule, to register, or for more information, contact the Metallographic Class Coordinator at (269) 982-2385. Reservations are made on a first-come-first-served basis, so be sure to call early. Hotel reservations will be made in the registrant's name at a local hotel, however payment is the responsibility of the registrant. The name and location of the hotel will be sent with the registrant's confirmation letter.

How Accurate Are Your Calibrations?

If you calibrate your video system using an uncertified stage micrometer, you may be introducing significant error into all your results! This is because stage micrometers are usually used with the nominal values assumed to be correct. However, these nominal values are almost always wrong.

LECO's Optical Service department calibrates stage micrometers using high magnification Image Analysis. Using this technology for a typical 100 μm micrometer it was discovered that 1 mm (1000 μm) actually measured 995.29 μm . This same micrometer at the 100 μm division is actually 99.516 μm .

If you use this micrometer and the 100 μm increment to calibrate a video system or image analysis system, then you have just given every measurement made with that system 0.5% error, which will be added to any other errors/deviations that will naturally occur.

So, if you have a calibrated stage micrometer, remember to use the certified values for the increment you're calibrating rather than the nominal. If you don't have a certified micrometer, consider getting one.

Calibrations for LECO's Optical Service Department comply with the requirements of ISO Standard 17025 and applicable ASTM standards. The department is accredited by the American Association for Laboratory Accreditation (A2LA) under certificate number 1845.01. To view the A2LA certification, visit www.leco.com and click on the optical service link at the bottom of the page.

Get Connected with LECO On the Web!

We are continuously making improvements and updates to our website. Look for our newly designed site to be up and running soon. In the meantime, you still have access to a number of great and helpful resources on our current site, located at www.leco.com. Once you enter the site, everything you need to solve your most difficult Met and Optical problems is just a click away. Our "What's New" section gives you information about new products and consumables, while our Customer Support section lists reference cards, approved methods, and a question and answer section. Also within the Custom Support Section, under Metallography Application Notes, is a section of Met-Tips. These aid in the solution of both technical and application-related questions.



Interested in learning more?

More information on articles or information featured in this issue of *The Analyzer* can be obtained by selecting one or more of the following categories.

Please fax this entire page to 269-982-8987.

- AMH43 Automatic Hardness Testing System
- Metallography Classes
- Demonstrations featuring LECO's Metallographic/Optical Equipment
- Please have a sales engineer contact me regarding a quote
- Please remove me from the mailing list (check here if you have received this mailing in error or no longer wish to receive issues of *The Analyzer*)
- Check here if you would like further issues of *The Analyzer* to be e-mailed to you instead of mailed to you. *Don't forget to give us your e-mail address!*

Name _____

Company _____

Address _____

City _____

State _____ Zip _____

Phone _____ Fax _____

E-mail _____

PERMIT 16
SOUTH BEND, IN
U.S. POSTAGE PAID
FIRST-CLASS
PRESORTED

LECO Corporation
3000 Lakeview Avenue
St. Joseph, MI 49085-2396
www.leco.com



Delivering the Right Results