

OUTLETT™

A QUARTERLY PUBLICATION OF LEADING EDGE TURBINE TECHNOLOGIES

LETT'S NEW CNC MACHINING EXPANSION

Leading Edge Turbine Technologies launched a new "lean process improvement and best practice initiative" this past May. The new initiative will be led by LETT Machine Shop Foremen, Catalin Albu and CNC Machinist, Andy Holmbeck. It will be used in LETT's machine shop for industrial machinery repairs that currently employ utilization of manual machining centers. The focus of the "lean process" initiatives are to reduce turnaround times and improve efficiency of machining multiple sets of components.

➤ These initiatives are based upon a systematic approach for identifying and improving production through continuous advancement of practices and technology. When moving components through LETT's facility, where activities involve multiple set-ups, the use of the computer numerical control mill and lathe equipment will shorten cycle time and increase productivity, resulting in better efficiency and reduced labor hours.



Vane machining

"In all of our disciplined crafts at Leading Edge, we are striving to become the premier turbomachinery shop. From a process of lean re-manufacturing to best practices improvements, we are equipped for the 21st century," David Theis, CEO, said.

➤ LETT is currently retooling some large manual machine centers with CNC equipment. The new equipment enables LETT to manufacture many detailed parts utilized in the repair process in-house, improving quality control and reducing turnaround time.

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LEADING EDGE TURBINE TECHNOLOGIES (LETT™)

is an independent industrial steam and gas turbine repair company that provides services for the global power generation, pipeline, petrochemical and paper mill industries. We offer unique services that are personalized in approach, comprehensive in scope and cost-effective in practice.

To reach us call 281.821.2255
or visit us on the web at
www.leturbine.com



LETTER FROM THE PRESIDENT



Doug Sewell - President and COO

Dear Valued Customers and Employees,

I would like to thank everyone for the outpouring of support this year. I hope that everyone is having a great summer and is able to spend quality time with friends and family.

➤ As the second quarter of the year fades away, the tenacity of the LETT team is evident as we continue to grow and be profitable even in the current slow economy. Although sales were softer than expected (93 percent of planned), due to deferred customer outages, profitability was actually 12 percent more than planned. Kudos to

the LETT team for the excellent management of resources.

➤ Being a customer driven and community-focused independent service provider, LETT successfully hosted a third annual golf tournament which raised over \$30,000 for charity. A new "green initiative" to better manage LETT's recyclable materials has also been successfully implemented this past quarter. Additionally, LETT's installation of new CNC mills, and the subsequent conversion of certain machining operations to CNC, has resulted in a 50 percent reduction in turnaround time for "F-Class" vane work.

➤ I greatly appreciate all of the contributions from the LETT team as we all strive to develop a more value-added service in support of customers' growing needs. I look forward to a highly productive third quarter as the next outage season begins.

Best regards,

Doug Sewell
President of Leading Edge Turbine Technologies

SPECIAL THANKS TO LETT

LETT SUPPORTING LOCAL WORK CAMP

On June 14, 16 teens and five adults from St. Edwards Catholic Church left Houston and headed to Mishawaka, Ind. for a week-long Catholic Work Camp experience.

➤ Each day started at 6:45am with breakfast and a morning program before everyone left for their individual work site. Each member of our group was assigned to a work group with people from different Catholic youth groups from all across the United States. This encouraged people to get out of their comfort zones and created an opportunity to develop new lasting friendships. Each of these 32 groups worked on different projects in the area. Some teams worked at residents' homes; doing things such as painting, housework, yard work and most importantly, getting to know the people they were helping. Other groups worked on building sheds, ramps and fences. Still other groups worked at volunteer-run organizations such as food kitchens, Boys and Girls Clubs and shelters. In the evenings, everyone reconvened for dinner and the evening program. These programs were filled with activities, music, skits, videos, slides of the work day, testimonials from teens, motivational speakers and prayer.

➤ The week was focused on inspiring teens to get excited about serving others and to renew their commitment to God. We greatly appreciate Leading Edge's generosity for sponsoring our group and making it possible for us to have such an amazing experience!

Sincerely,

Rachel Homeyer
Chaperone

NEW METHOD OF REPAIRING 7FA PACKING

IMPROVED DURABILITY AND REDUCED

Leading Edge Turbine Technologies has successfully completed its 20th set of repair for the Frame 7FA 2nd stage nozzle diaphragm packing segments. This packing repair technology was co-invented by LETT Rotating Component Manager Greg Gaul. The proprietary technology provides an alternative method for correcting diaphragm packing issues.

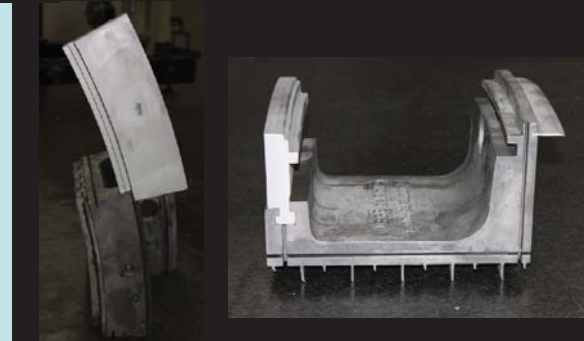
➤ The Frame 7FA+e (7241) industrial gas turbine utilizes stationary diaphragm packing boxes to create a seal between the stationary turbine nozzles and the rotating element. The diaphragm packing is made from a cast nickel-iron material, which has poor weldability. Conduction from the high temperature



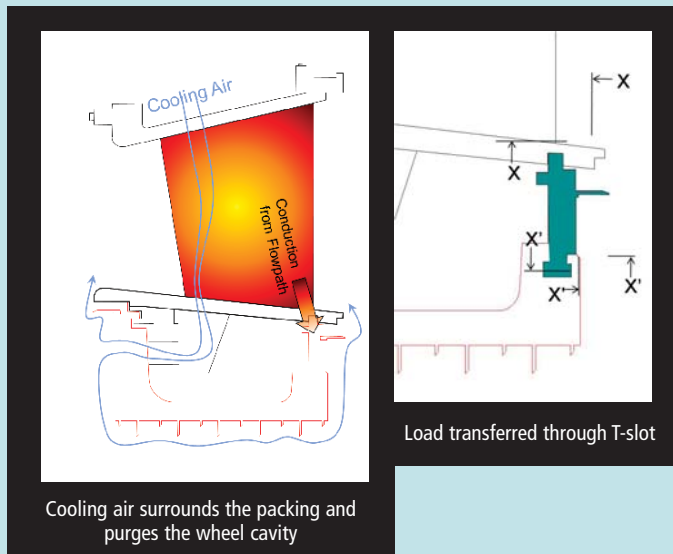
Machining aft rail of packing with T-groove



Final assembly



Aft rails inserted into packing segment



Cooling air surrounds the packing and purges the wheel cavity

Load transferred through T-slot

gases through the nozzle wall result in excessive temperature of the diaphragm packing at the contact surfaces of diaphragm packing and stationary nozzles.

➤ In particular on the second stage of the turbine, the local temperature at the contact surface is sufficiently high which causes severe oxidation, material deposit and cracking on the diaphragm packing. To remedy this condition and avoid issues with welding cast nickel-iron, LETT has developed an innovative repair and upgrade.

➤ The upgrade consists of replacing the damaged hook fit with a mechanically interlocked piece. This replacement hook fit is manufactured from a high-temperature 310 stainless steel, which is sufficiently resistant to the oxidation at the temperatures experienced at the contact surface to the turbine nozzle.

➤ This process effectively eliminates the oxidation problem and results in improved durability. This provides the end user with an enormous cost savings as future repair expenses are greatly reduced.



Erosion on packing



Material deposit on nozzle



A DAY IN THE LIFE OF LETT EMPLOYEES

LETT GOES GREEN NEW GREEN INITIATIVE



Leading Edge Turbine Technologies has been doing its part to “go green” since building its new facility back in 2003. A recycling program was recently put in effect, enabling LETT employees to reduce the amount of trash put into dumpsters. Since trash pickup is more expensive than recycling pickup, LETT will save an average \$1,500 per year. It pays to be green!

➤ “We are doing our part to help save the environment and cutting some of the high costs incurred with trash accumulation” Senior Buyer Amanda Carter said.

➤ LETT employees will now be able to toss soda cans into a recycling bin instead of the trash can. The Abitibi Bowater Recycling Company will collect and recycle paper, cardboard, plastic, glass, aluminum and metal

recyclables from the new recycling containers. The LETT team is excited about this new initiative to “go green” and has already shown great results, doubling the

expected recyclable accumulation rate. Because of this, the recycling dumpsters must be emptied twice as often as was originally planned.

➤ “Our operations have always been environmentally aware; we are very proactive in that area and have never had an environmental mishap. We built the facility for the 21st century, not the 20th,” David Theis, CEO and cofounder of LETT, said.

➤ Helping the environment has always been and will continue to be a top priority for the people at LETT.

GIVING BACK TO THE COMMUNITY LETT HOSTS GOLF TOURNAMENT

The third annual Leading Edge customer golf tournament, held on May 4, 2009, was a huge success. The morning was kicked off at Redstone Golf Course, home of the Shell Open, with 38 teams meeting at 8 a.m. Golfers were greeted with breakfast tacos, coffee and goodie bags filled with tees, balls, a towel, hat and golf shirt.

➤ Players enjoyed the sunny weather and ate fajitas after finishing all 18 holes. Awards, plaques and door prizes were given for the first, second and third place winners of the game as well as awards for players closest to the pin and with the longest drives.

➤ The generosity of our sponsors and customers raised more than \$30,000 for the Rise School of Houston, a non-profit organization associated with Texas Children’s Hospital designed to meet the needs of young children with or without disabili-



AI Quintanilla, LETT Co-founder, and Doug Sewell, LETT President-COO

“Our corporate goal has always been, and will continue to be, to raise or donate more money to charitable organizations than the year prior,”
David Theis, CEO of Leading Edge, said.

ties who are anywhere between 6 months to 6 years of age.

➤ Leading Edge would like to give a special thanks to all of the sponsors, employees and customers involved in this event. The golf tournament was a true success.



Hilary Spruell, LETT marketing coordinator, and Joel Rimlinger, PPG maintenance engineer, enjoying the day.



Tim Lambright, LETT director of sales and marketing

Welcome To Our Team

Leading Edge would like to extend a warm welcome to the newest additions to our team:

David Acevedo, Welder - Nozzle/Fabrication

Adam Briscoe, Engineer

Ray Fletcher, Welder - Nozzle/Fabrication

Shawn Greer, Welder - Nozzle/Fabrication

Andy Holmbeck, CNC Machinist/Programmer

Blaze McAllister, Rotor Tech

Bryan McAllister, Rotor Tech

Jared Miro, Rotor Helper

Antonio Palacios, Balance Tech

Jason Sagmiller, Welder - Combustion

Wayne Traylor, Welder - Combustion

Clay Wilson, Rotor Tech

Karl Wolff, Welder - Combustion

Currently, the Leading Edge team consists of 122 employees and continues to grow.

For employment opportunities, please E-mail HR@leturbine.com

Birth Announcements

LETT congratulates the following employees on the new additions to their family:

David Acevedo and his wife, Dulce Acevedo, on the birth of their daughter, **Hailey Acevedo**, on June 6, 2009.

Robert Quinn and Shanna Birkle on the birth of their daughter, **Kamryn Lee Quinn**, on May 8, 2009.

Employee Anniversaries

Leading Edge would like to thank the following employees for their hard work and commitment to LETT:

8 Years

Gene Bukys

Geovani Bravo

David Lawrence

Don Miro

6 Years

Billy Hamic

Matt Sokol

5 Years

Dave Barnhill

Keith Bosheers

Martin Peña

Melinda Romine

4 Years

Catalin Albu

Thomas Brueckner

Robin Deleon

Dean Dickie

Michael Ellis

Greg Gaul

Jose Gonzales

Steve Ostinelli

Adam Vallejo

EDGE WISE

Words of Wisdom

Safety Monitor

Protect your eyes, protect your career

Imagine trying to do your job in total darkness. Then imagine an eye injury that can end your career in an instant. Fortunately, most eye injuries can be prevented, especially if you know what to guard against. The main causes of eye injuries in the workplace, according to the Bureau of Labor Statistics, are:

- **Flying or falling objects (including sparks).** An object as small as a pinhead can cause severe injury to the eye.
- **Chemicals.** Contact with chemicals causes about 20 percent of eye injuries.
- **Equipment used improperly.** Staple guns, for example.
- **Poor eye protection.** Objects or chemicals flying underneath or around protective eyewear cause about 94

percent of injuries to workers who do wear eye protection.

- **Lack of precautions.** Workers may not be aware that eye protection is advisable or available.

Suitable eye protection is a must: Wear safety glasses with side shields, goggles, or protective helmets, depending on the hazards of the situation. Whatever protective gear you use, make sure it fits correctly so that dust, chemicals, or other particles can't sneak under the edges. Make sure you and others in your workplace are familiar with basic first aid for eye injuries, and designate an eye-washing station where workers can immediately flush their eyes after an accident. And don't play with laser pointers. They may not be the death rays of sci-fi movies, but looking directly into one can cause temporary vision loss, and even permanent retina damage.

UPCOMING EVENTS

- September 15-17, 2009
Turbomachinery Symposium
LETT @ Booth 131
Location: George R. Brown Convention Center
Houston, TX


- September 16, 2009 from 8:30-10a.m.
ASME Gas Turbine Users Symposium
LETT Presenting on "Gas Turbine Rotor Life
Extension Issues versus OEM Directives"
Presented by Greg Gaul, LETT rotating component
manager

- September 16, 2009 from 5:30-5:50p.m.
LETT Presenting on "The Leading Edge Difference"
Presented by Greg Gaul, LETT rotating component
manager
Location: Exhibit Hall D

- August 31, 2009 from 5-9p.m.
CTOTF Turbine Users Forum
LETT @ Booth 18
Location: Double Tree Paradise
Valley Resort
Scottsdale, AZ

- November 4, 2009 from 5-9p.m.
7EA Users Group
LETT @ Booth 17
Location: Hilton Miami Airport
Miami, FL

- December 8-10, 2009
PowerGen International
LETT @ Booth C2-151
Location: Las Vegas Convention
Center
Las Vegas, NV

 Interested in submitting ideas for the next OUTLETT newsletter? If so, please contact Hilary Spruell at hspruell@leturbine.com

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Turbine Technologies
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