



**LIPTEN™**  
ENERGY SOLUTIONS

*the LIPTEN™ advantage*

Third Quarter, 2015 Newsletter

## HISTORIC QUOTES:

" Experience is the name everyone gives to their mistakes."

-Oscar Wilde

" Think for yourselves and let others enjoy the privilege to do so, too."

- Voltaire

" People who say it cannot be done should not interrupt

## Neenah Paper Boiler Controls Upgrade



Replacing an old analog boiler control system with advanced PLC controls is usually not a challenge, except when it has to be done in only one week. That was the challenge Lipten faced this summer when providing a control system upgrade to Boiler #2 at Neenah Paper's Stevens Point, WI facility known as the Whiting Mill.

The vintage 1986 control system was

those who are doing it."

-George B. Shaw



- On the environmental front, the Supreme Court ruled against the EPA citing that agency's interpretation of the Clean Air Act was unreasonable when it decided to set limits on the emissions of toxic pollutants from power plants without first considering the costs on the industry. The decision does not strike down the rule, but it means the E.P.A. will have to review and rewrite it, taking costs into consideration.

- Lipten has been awarded two new boiler control upgrade projects that will use

composed of obsolete components and no longer complied with the current National Fire Protection Association Boiler and Combustion Systems Hazard Code (NFPA 85). Reliable steam production is critical to the operation of the paper mill and lack of available spare parts posed a threat. To resolve these issues, Neenah contracted Lipten to upgrade the controls with a CombustionPac integrated Burner Management and Combustion Control System. The CombustionPac uses the latest Fireye® BurnerLogix flame safeguard in conjunction with a state of the art PLC based combustion control system to provide safe, efficient control of the boiler's approximately 85MMBTU/Hr. natural gas burner.

The Combustion Control System uses full metering control of air and fuel to maintain proper stoichiometric balance. The combustion process is further fine-tuned with oxygen trim, a method where the oxygen content of the flue gas is measured and based on the measurement; the air-fuel mixture is adjusted for optimum combustion efficiency, thus minimizing excess air. The system is operated using a 15" color touchscreen display panel. All operational and maintenance controls are available on various displays.

Because of the operational constraints of the mill, the entire control system upgrade had to occur within a one week shutdown period.

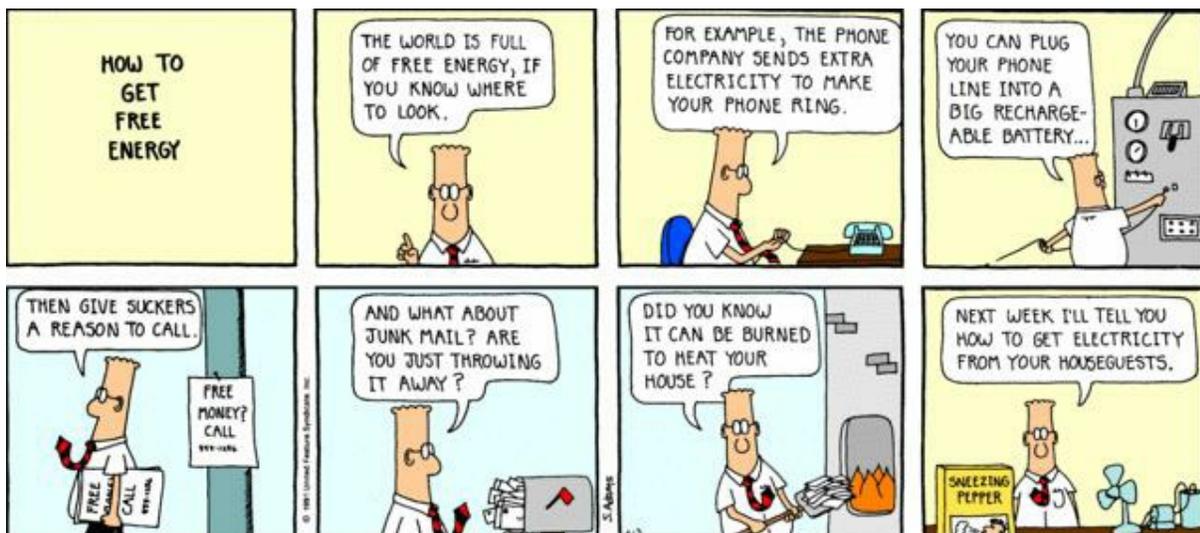
the CombustionPac line of products.

- Lipten has been contracted to provide the engineering and procurement services related to replacement of the chevron separator on a "D" type boiler. We will also provide the engineering associated with de-rating the operating pressure of the boiler.

Lipten hired local contractor Van Ert Electric, Inc. to provide the electrical demolition and installation services. Aside from some early pull-ahead work running new conduits, the bulk of the activities began early on a Sunday morning. Working around the clock under direction of Lipten's controls team, the boiler was able to see first fire the following Friday afternoon. The mill was able to restart Monday morning as planned without interruption.

Special thanks to Van Ert Electric, Inc., Lipten's Jason Bradshaw, Chad Whitehead and Eric Hjelmberg, and, of course, Neenah Paper's Brian Bayorgeon for helping make this a successful project for all.

Neenah Paper is recognized as a world-class manufacturer of premium writing, text, cover, specialty and private watermark papers. To learn more about this valued Lipten customer please visit: <http://www.neenahpaper.com>



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## Did you know ...



### **Invention of the Boiler**

While the true first inventor of the steam-generating boiler is difficult to identify (Hero of Alexandria ~Year 50 AD?), the power industry generally agreed that George Babcock and Steven Wilcox were two of first to develop the modern fixed steam generator. Their boiler design which used tubes inside a firebrick-walled structure to generate steam was patented in 1867.

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### **Spotlight on Lipten's Rob Davis**



Rob joined Lipten in May of 2006. He specializes in the design and development of instrumentation and combustion control systems for boilers, heat recovery steam generators, thermal oxidizers, process burners and balance of plant systems. Robert has nearly 30 years of control system experience under his belt. His professional accomplishments include control systems for many major industrial manufacturers.

A self-declared "boat nut" Robert enjoys many outdoor activities including fishing, snowmobiling and hunting.

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## Lipten Racing Update



Now with four events under their belts, the Lipten Sponsored Racing Team proudly holds third place in the overall points standing, quite an accomplishment for their first year in the F2000 Championship Series. The credit truly goes to driver Eric Filgueiras whose expert control always kept the car in competition.

In the first event at Road Atlanta, Eric was able to secure a second place finish in the final race. "I can't believe it" exclaimed the 21 year old, "we are a small team compared to many of the others and for us to be this strong in our first official series weekend is incredible." Eric then followed up the next month with a strong third place finish in the final race at the famous Watkins Glen Raceway.

In June at the Virginia International Raceway, Eric post third and fourth place finishes in the events two races. These were amazing feats considering that the front suspension was damaged in an early practice session before the first race, and, in the second, a left-rear camber bolt was lost after only a few laps.

In the latest outing at Mid-Ohio, there would be no podium joy that weekend. Traction issues plagued the team and left team wanting with seventh and fifth place finishes for the event's two races. But, with other teams having their own problems Eric managed enough success to earn him third place in overall points halfway through the series.

You can read more about all the events here:

<http://www.f2000championshipseries.com/>

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## **Lipten is Hiring!**

Lipten is looking for experienced power plant mechanical engineers, project managers, software developers and service technicians.

If you're interested in a dynamic career with a healthy, growing firm, you've come to the right place. Lipten Company offers competitive salaries and a comprehensive benefits package including medical, dental and 401(k) as well as three weeks paid personal time off in addition to ten paid holidays. Lipten is an equal opportunity employer

[Click here](#) to see if you are interested in potentially being part of the Lipten winning team.

### **Lipten Mission Statement**

*Lipten will make "power" a source of value for our clients by providing superior engineering, procurement and construction of steam, hot water, compressed air, chilled water and electrical systems. Lipten operates profitably throughout the world in an ethical, environmentally sensitive and socially responsible manner while focusing on the core principals of systems' safety, reliability and efficiency. **Essential to achieving our goals is our dedication to maintaining a positive working environment.***

Please [Click Here](#) to view newsletters and more on the LIPTEN website.

Lipten is an Engineering, Procurement and Construction (EPC) firm that specializes in Central Energy Plant (CEP) design and construction. Lipten also has a controls group that provides standard and custom control solutions.

Lipten provides steam generation, power generation, chilled water systems, compressed air systems, water treatment systems, controls and related Energy Center equipment and services. Lipten's level of support can vary from an advisory role to complete turn-key facility construction. Services include: design, engineering, drafting (CAD), equipment specifications, procurement, installation, construction management, site audits, start-up, operator training and maintenance.

