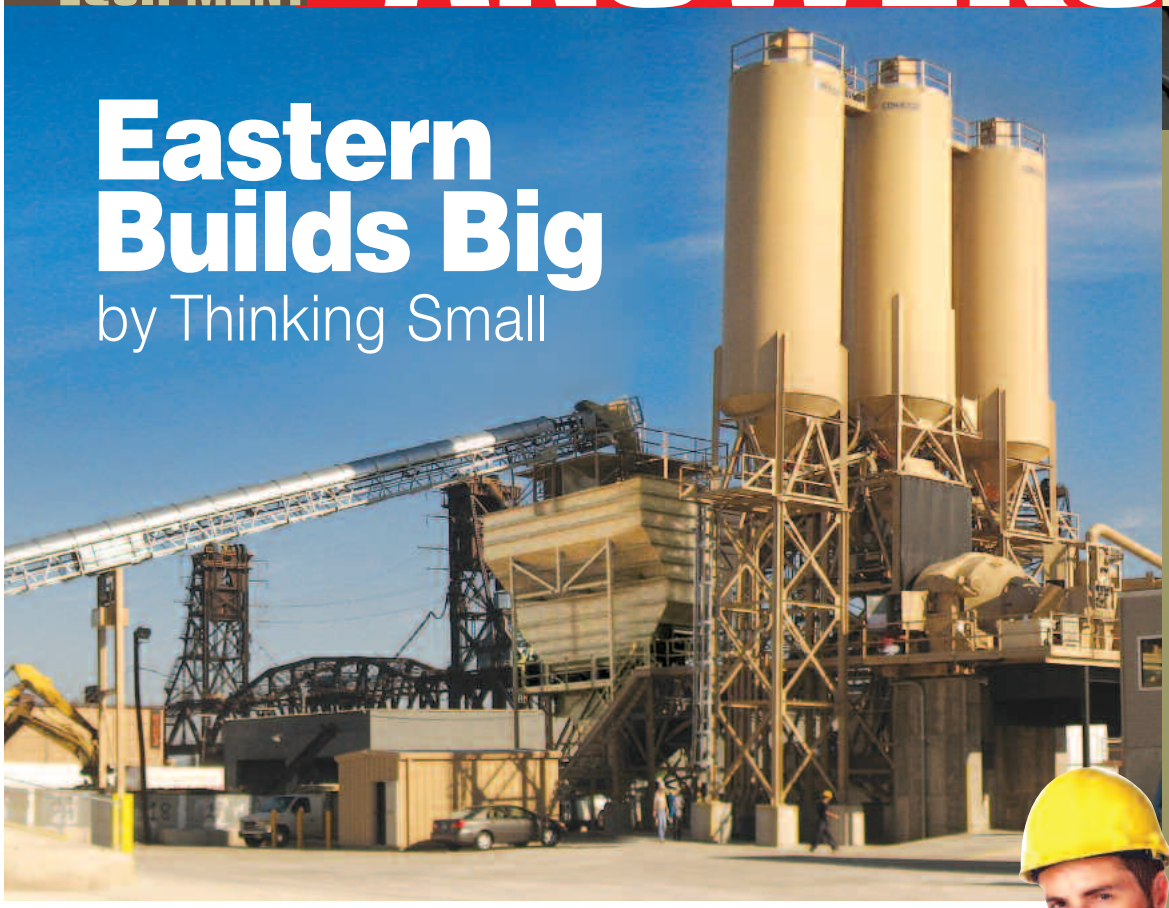
MID ATLANTIC CONCRETE EQUIPMENT

# CONCRETE ANSWERS

FALL 2006

# Eastern Builds Big by Thinking Small



*An impressive sight awaits drivers passing Eastern's newest plant along Pulaski Highway in Jersey City, New Jersey.*

With ten concrete plants and counting in New Jersey and New York, Eastern Concrete Materials was a healthy and growing company. But Vice President of Operations Drew Hope had to downsize his thinking when faced with a shortage of available real estate for plant number eleven in the Jersey City, New Jersey area.

"I give a lot of credit to Drew Hope for his design and layout on a postage-stamp sized lot," says Owen Blevins, spokesman for Mid Atlantic Concrete Equipment, the contractor responsible for erecting the Con-E-Co 400 SLP batch plant for Eastern earlier this year.

"It was a pretty small site," agrees Con-E-Co Engineering Manager Don Hansen. "We had to shift the conveyors around to make it all fit. It took several tries."

Hope's design was ultimately successful, with the erection and subsequent startup going off without a hitch.

"The service and support from Con-E-Co and Mid Atlantic Concrete Equipment has gone far beyond my expectations," says Hope. "Mid Atlantic was on site throughout the project, making experienced decisions on several changes to the plant. Con-E-Co's Engineer, Don Hansen, was a great help in the erection of the plant. If there was a question

*(See "Eastern Builds Big," page 2)*

## Predictive Maintenance

### Keep an eye on your compressed air system's efficiency

Why do you need a predictive maintenance program? Simple. It maintains your compressed air system's efficiency, which increases reliability and extends equipment life. Predictive maintenance programs provide protection for sub-systems within the whole, including air, cooling, oil, and driver (electrical motors, steam turbines, diesel engines, etc.). Let's look at some of these key systems and how predictive maintenance can help:

The air system needs to maintain aerodynamic efficiency and the good condition of moving parts. Both can be compromised by poor air quality. Contaminants that come in contact with impellers, rotors or pistons can increase wear on and decrease overall system efficiency.

Air cooling systems can become contaminated by deposits in the water, which over time can lead to loss of heat transfer capability

*(See "Eastern," Page 2)*

# Eastern Builds Big

Drew Hope, Eastern's VP of Operations

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involved, he always got an answer."

Hope's 39-year career began with construction work and heavy equipment, then took a turn into the ready-mix industry in the early '80s. Starting as a fleet mechanic, he quickly rose to vice president for operations for a three-plant company, which grew to eleven plants when Eastern was formed through acquisitions by parent company U.S. Concrete. He finds his background useful in judging which vendors to work with and what kind of batch plant to buy.

"A great batch plant comes from experienced people designing and engineering the plants, along with experienced people who take pride in building the plant so it is made to last," says Hope.

Eastern is a subsidiary of U.S. Concrete, which operates more than 140 plants throughout the United States. Hope says, "[Since we are] one of U.S. Concrete's alliance partners, McNeilus/Con-E-Co was the choice for the new Eastern concrete plant."

Eastern relies heavily on well-designed, productive plants to maintain its reputation for providing high-quality work on or ahead of schedule. Case in point is a recent large project supplying concrete for New Jersey Route 21, section 2N. As reported on the U.S. Concrete Web site, it was a "challenging, 12-month project."

According to the article, "Logistics were complex, timing was critical and production levels had to be maintained in order to complete the project on time. With all concrete in place, Eastern earned a performance bonus on this $100 million project."

That's a big result for a company that decided to think small. "We made sure his design worked," says Blevins. Adds Hansen, "Our forte has always been in the details."

Moral of the story? Choose those with whom you work carefully, especially when the plant site's cozier than a 10-clown phone booth.

# Batch Plants: **Safety First**

We've all had or heard about close calls when it comes to working in and around batch plants. Operations such as conveyor belts, agg gates and electrical panels are just of few of the everyday dangers faced by you and your employees. Workers can be electrocuted, lose fingers, hands, and arms, or suffer severe crushing injuries because machinery is inadvertently turned on while being serviced or maintained. These injuries can be prevented by establishing an effective lockout program.

As defined by the US Department of Labor, Lockout/Tagout (LOTO) refers to specific practices and procedures that safeguard employees from the unexpected startup of equipment, or the release of hazardous energy during service or maintenance. LOTO requires that a designated person turns off and disconnects machinery or equipment from its energy source before performing service or maintenance and that the authorized employee either locks or tags the energy-isolating device to prevent the release of hazardous energy, as well as verify that the energy has been effectively isolated.

'LO TO'

Failure to lock out and block out machinery before working on it is a major cause of injury and death in the US. An effective LOTO program should include the following:

- Inspection of equipment by a person who is thoroughly familiar with the equipment operation and associated hazards
- Identification and labeling of lockout devices
- Purchase of locks, tags, and blocks
- A standard written operating procedure that is followed by all employees

If you have these safety procedures in place and are practicing them on a daily basis, you're doing right. If not, we can point you to some Web sites that can easily get you into compliance. Check out *www.osha.gov* for effective easy-to-follow safety processes that will keep your operation safe and compliant. If you have other questions or would like to learn more about topics covered in this article, please contact us by phone, 717-627-3002, or email us at info@maconcrete.com.

Source: www.osha.gov

# Predictive Maintenance

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and increased air temperature.

Oil cooling systems need clean lubricant at the correct temperature, or metal-to-metal contact between rotating assemblies and bearings will increase vibration and require more power.

Lubricated parts require correct changeout intervals so that separators and/or oil coalescing elements don't increase oil carryover throughout the system and hurt performance.

Driver systems can become contaminated, compromising efficiency.

A predictive maintenance program helps prevent all of these potential drains in efficiency (and others) reducing both downtime and unscheduled repair costs.

To ensure a successful program, you need to understand what variables can be monitored. Let us answer your questions. Contact us by phone, 717-627-3002, or email us at info@maconcrete.com


# CIFA USA Moves

CIFA USA recently held a grand opening of its new U.S. headquarters and manufacturing facility near Milwaukee. The company is a worldwide manufacturer and distributor of concrete management products, in the forefront of the design of truck-mounted concrete boom pumps for over 38 years. Customers and vendors toured offices, parts departments and production areas, then took part in hands-on demonstrations of the newest 2007 CIFA equipment models, such as the CIFA "A" Series portable concrete pumps, the newly re-engineered K36 and K31, and the new K41 and K48 truck-mounted boom pumps, which were developed exclusively for the U.S. market.

Attendess learned about CIFA's 'Quality First' philosophy through a video presentation. The evening was topped off with a cruise showcasing Milwaukee sites—including the harbor marina and the world-class Milwaukee Art Museum.

# MID ATLANTIC VENDOR PROFILE

**Control Solutions**

## **Advancing Automation:** Why VP Marc Mitchell believes batchWare CS will lead to the company's next growth spurt

Not long ago we sat down with Marc Mitchell, vice president at Irving, Texas-based Control Solutions, to discuss the company's new Windows-based batching control software, batchWare CS.

***What role is automation playing in the industry that it didn't 15 years ago?***

Fifteen years ago you had to convince somebody why they needed a batch computer, why manual wasn't good enough, and how they would benefit.

Ten years ago, you had to [help them decide] which batch computer to buy, because they were pretty much getting on board that they needed one.

Five years ago, the industry changed, and people started wanting more out of their batch computers. They said, "Hey, it's a computer, it should do everything a computer can do…in addition to controlling my plant."

Now, it's almost as if the industry has said, we know what a batch computer is, we understand it will be more accurate and it'll speed us up, great. Let's take that for granted…what else can you do for me?

***So what should a batch computer do these days?***

Batch computers have become a management tool. Yes, they make you more consistent, accurate and all those things, but selling them isn't as much any more a matter of "I'm more accurate than the other guy" as it is about the management functions. Unfortunately, people are losing sight of how important [accuracy] is. But they shouldn't lower their standards on one side, just to get some reports on the other. They need to keep their standards high on the accuracy and the speed and also demand additional reporting and functionality.

*Control Solution's latest innovative product, batchWare CS*

***How does batchWare CS balance accuracy and control with reporting?***

Ours is a Windows-only solution, unlike most of the other systems out there, meaning we don't have programmable logic controllers (PLCs) to control the plant.

What most of our competitors do is give you a data front end to enter information into, and then the PLC actually does the work. With our software, everything is based on the single computer. We wrote our software from scratch to use all the hard drives, and RAM, and processing power of a modern computer.

We believe using a front end computer and a PLC for batch control is not the way to go. Having two different computers run your plant gives you an extra point of failure. We just don't subscribe to that theory.

With batchWare CS, we rewrote our software from the ground up to take into account all the things that people have been asking for. The most common things are to be able to batch and then switch to managing customer files or mixes or get reports or order materials. Most of our competitors have window-dressed their products, but in the background their old software is still really doing the work. We recreated our software from ground up to avoid [the limitations of that approach].

***Does everyone who's currently on your software get an upgrade?***

Yes, every customer who currently runs an existing version of batchWare, who has a service agreement, does get a free upgrade. Charges would be incurred if we had to come up to the plant to do the upgrade, which is required in some cases. ■

*Marc Mitchell, Vice President, Control Solutions*

# CONCRETE ANSWERS

Inside:

**ADVANCING AUTOMATION**
Why Control Solutions believes in batchWare CS

**PREDICTIVE MAINTENANCE**
Keeping your compressed air system running right

**BATCH PLANT SAFETY**
The importance of a lockout/tagout program

MID ATLANTIC CONCRETE EQUIPMENT

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# Partners

Call Mid Atlantic now for your FREE batch plant assessment!
888-378-6223

## Stationary & Portable Batch Equipment

Mid Atlantic Concrete clients benefit from our exclusive relationship with North America's leading line of portable and stationary batch plants, ***CON-E-CO, an Oshkosh Truck Company***, providing quality since 1957.

## Automation & Observation Systems

***Control Solutions*** provides efficient automated batch control systems. ***Bosch*** provides state-of-the-art observation and security. Additional resources include ***Eagle Pneumatic*** tube delivery ticket transfer systems and ***Paradyme Technologies*** digital ticketing systems, satellite based truck tracking, and mobile communications. ***Hydronix*** provides microwave moisture measuring equipment. ***Command Alkon*** offers batching, disbatching, mobile signaling, quality control, mix design and accounting products *(availalable only with the purchase of a new Con-E-Co plant)*.

## Concrete Reclaim Systems

***BIBKO*** provides a 100% concrete recycle system for the Readymix and Precast industries.

## Bulk Handling Equipment

***WAM Inc.*** provides equipment for bulk material handling, dust filtration, solids-liquid separation, and mixing & vibration Technology. ***Teka*** has offered innovative mixing tehcnology for decades. ***Merts*** provides parts for all makes of plants.

## Water Heating & Cooling

***Infern-O-Therm*** provides the most reliable and energy efficient hot water storage systems and chillers on the market today. ***Ludell*** provides direct-fired instantaneous hot water heaters, and waste water heat recovery.

## Trucks & Mobile Equipment

***CIFA USA*** supplies truck-mounted concrete boom pumps, concrete recyclers, concrete batch plants and equipment. ***Trans-Flo Corporation*** provides pneumatic bulk transfer systems and tanker unloaders, ***McNeilus & Oshkosh*** offers concrete mixer trucks and ***Oshkosh S-Series***, the leading front-discharge ready mix concrete vehicle in North America.

## Design/Build

***Horst Construction*** has provided the Northeast with industrial and commercial construction solutions for over a century.