

PIPELINE

Winter 2015

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Ahern's Blog: Learn from the Experts

Ahern's experts possess a wide breadth of knowledge that extends beyond system design, build, and maintenance, and the best part? You have access to it! Located on Ahern's web site, the company's blog features a number of technical articles written by Ahern employees that range in topics from industry trends, maintenance tools and tips, to service information, and more. Below is a brief sampling of the types of articles you can explore:



- NFPA 13 versus 13R
- Welding Symbols Designated as Typical
- HVAC: If It Isn't Broken...Fix It?
- Exhausting Your Energy Savings
- And more!

Want to know when there's a new article to delve into? Follow Ahern on LinkedIn and Facebook for links to new content, or visit the blog directly on the web site at www.jfahern.com/blog.

AFP-St. Louis Receives SCOTY Award

AFP-St. Louis was recognized by the Association of General Contractors (AGC) of St. Louis as the recipient of the 2014 Specialty Contractor of the Year (SCOTY) award in the Plumbing/Fire Protection discipline. The AGC of St. Louis general contractor members are asked to choose the top specialty contractor in 11 categories through a secret ballot process. The specialty contractor with the most votes in a specific category is given the First Place Specialty Contractor of the Year award in that category.



"The award is recognition of Ahern's reputation in the St. Louis market," states John Schotz, vice president/district manager of AFP-St. Louis. "It's exemplary of our ability to meet project schedules, and be a part of the planning and execution of safe and successful projects."



Ahern is a full-service mechanical, pipe fabrication, and fire protection contractor.

The Company's executive officers include:

John E. Ahern | Chairman

John E. "Tripp" Ahern III | President and CEO

Anthony J. Ahern | Executive Vice President
Fabrication and Operations

Krista J. Ebbens | General Counsel and
Corporate Secretary

Robert J. Fischer | Executive Vice President
Milwaukee Region

Jace T. Hierlmeier | Executive Vice President
Ahern Fire Protection

James R. Jarvis | Executive Vice President
Northern Wisconsin & Madison Regions

Robert A. Mathews | Chief Financial Officer

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Ahern's Core Purpose:

To create and maintain systems that save lives, improve the environment, and ensure personal comfort and well-being.

Equal Employment Opportunity/Affirmative Action

J. F. Ahern Co. is an Equal Opportunity Employer. It is Ahern's policy not to discriminate on the basis of race, sex, age, color, religion, national origin, sexual orientation, disability or other basis prohibited by applicable local, state or federal fair employment laws. This policy applies to all personnel actions and activities, including recruitment, recruitment advertising, selection, hire, placement, training, apprenticeships, transfer, promotion, layoff and recall, rates of pay and other compensation, discipline and termination. This policy further is designed to ensure that there is no segregation of facilities or activities based upon race or other improper consideration.

J. F. Ahern Co. is also committed to an Affirmative Action program with regard to female and minority employees. The Company has instituted practices to remain in compliance with these regulations such as regular communication of EEO/AAP policies both internally and externally, including to all construction trade unions, referral agencies and sources, and subcontractors with whom we do business.

Our EEO/AAP policies are a matter of continuing interest and importance to all our employees. For that reason it is the policy that J. F. Ahern Co. officers and management personnel periodically review and, as appropriate, revise such policies to better promote equal employment opportunities and affirmative action.

The Company's Equal Employment Opportunity Policy is displayed in all buildings on bulletin boards. Affirmative Action plans are available on the JFAWeb for Individuals with Disabilities and Disabled Veterans, Vietnam Era Veterans, Recently Separated Veterans, and other Protected Veterans. If you have any questions regarding this policy, please contact Travis Moser, EEOC Officer and Human Resources Manager at (920) 907-5119 or tmoser@jfahern.com.

Like Money in the Bank

Ahern Helps Waterstone Save Big On Their Gas Bill



Waterstone Bank recently asked Ahern for help at their State Street branch in Wauwatosa, Wisconsin. Ahern had been maintaining their mechanical systems for a little over a year, providing quarterly inspections on the air handlers, boilers, pumps, cooling equipment, and pneumatic systems. Waterstone's Facility Manager Al Scheinpflug wanted to investigate some unresolved issues related to unsatisfactory work by another mechanical contractor. Having a strong aptitude for how the mechanicals should work, Scheinpflug was suspicious that the Wauwatosa facility was wasting money on natural gas and electricity costs. Additionally, tenants and employees in the building regularly complained about temperature issues.

Ahern Account Executive Grant Horn and Commissioning Manager Dick Wirt analyzed the building and its original 1970s drawings and design. Prior to any air balancing taking place, Wirt identified some major losses of conditioned air into unconditioned spaces. These hidden duct leaks were sealed up by Ahern Sheet Metal Service Technician Kurt Grasse. Through some investigation of his own, Scheinpflug found a barometric relief damper above the ceiling on the third floor that was no longer functioning properly (after 40 years of use) and asked Ahern to install a mechanically-controlled relief damper that would automatically open only when required. The old damper had been allowing cold and hot air to pour into the building at all hours of the day. After these provisions have been made, Ahern Sheet Metal Service Tech Lonnie Smith spent a week going through every terminal unit, VAV, and supply air grille, making adjustments and correcting issues that had been left unresolved by the previous contractor's installation.

Scheinpflug noticed results nearly immediately, and was pleasantly surprised to find out that his boilers did not run for a full week after Ahern worked on the system. Up until that point, the boilers had run every day for as long as they had been in the building. He actually received a phone call from the utility company less than 30 days later, expressing concern that there was a problem with his building-- the

The gas bill had never been less than \$368.61 in one month... but the most recent period had generated only \$17.86 in natural gas charges

gas bill had never been less than \$368.61 in one month (the average bill was over \$500 between June and September), but the most recent period had generated only \$17.86 in natural gas charges! Additionally, he noticed the reading on his variable frequency drive had dropped from 58-60 Hz down to as low as 30 Hz for the first time since it was installed 5 years before, indicating he was now using 50% less fan energy. Waterstone is reducing their electricity consumption from this air handler from \$1.64 per hour down to as little as \$0.82 per hour.

Needless to say, Al was quite pleased with the results, is enjoying not getting 'hot & cold complaints,' and is happy to be saving the bank some money.

To learn how Ahern can save you money on your utilities, contact Grant Horn at ghorn@jfahern.com

Mastering Modules: Pipe Fabrication Weighs In on Canadian Oil Sands Project

Not every project that comes through Ahern's Pipe Fabrication shop is the standard ½" to 144" diameter piping. In one of the most complex module projects tasked to the team, boiler system manufacturer Cleaver Brooks awarded Ahern the opportunity to fabricate 10 modules for an oil sands plant in Lac La Biche, Canada. Starting in November 2013, it took Ahern a little over a year to build five 16' x 41', 145,000 pound steam drum modules and five 13' x 32', 92,000 pound boiler feed water modules that play an essential role in processing oil. Having a poor outcome with a previous contractor on a module project, Cleaver Brooks entrusted Ahern's pipe fabrication team based on their exemplary knowledge and performance on past projects—and it paid off. In an on-site inspection by the customer, the satisfaction of Ahern's work was apparent. "The workmanship that has been done is of high quality," states Kevin McWilliam, Inspector for Canadian Natural Resources Limited. "It shows the degree of planning that went into the assembly of the modules, and each looks to be very good replicas of one another."



Boiler feed water modules

Bringing the pipe fabrication team another "first," the module project prompted the opportunity to partner with Ahern's major construction team to perform the skid assembly. While the responsibility of building skids almost always falls in the hands of the pipe fabrication team, the degree of the project required the expertise of the major construction team to manage the risks involved using crane lifts during the build. From the early stages of estimating and pre-planning to the execution and delivery of the modules, strong collaboration was built in combining the expertise of Ahern's two business units to deliver an unmatched product to the customer.



Ahern's Pipe Fabrication team offers a variety of material types including stainless steel, carbon steel, chrome moly, and special alloys, as well as specialty orders. In addition to skid and module assembly, Ahern's shop has experience in fabricating the following custom orders:

- Containment piping
- Coating and lining systems (prime and finish painting – epoxy, coal-tar, etc.)
- Insulated piping
- Vessels
- Supports, saddles, hangers, and re-pads

With the knowledge, experience, and collaboration of Ahern's project team, no fabrication job is too complicated or difficult. "Completing a large-scale module project opens future opportunities in all the industries we serve and has proven our capability to see these projects through from start to finish," states Brad Witt, pipe fabrication division manager at Ahern. "It's a great showcase of the project complexities Ahern's pipe fabrication shop can manage in house."



Cable trays installed with separation plates

Despite the negative-degree temperature, Ahern's pipe fabrication team loaded the modules onto flatbeds using two cranes, keeping delivery on-time.

Cover photo: Pictured is a 16' x 41', 145,000 pound steam drum module



Trusted Relationship Leads to Multi-Trade Project

A fire protection relationship spanning over two decades awarded Ahern the opportunity to showcase two additional areas of expertise in an expansion project with plastics manufacturer Goex Corporation. Contracted directly with the owner, Goex selected Ahern as the prime contractor for their 170,000 square-foot, plastic extruding and warehouse facility in Janesville, Wisconsin. The expansion space was the first time Ahern performed plumbing and HVAC work for Goex, and was the Madison office's first time performing plumbing, industrial process, fire protection, and HVAC concurrently on one project.



Goex's fire equipment room which includes the installed fire pump equipment and risers for the five wet sprinkler systems

Building upon the existing relationship, Ahern and Goex continued to sustain that foundation with direct and regular communication throughout the project. From the layout and aesthetics to the piping and equipment, Goex was very involved in the planning process, which kept the project running smoothly and minimized any changes on-site. Having run into weather-related challenges in early 2014 with the Polar Vortex, the schedule never fluctuated and Ahern completed the project on time in August 2014. Especially important, Goex's existing building was left fully operational throughout the relocation of their existing process chillers to the new facility, by means of a temporary tractor trailer mounted chiller system.

"We are very pleased with the quality of work, attention to detail, and the value of maintaining a schedule that your personnel demonstrated."

Joshua Gray,
president of GOEX Corporation

Despite the weather challenges, team work, communication, and execution ultimately led to a satisfied customer. So much that Ahern secured a Planned Maintenance Agreement (PMA) for both the mechanical and fire protection systems after the building was completed. The PMA will help maintain the longevity of the systems installed. "Being able to have that direct communication kept expectations at the forefront," states Craig Carlson, regional facility services manager at Ahern. "Having an owner involved in the building process and wanting information for all options with our systems ultimately led to project satisfaction."

PROJECT HIGHLIGHTS:

Fire Protection

- 23,000 feet of branchline piping
- 4,000 feet of main piping
- 2,400 sprinkler heads
- Five wet systems
- One 1,500 GPM electric fire pump
- 1,362 labor hours

HVAC

- 15,000 pounds of ductwork
- Two 15 ton rooftop units
- Six 50 ton rooftop units
- 2,233 labor hours

Industrial Process

- 1,000+ feet of 2" to 8" carbon steel tunnel piping
- One temporary semi-mounted chiller and pump
- Relocated two chillers
- Relocated two dry-chillers
- 1,167 labor hours

Plumbing

- Installed plumbing fixtures in office bathroom, kitchen, and locker room
- 2,637 labor hours

Pre-Construction: Planning for Success

Successful construction projects start well before the first shovel hits the dirt. In recognition of the need for careful planning, pre-construction services have quickly become integral to projects of all sizes. Ahern utilizes a combination of extensive project experience and the latest in design and estimating technology to give customers superior pre-construction services.

Engineering Solutions – Cost-effective, proven solutions for any mechanical or fire protection system. Ahern employs 7 licensed PE's and 7 EIT's.

Design Analysis – We analyze system designs for cost effectiveness, code compliance, serviceability, and constructability. Our team of mechanical and fire protection designers logged approximately 150,000 hours of work in 2014.

Budgeting/Conceptual Estimating – Accurate mechanical and fire protection system budgets assist the owner and construction teams in making value-based system decisions early in the process. Our actual project costs have averaged within 1.8% of the original estimates for the last three years.

Integrated Project Delivery Expertise – We can provide the framework, resources, and team members required to execute projects under a fully Integrated Project Delivery procurement system including in house engineering, estimating, BIM coordination, Prefabrication, Project Management, Extensive Field Resources, Commissioning Services, Detailed Cost Accounting, and Maintenance Programs.

LEED/Green Consultation – Navigate through the LEED process with our energy modeling services, LEED Administration services, LEED Documentation, and a long track record of successful green/LEED project experience to draw from. Ahern employs 9 LEED AP's.

Building Information Modeling (BIM) – Reduce project conflicts, improve field labor productivity, increase the use of prefabrication, and to improve project quality. We can also integrate project documentation such as owner training videos, O&M manuals, product submittals, equipment performance testing data, etc. into the completed model provided to the owner.

Ahern also offers complete design/build services. For more information, contact Phil Corbin at pcorbin@jfhahern.com

A Sampling of Ahern's PRE-CON SUCCESS:

Healthcare:



- Columbia St Mary's Main Hospital (Milwaukee, WI)
- Luther Midelfort Hospital Expansion (Eau Claire, WI)

Commercial Office:



- Kohler Global Communications Headquarters Building (Kohler, WI)
- City Center West Office Building (Middleton, WI)

Industrial/Process:



- Waukesha Electric Plant Expansion (Waukesha, WI)
- Cargill Project Tundra (Germantown, WI)

Laboratory:



- Aldrich Chemical Research and Development Laboratories (Milwaukee, WI)
- BD Medical Cleanrooms (Franklin, WI)

Hotels/Hospitality:



- The Ambassador Hotel (Milwaukee, WI)
- Potawatomi Casino Hotel (Milwaukee, WI)



Ahern Surpasses Man-Hour Milestone in 2014

It was another record-breaking year in 2014 for Ahern's employees finishing with a total of 2.3 million man-hours worked. Approximately 16,000 hours above the previous record set in 2013, the Company performed work for thousands of customers ranging from small businesses to over 20% of the Fortune 500 companies. From office to shop to field, the hours were logged throughout Ahern's 13 Midwestern locations, as well as various construction sites across the United States. This number is a representation of Ahern's mechanical, fire protection, and pipe fabrication services.

**Facility
Maintenance
Guide**
written by Ahern's
Experts



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Checkup, Passing Sprinkler Inspections,
Plumbing system control, and more!