

We are now in the final months of our 2009 year. If there were any doubts about a tough construction season, they have been confirmed. New projects are scarce, competition is fierce and our clients feel economic pressures to reduce internal costs.

It's clear the economy has changed; however, our way of doing business has not. We must fulfill our mission to be different and better than our competition. We must be customer focused and live our values. We must continue to be the resource our clients have come to know and trust.

During these economic times what does that mean? It means:

- We must stay connected with our clients. We must be visible, engaged and curious about what they are thinking about and looking for.
- We must execute our work better than ever, using all of our skills in pre-construction phases, communication, LEAN, BIM, LEED and sustainable construction.
- We must create the winning project approach at a sensible price.

In this issue, you'll read about our work with the Air National Guard, and about our successful partnership approach on the Aurora Summit hospital project. Through close collaboration and understanding with our clients, our Metals team provided an outstanding portion of the Milwaukee Riverwalk by Marine Terminal. Likewise, our Pittsburgh team created and nurtured a strong working relationship with Robert Morris University, which has again trusted us with fire protection in its student dormitories. By engaging clients and working together, our team provided refrigeration services at Milwaukee's Summerfest, *The World's Largest Music Festival™*. In our continuous development of skills and education as a client resource, we are excited to now have eight LEED accredited individuals on staff.

Of course, it is our people who truly provide that customer-focused, value-based experience our clients have come to expect. In this issue, you will see some of these folks who have been committed to our mission for a long time.

Lawrence E. Loomis

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President, Grunau Company



GRUNAU UPGRADES PROTECTION FOR 128TH AIR REFUELING WING

For nine months, Grunau Fire Protection personnel received security clearance at the 128th Air Refueling Wing, part of the Wisconsin Air National Guard. Grunau's project team replaced an existing aqueous film-forming foam (AFFF) system with the more effective high expansion foam (HEF) protection system for the Oak Creek military base.

The 128th wing was formed in 1947 and has been in the refueling business for more than 45 years — longer than any other Air National Guard tanker unit. The base was 100 percent operational when Grunau team members removed existing fire protection to install more advanced systems. The installation included two high expansion foam (HEF) systems equipped with ten foam generators, as well as two wet pipe systems, two preaction systems and two 2,000 gallon-per-minute fire pumps.

Grunau operated under a strict work schedule in accordance with the government's requirements about when third parties could and could not be in the hangar area. "Working at an active military base required adherence to guidelines and rules while also maintaining flexibility due to changing circumstances like military procedures, plane maintenance or drills," said Eric Radke, Grunau Company fire protection manager.

Since fire protection accounted for nearly 80 percent of the overall site upgrade, Grunau closely coordinated its work with general contractor, Nuvo Construction. Even with the variability in scheduling, Grunau's excellence in project management and its teamwork with Nuvo allowed it to complete the project on time and honor its commitments.



▲ Grunau tested its newly-installed high expansion foam systems during a fire protection upgrade at the 128th Air Refueling Wing.





FIRE PROTECTION

FIRE PROTECTION AT PITTSBURGH UNIVERSITIES

Grunau recently utilized its fire protection expertise to equip dorms at two Pittsburgh universities — Robert Morris University and Duquesne University.

Grunau installed 200-head sprinkler systems in Adams Hall, Hancock Hall and Hamilton Hall at Robert Morris as part of the university's initiative to remodel its student housing. Grunau also placed a new underground water line for one of the dorms. The teams worked with general contractor Landau Construction and with local fire departments to ensure that hoses hooked up properly to the new equipment. Grunau managed the project while students were off for the summer and completed the project before deadline.

Another Grunau team led a similar project at Duquesne University to install fire protection in two dorms — the six-story St. Anne Hall and the three-story Assumption Hall. Under an extremely aggressive 55-day timeline, Grunau installed wet sprinkler systems, with a total of 1,900 heads, and standpipes for both dorms. In addition to the tight timeframe, Grunau coordinated work around the inspections of the building's asbestos abatement officer.

Grunau's innovative design work saved the university time and money in multiple ways. For example, the team figured out a way to hide fire protection pipes without fabricating bulkheads — an option which improved the dorm's aesthetics. Grunau also changed the initial design to locate the system's standpipes inside stairwells instead of inside student rooms. Then, Grunau converted the existing standpipes to drain risers. This meant the general contractor wouldn't need to cut walls or build enclosures to hide those components in the student rooms. The university was thrilled with this solution, because it freed up enough space for each room to house two students instead of just one.



▲ Grunau's Pittsburgh fire protection branch installed new sprinkler systems in these student dorms at Robert Morris University and in two dorms at Duquesne University.



MECHANICAL

GRUNAU TEAM HELPS AURORA CONSTRUCT NEW MEDICAL CENTER

Grunau recently completed plumbing and HVAC work on Aurora's new 800,000 square-foot hospital, which includes a medical office building and cancer center, located in the town of Summit, Wis. Grunau was selected to be part of the construction team in a non-traditional approach — selected not only on price, but as a partner to work with the architect, engineer and owner to provide the best facility for the end user, the patient.

The team successfully handled the project's expedited construction schedule and challenging scope, which required 150 full-time field staff. To ensure work went smoothly and quickly, Grunau submitted a manpower flow plan before beginning the job. The team also held daily, weekly and monthly meetings to review progress and monitor manpower usage.

Field staff from Grunau split into five teams, each responsible for a different area of the facility. Two teams managed installations in the main hospital; two executed work in the medical office building and cancer center; and one oversaw the remote central utility plant. The onsite presence of the owner's agent, architect and Grunau's project management team led to timely decisions that helped field teams work more efficiently.

Collaboration among contractors was possible thanks to BIM technology, which virtually maps out three-dimensional models so technicians can see how building systems interact with each other prior to installation. Grunau kept three plumbing representatives, three HVAC experts and six sheet metal technicians plugged into the project's BIM model at all times.

"Using BIM, you can 'fly' through the building to review conflicts and installation detail," explained Ron Kwiatkowski, Grunau's project manager. "We drew out our plans and flagged any trouble areas. This reduced the potential for rework."

Grunau also added a second shift to its sheet metal shop to handle fabrication of the project's million pounds of ductwork. Deliveries were carefully coordinated to ensure that the required HVAC piping, plumbing fixtures and major equipment arrived on the job as scheduled.

Grunau installed major equipment and utilities for the hospital's heating, cooling and plumbing systems in the central utility plant. The system components included three 1,000 ton chillers, four 800 horsepower high-pressure boilers, three 1,000 ton cooling towers, and the facility's main water softeners and booster pumps. Grunau also placed two 250 ton air-cooled chillers for use when the main chillers weren't available.

To manage the facility's hot water distribution, Grunau installed five satellite rooms equipped with heat exchangers that use steam from the central utility plant to heat water. Grunau also applied special metering because heating and cooling costs were billed separately for the main hospital, and the medical office building and cancer center complex.

Due to the lengthy construction timeline, Grunau also conducted preventive maintenance on its installed equipment until the hospital officially opened. Now, Grunau is in the troubleshooting stages of final testing prior to opening. Since Grunau's equipment manuals are available electronically, building representatives had easy access to important maintenance and operation information before the first patients entered the hospital.

Grunau put in a total of 250,000 field hours to complete the project and maintained a great safety record. "One of the big rewards was that by meeting our commitments presented at the selection process, we were able to partner with the construction team on another Aurora project," said Kwiatkowski.



▲ Grunau recently completed plumbing and HVAC work on Aurora's new 800,000 square-foot hospital located in the town of Summit, Wisconsin.

GRUNAU EMPLOYEES RECOGNIZED FOR YEARS OF SERVICE

During recent picnics in Milwaukee and Pittsburgh, Grunau Company honored 30 employees from all locations for their years of outstanding service and commitment.

MILWAUKEE



Front row, left to right: Brian Wang (20 years), Karen Dix (25 years), Chuck Neumeyer (35 years), Chris Miller (35 years), Ray Braun (25 years) and Jeff Kuhnke (20 years).

Back row, left to right: Paul Grunau, Dennis Laney (40 years), Tim Sadowske (25 years), Don Mateicka, Jr. (30 years), Steve Vizer (10 years), Dave Machajewski (25 years) and Larry Loomis.

Not Pictured: John Mervin (10 years), Jesse Cefalu (10 years), Lisa Smith (10 years), Greg Klumb (10 years), Eric Vaa (10 years), Alonzo Williams (10 years), Richard Godwin (10 years-Orlando), Robert Taylor (10 years-Orlando), Don Sparks (10 years-Orlando), Jeffrey Gill (10 years-Indianapolis), Brad Shepherd (15 years), Rick Herrmann (15 years), Kevin Fredrick (20 years), Sue Wegner (20 years) and David Beres (25 years)

PITTSBURGH



Left to right: Randy Rubesa (15 years), Vinnie Viglione (20 years), Larry Loomis and Rob Schmitz (25 years)

Not Pictured: Rick Gasior (10 years)

CREATING LEEDERS AT GRUNAU

The U.S. Green Building Council (USGBC) established the LEED Green Building Rating System™, a voluntary, consensus-based national rating system for developing high-performance, sustainable buildings, to provide independent, third-party verification that a building project is environmentally responsible, profitable and a healthy place to live and work. LEED Accreditation distinguishes building professionals with the knowledge and skills to successfully steward the LEED certification process. LEED Accredited Professionals (LEED APs) have demonstrated a thorough understanding of green building practices and principles and the LEED Rating System.

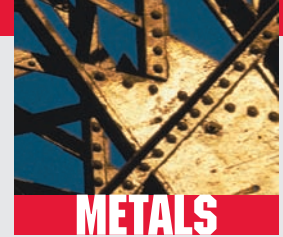
Over the years, LEED has become more prevalent and Grunau felt it was important that its team be knowledgeable about the LEED certification process. Grunau has participated, or currently is participating in, 12 LEED projects for customers, including the Manpower Corporate Headquarters (2007, LEED NC Gold), the Marquette University Law School (2010, *Anticipated* LEED NC Certified) and we are very proud to announce the Grunau Company Headquarter's most recent certification (2009, LEED EB Gold).

"LEED has become more and more common for projects," said Sarah Meyer, one of Grunau's LEED AP project managers. "We want to show that our team is educated and that we are committed to being engaged in sustainable building projects."

Since 2005, eight Grunau employees have achieved LEED accreditation:

- Aaron Block, P.E., LEED® AP, Project Manager
- Daniel Cypcar, P.E., LEED® AP, Project Manager
- Jessica Jahner, P.E., LEED® AP, Project Manager
- Jeff Kuhnke, P.E., LEED® AP, Project Executive
- Sarah Meyer, P.E., LEED® AP, Project Manager
- Doug Mikolainis, LEED® AP, Sr. HVAC Engineer
- Rachel Rueckert, P.E., LEED® AP, Project Manager
- Tyler Trotter, LEED® AP, Project Engineer

"In addition to offering input on mechanical system types, our team regularly counsels customers about how to achieve LEED certification for their buildings," Meyer said. "We want to be a resource to our customers in any way we can."



METALS

GRUNAU METALS GIVES MILWAUKEE RIVERWALK A NEW LOOK

As part of Milwaukee's ongoing effort to improve and remodel its downtown Riverwalk, Grunau Metals recently installed structural steel and specialty metals to add flair along one section of the walk. The Metals team fabricated stairways and several hundred feet of railings for the Mandel Group building, which overlooks the Milwaukee River.

Grunau Metals took extra precautions to ensure job quality and safety while working directly over the water. Team members wore life vests and were required to tie off securely before beginning work. A lifeboat also was onsite during the project. Grunau coordinated with local barges to deliver the needed equipment.

"It was a fun experience to be on the river," said Scott Hansen, Grunau Metals' project manager for the Riverwalk job. "There's a lot of boat traffic and several summer festivals in Milwaukee."

Grunau Metals fabricated and installed the custom, semi-ornate railing for the Mandel Group building. The team also needed to match the styles of an existing railing in order to connect the new section more seamlessly.

Grunau Metals completed the project in eight months, finishing before the winter cold hit Milwaukee. The team returned the following spring to shine up the metal railing in preparation for its high use during the summer.



▲ *Grunau Metals fabricated and installed these custom railings and stairways along the Milwaukee River.*

**SERVICE****GRUNAU KEEPS MILWAUKEE'S HOTTEST SUMMER FESTIVAL COOL**

Most visitors to Milwaukee's Summerfest, *The World's Largest Music Festival™*, which is an 11-day festival along the shores of Lake Michigan, don't think twice about how the food and beverage they enjoy on the festival grounds is kept cold. Thanks to Grunau Service, they don't have to worry.

Grunau recently conducted maintenance and repairs on approximately 100 walk-in coolers and freezers on the Milwaukee World Festival, Inc. grounds, where Summerfest and numerous summer ethnic festivals are held each year. The team had only a short timeframe to complete the job before the grounds opened for the summer. Grunau carefully managed manpower and vehicle dispatch in order to make it happen. The Grunau tool room also retrofitted an existing service cart to meet Summerfest's specific safety requirements. Service technicians used the cart to make onsite repairs more quickly.

The refrigeration units themselves also presented several repair challenges due to their heavy usage and exposure to harsh weather elements along the lakefront. Although the coolers were only used approximately six months out of the year, the on-again, off-again usage led to further wear and tear.

As a result of Grunau's work, Summerfest issued fewer service calls during its 11-day run than in previous years. The repaired equipment also uses less energy because it runs more efficiently. The completed repairs directly qualified Summerfest for recognition from We Energies' Focus on Energy initiative. Grunau actively pursued this benefit for its client, knowing that We Energies rewards refrigeration that is clean, efficient

and working properly. Grunau, which also participates in Summerfest's group ticket sales program and does business with Summerfest, hopes the Focus on Energy award provides the client with continued savings.

In addition to the refrigeration repair work, Grunau also maintains a 24-hour emergency service contract with Milwaukee World Festival, Inc. for Summerfest and several other ethnic festivals that take place on Milwaukee's lakefront.



▲ *Grunau's tool shop retrofitted this cart to match Summerfest's safety requirements so service technicians could use it during refrigeration repairs on the festival grounds.*

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