



# QUARTERLY

## Training for the Future

Continued growth in the Northwest construction industry may not be a given, but the need for training remains a challenge to be faced and something we plan for and act on. At PSF, we take our responsibility for providing innovative and effective mechanical systems seriously, and this means we have to take our responsibility for recruiting, training and mentoring seriously as well.

We have been recruiting the best available talent, and not just from the traditional sources such as ME graduates, consultants and, at times, competitors. For example, two recent additions to the PSF team include Marty Novini and Manuel Canut, both previously with Heery International. Marty and Manuel add extensive commissioning, energy modeling and retrofit experience to the PSF team, in addition to their mechanical design skills. Marty has extensive green building experience, is a LEED AP and is a registered PE in Washington, Idaho and Oregon. Manuel earned a BS in Mechanical Engineering from OSU and is a NEBB Certified Supervisor. (We understand Manuel runs a pretty hot racing cart as well, and has the Seattle Karting Club Championships to back up his claims!).




Also arriving recently is Lawrence Palmer, previously with ATS Automation. Lawrence has extensive knowledge of building environmental controls, sequences of operation and mechanical systems operation. Lawrence is also a LEED AP, is a registered PE in Washington.


We don't just hire in talent. PSF has been engaged in ongoing training and mentoring for all employees. Last spring we had over 30 of our employees enrolled in a 14-session training program sponsored by Carrier and Washington Air Reps. The original venue was open to the entire mechanical industry, and PSF's participation level was greater than half of the offered seats. We ended up finding a separate venue and conducting a private series for our employees, plus a few overflow students from a competitor. Two PSF employees--Engineering Manager, Ron Marson and President, Jim Reynolds--taught a number of the classes. Students in the sessions came from all areas of the company, including project management, engineering, detailing, service and the field.

The Carrier TDP (Technical Development Program) was so successful, we conducted a second twelve-class series this fall that finished in December. Beginning soon is an additional training program centered around green building design, particularly the application and use of the Carrier HAP (Hourly Analysis Program) for energy analysis and modeling on LEED projects. This series of training sessions will be directed primarily toward our engineering staff.

At PSF it is our intent to look forward in anticipation of industry needs and to creatively use technology so that we insure our team is ready to support our customers.

### CURRENT PROJECTS

- Highline YMCA   
SeaTac, WA
- Redmond Software Company, Building 111  
Redmond, WA
- T-Mobile Canyon Pointe T.I.   
Bothell, WA
- Fleet Region Readiness Center   
Everett, WA
- Bellevue First Presbyterian Church,  
Education Wing  
Bellevue, WA
- Nordstrom Fashion Place  
Murray, UT
- Nordstrom Kenwood  
Cincinnati, OH
- Nordstrom Park Lane Rack  
Dallas, TX

 Refers to a LEED or Green Globes Project

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## May we introduce you to the Technology of Turbocor?


A refrigeration compressor that ...



- Saves 50% on energy costs
- Contains no bearings
- Has its own brain
- Never needs oil
- Stays quiet
- Has no locked rotor amp rating
- Is environmentally friendly



#### St. Thomas School

- LEED Silver Rating 
- 55,000 ft<sup>2</sup>, 2-story School
- Medina, WA

#### Team Members:

- GC - Sellen Construction
- Architect - Bassetti Architects
- HVAC - PSF Mechanical, Inc.

#### HVAC Systems:

- Central 100% OSA forced ventilation
- Hot water radiant supplemental heat at perimeter

#### Energy Saving Strategies:

- Natural ventilation, operable windows and natural economizers
- High efficiency green refrigerants for mechanical cooling and heating systems



#### Redmond Software Company, Building 92

- 200,000 ft<sup>2</sup>, 3-story Office Building
- Redmond, WA

#### Team Members:

- GC - Sellen Construction
- Architect - NBBJ
- HVAC - PSF Mechanical, Inc.

#### HVAC Systems:

- Chilled water air handling units
- VAV boxes with electric heat
- Liebert split system units for communication rooms
- Central exhaust systems

#### Energy Saving Strategies:

- FANWALL TECHNOLOGY® custom-built AHUs

#### System Benefits/Goals:

- Chilled water provided from central plant



#### University of Washington, H-Wing

- 82,000 ft<sup>2</sup> Multi-purpose Biological Research Facility
- Seattle, WA

#### Team Members:

- GC - Skanska
- Architect - Ambia
- HVAC - PSF Mechanical, Inc.

#### HVAC Systems:

- Hydronic heating coils
- Multi-floor VAV supply 100% outside air
- General VAV exhaust and stainless steel fume exhaust with heat recovery

#### Energy Saving Strategies:

- 200-plus zones
- Heat recovery coils
- Recover 100% of exhausted ventilation from the 5th floor

## Putting LEEDership into Design/Build

The design/build mechanical contractor plays a key role in the success of a LEED-certified project. The goal of achieving a high-comfort environment that minimizes energy consumption is central to the design/build concept. This concept is raised to a higher standard on LEED projects.

All LEED projects use a rating and points award system to achieve one of four levels of certification. Mechanical systems typically are involved in up to 37 of the available points, most of which deal with energy and water conservation, and indoor air quality.

One of the most important roles the contractor plays is that of cooperative involvement with the project architect in the development of the Energy Simulation Model (ESM), required under the Energy and Atmosphere category. Early collaboration is essential; the

building must exceed ASHRAE baseline performance by 14% (many people assume meeting Seattle Energy Code is sufficient, this is definitely not so).

Following energy efficiency, the most significant contribution to the certification process by the mechanical contractor is creating water efficiencies. Careful fixture selection can lead to 40% water savings, resulting in two points plus an innovation point. Drip irrigation can achieve a 50% savings in irrigation water use. Rain water reclaim offers even greater savings.

Most LEED projects involve an independent commissioning agent (CA) to obtain the Enhanced Commissioning point. The mechanical contractor must work closely with the CA beginning at the schematic design phase. Again, early involvement is key to project success. Refrigerant selection and management

is part of the Energy and Atmosphere category. The best refrigerants offer low ozone depletion potential and low global warming potential.

Environmental controls enhance mechanical and electrical systems operation. Proper performance measurement and verification monitoring can lead to an additional certification point.

Of the 15 available Indoor Environmental Quality points, mechanical contractors are typically involved in achieving 10. This includes everything from low-volatility products to proper ventilation procedures during and following construction.



## PSF EMPLOYEE SPOTLIGHT

### Wayne Lawson, Production Manager

#### ALL IN THE FAMILY

Wayne Lawson came on board with PSF Mechanical in May of 2007 as the Piping Superintendent and was promoted to Production Manager the summer of 2008.

Mechanical contracting has always been a part of Wayne's life. His extensive background began in Alaska in his father's sheet metal shop at the age of 12 learning sheet metal layout. He started as a plumber apprentice the summer he graduated from high school with Stephens Bros. Mechanical in Anchorage, Alaska. After his apprenticeship Wayne ventured into a sheetmetal business with his father for four years. With this experience he went on to run the sheetmetal and

pipng for Engel Mechanical, Inc. for 19 years. His roles were estimator, project manager, detailer, and production manager for plan and specification projects that covered Alaska, Washington and Northern Oregon.

Wayne has significant expertise in bio tech and healthcare plumbing and pipefitting on high-profile and public projects in Alaska and Washington State. Some examples of his work include the oversight of all underground piping and plumbing on the Amgen project here in Seattle; the Coast Guard base in Ketchikan, AK; the BNSF Railroad Tunnel on Steven's Pass; the Interim Seattle Public Library.



One thing you notice about Wayne upon meeting him is his BMW GS motorcycle and all of the travel destination stickers covering its surfaces. In addition to being an experienced rider, Wayne is also an accomplished cabinet maker (he is reported to have crafted all of the furniture and cabinetry in his home), a competitive sporting clays shooter, a husband and a father of three terrific girls.

## Meet the People That Make Things Happen



**Chuck Dowling, Commissioning Supervisor**, has over 22 years of industry experience. He is affiliated with NEBB and TAB and is certified in TAB & Commissioning of HVAC systems. In his free time he enjoys camping and golf.



**Mike Ross, Sheet Metal Foreman**, has been with PSF since 2002 and has over 27 years of industry experience. His strong work ethic and can-do attitude make him a great addition to any project. In his free time Mike enjoys car racing.



**Chris Clarke, Piping General Foreman**, has over 18 years of industry experience. His understanding of client's expectations and excellent communication skills, coupled with his plumbing knowledge, is invaluable. In his spare time Chris enjoys fishing, diving and camping.



**Jill Hughart, Project Manager Administrative Assistant**, holds a Bachelor Degree in English Literature. Her attention to detail and friendly manner make her an essential part of the project management team. When not at work she can be found in antique shops, hardware stores, at the Ballard Locks or with her backpack on a backcountry trail.



**Vaughn White, Detailing Foreman**, joined PSF in 2006 and has over 20 years of industry experience. Formerly a sheet metal foreman, Vaughn now works in-house creating 3D models of our mechanical systems. In his spare time, Vaughn enjoys the great outdoors of the Pacific Northwest.



**Nate Wenisch, Service/TAB Technician**, joined PSF in 2006. His friendly and efficient manner make him a valuable team member. When not at work you'll find him watching hockey, skiing, hiking or roller blading.

### MAILBAG

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