

125,000 lb/hr Reconditioned Boiler
Travelling Through New Mexico

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THE NATIONWIDE BOILER STEAMLINES

December
2019

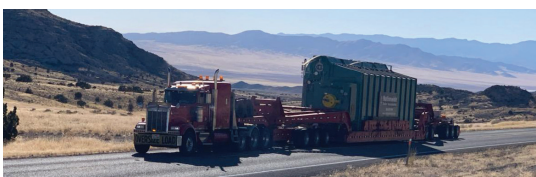
"...Integrity, Dependability, Real Customer Service."

From California to Michigan: A Cross-Country Tour

If a boiler could speak, it might have a lot to say about the sights it has seen, the people it has met, and the many conditions it has experienced.

Some boilers travel far and wide across the country and even overseas before settling into its permanent (or temporary) home. This can range from refineries, chemical processing plants, paper mills, hospitals, or manufacturing facilities. One boiler we shipped this year had a route that was quite impressive, travelling through fifteen states before reaching its final destination.

Late last year, along with the help of our local representative Dean Boiler, Nationwide Boiler secured a significant order including the purchase of a fully reconditioned boiler



for a manufacturing company in Michigan. This D-type package watertube boiler was built to provide 125,000 lb/hr of saturated steam with a design pressure of 260 psig. The overall equipment package also included a low NOx burner, a brand-new Allen-Bradley PLC-based control panel, and a ground mounted vertical tube economizer. In addition, a Predictive Emissions Monitoring System (PEMS) was supplied to comply with the local air district requirements.

At roughly 16 ft tall and 12 ft wide, this shipment was by no means a simple one. The freight forwarder had to complete multiple route surveys and considered various trucks and drivers before finding one that would fit the bill. In addition, this size load required police escorts throughout the entire California route, as well as other various locations.

A 350 ton crane was utilized to lift the 127,500 lb boiler, which was set onto a 145 ft double-



drop perimeter trailer. To add to this puzzle, the trailer (with boiler in place) squeezed through a narrow driveway to start the cross-country tour. A great job by all involved with coordinating this massive shipment.

The equipment is now on-site and installation activities have begun. Once all equipment is installed, Dean Boiler service technicians will perform start-up, and we will coordinate PEMS certification activities to complete the commissioning process. What a way to end the year!

100+ Number of boilers in our
rental fleet

30 Representatives across
the country

8 Storage and maintenance
facilities across the US

Wrapping Up the Year



As we wind down the year, I am happy to report we are going to have, for the second year in a row, a record year for sales and profits. This achievement is truly a team accomplishment and I am so proud of our employees.

Throughout the company we have continually made incremental improvements and key hires that keep raising the bar. We are also at a record number of employees (67) and still have more hiring planned for next year. As for our customers, the refining industry in particular has been very good for us this year with landmark jobs at ExxonMobil in Texas and Aramco in Jizan, Saudi Arabia.

Two years ago we came out with a new company mission statement: *Nationwide Boiler is committed to be the type of company you would want to work for, buy from, sell to, and refer others to. Looking back, I can now see this mission coming to fruition with our new employees, large repeat growing customer base, great long term vendor relationships, and overall good reputation within our industry and community. I feel very honored and proud to lead this company and carry on the values of our past president Jeff Shallcross and owner / founder Dick Bliss.*

May the blessing of joy abide within you. May the blessing of peace rest upon you. May the blessing of love flow through you. May all the blessings of the Lord be yours at Christmas and in the New Year.

Sam

Urea-Based SCR Rentals Performing at Their Finest

Nationwide Boiler has been utilizing urea as the reducing agent for our SCR systems for nearly a decade now. But just a few years ago, if one began searching for urea-based SCR systems for a rental application, they would have come up empty handed.

We are pleased to have had the opportunity to supply six 75,000 lb/hr superheated steam boilers each paired with a urea-based CataStak to a refinery in the Gulf Coast. The equipment has been operating for over 1-year now with optimum performance. On average, we are seeing an output of (5) ppm NOx and (5) ppm CO, with (7) ppm ammonia-slip. An impressive job overall!

In addition to this project, we've supplied urea-based SCR systems to multiple other customers throughout the year, each exceeding the initial NOx guarantee.

We have now built a fleet of urea-based SCR systems to add to our inventory, and are excited to continue to offer this as a solution for customers needing to meet stringent NOx & CO limits.



Riding Into Action Employee Recognition: Brett Barnes

Brett Barnes, one of our sales & project engineers, celebrated his 5 year anniversary at Nationwide this year. When he isn't hard at work selling our CataStak product, Brett enjoys a nice ride on his bicycle. However, the kind of rides he goes on aren't for the faint of heart.

His first major accomplishment for riding was back in 1990 when he participated in "The Death Ride", a stretch of 150 miles which took



approximately 12 hours to complete. Not an easy task even for seasoned riders. The length of the ride itself was a hardship, and the 15,000 ft of inclined elevation while riding didn't make it any easier.

In more recent adventures, he participated in a ride earlier this year located at Crater Lake, Oregon, which was inclusive of 100 miles as well as 7,000 ft of climbing. To make things more interesting, the ride started at 4,000 feet of elevation so everyone had to keep the altitude in the front of their minds. Of course since these rides are a little more intense than usual, training is essential and can take several months prior.

This dedication and endurance are not only great for cycling but are also great qualities we look for in our employees. Brett gives a hundred percent dedication to his job and we are happy to have him as part of the Nationwide Boiler team.



Superior Boilers Built to Outperform

Nationwide Boiler is the California representative north of Kern County for firetube boilers, auxiliaries and parts, while Pacific Combustion Engineering represents the entire Superior Boiler product line in the Pacific Northwest. Superior manufactures Scotch Marine firetube and high-efficiency condensing boilers, watertube boilers, deaerators, and associated boiler room equipment for process steam, hot water, and waste recovery.

In addition to offering new boilers and boiler room equipment built to your specific requirements, we also stock pre-built boilers that are available for immediate needs. We've researched the most common sizes and operating pressures for specific industries, and built a stock equipment program around our findings. The following sizes are typically in-stock, and we often don't mount the burner until a customer confirms their specific needs. This allows for flexibility on burner design, or the ability to provide a boiler-only package.

47.5hp - 119hp - 125hp
200hp - 350hp - 800hp



ABMA ANNUAL MEETING

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A place for boiler leaders to meet and gain insights on the latest trends in the industry, hear from thought provoking speakers, think and plan for change, and network with peers. The 2020 meeting is being held at the San Bernardo Inn in San Diego, CA.



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IDEA CAMPUS ENERGY

Being held at the Sheraton Denver Downtown, CampusEnergy2020 is a venue for IDEA members and professionals in district energy to come together to share experiences, explore solutions, and learn from each other. Visit NBI at table # 102 !



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CA FOOD PRODUCERS EXPO

The California Food Producers Expo will be at the Santa Clara convention center in 2020, a brand new venue for the event. Visit NBI at booth # 2128 to learn see the many boiler-related solutions we have been providing to Food Producers for over fifty years.



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NW FOOD & BEVERAGE WORLD

Located in Spokane, WA, the Northwest Food and Beverage World will have a new format in 2020, designed to facilitate information sharing and networking. Stop by booth # 1330 to meet with representatives from Pacific Combustion Engineering to see how we can support your next project.

Advantages Based On Economizer Design

Cylindrical Economizers

- relatively inexpensive initial cost
- easily fitted with round boiler stack
- typically no transition pieces req'd
- coil design requires fewer welds / less potential failure points

Rectangular Economizers

- better suited for larger boiler systems
- adapts for greater heat transfer demand
- easier to perform repairs if it becomes necessary

Benefits of an Economizer

In the boiler room, efficiency improvements can be found by many sources, however, a common option for energy savings includes the use of an economizer. Economizers are finned tube heat exchangers that are installed in the boiler flue exhaust stack. They come in multiple designs and configurations (most common being cylindrical and rectangular), and can be paired with boilers as small as 100 hp and up to 300,000 lb/hr or greater.

An economizer provides many benefits as outlined below, but ultimately, it will provide cost savings and a quick ROI.

- 01 Lower Stack Temperatures; Reduce Emissions
- 02 Preheat Boiler Feedwater; Reduce Fuel Consumption
- 03 Increase Boiler Efficiency; By at Least 3-5%
- 04 Decrease Operating Costs; Save You Money

Check out our latest edition of Boiler Basics 101 on the Nationwide Boiler Blog for more on economizers!



Cylindrical Economizer Installed with an 82,500 lb/hr Boiler

More than Control Panels Fuel Skids, Too!

We talk a lot about Pacific Combustion's expertise when it comes to PLC based burner management and combustion control panels, but that's not all we do. We also have the capability and experience to design and build custom fuel supply skids for a variety of process heating applications.

Our skilled engineers design fully packaged fuel supply skids to provide the intended equipment with liquid or gaseous fuel at the appropriate pressure and temperature. This can be for a boiler, fired heater, gas turbine, or other fired equipment applications. The NFPA rated fuel skid will typically include a main gas pressure regulator and control valve, safety shutoff valves, and a NEMA rated control panel that is mounted and wired to the fuel rack assembly.

As a UL-certified and recognized panel fabrication shop, all of our panels are c-UL-508 listed.



Our fully complaint fuel supply skids can be built for explosion-proof environments, and will meet ASME B31.1 / B31.3 and NFPA 85, 86, and 87. In addition, we meet many stringent regulations and safety standards, including CSD, FM, and SIL I, II, and III.

The photo above highlights a recent fuel gas skid assembly with burner and BMS panel for a fired heater project. It was designed for firing natural gas and included a pre-programmed PLC based BMS control system and panel mounted touch screen HMI. We completed a successful Factory Acceptance Test (FAT) at our Washougal facility prior to shipment.



Supporting Our Community

We just wrapped up our 2nd Annual Holiday Food Drive, this time supporting communities in both Fremont, CA and Washougal, WA. Our teams collected the most needed items requested by the Alameda County Food Bank and Inter-Faith Treasure House.



With our combined efforts, we collected over 10 bags in Washougal and filled four barrels in Fremont. This equates to roughly 500 lbs of food! The multiple bags and barrels we filled will fill the bellies of many in need.

Nationwide is always looking for opportunities to lend a helping hand and contribute to local non-profits. Each of these Food Banks distribute millions of healthy meals every year; we are proud to contribute to their efforts and encourage others to donate as well not only this holiday season but throughout the new year.



Food and Fun at Nationwide Boiler's Annual Christmas Party

Tis' the season, and Nationwide employees celebrated at our Annual Christmas Party this past weekend. With over 70 employees and families in attendance, we came together for cocktails, good food, good music, and photo booth fun.

This year we enjoyed the sounds of live holiday music performed by Harpist Adele Stinson. Along with the musical ambiance, we had a photo booth and props for everyone to snap a photo or two for fun. At the end of the night, Larry Day MC'd our annual white elephant gift exchange followed by a recap of the year where he presented different products manufactured by our customers.

As with tradition, Larry also announced our Length of Service Awards, which included six 5-year employees, one 10-year employee, and



two astounding 35-year employees (one of which was himself, presented by Sean McMenamin). And lastly, we have two special awards given out each year to employees that make a big impact. Our Jim Self Award was presented to Christo Ramos for his constant hard work, dedication, and drive to excel. Our Dick Bliss Award was presented to our lead painter, Hilario Melchor, who also celebrated 35 years at Nationwide this year. Larry recognized Hilario as the real 'American Dream', immigrating to the US years ago and succeeding in building a fruitful life for himself and his family.



Nationwide Boiler Annual Christmas Party



Power Equipment Company

Power Equipment Company specializes in energy systems and heat generating products, and has been a representative of Nationwide Boiler for nearly 40 years.

Being in business for over 85 years, Power Equipment prides themselves in setting high standards of innovation. The company's mission statement is, "To provide immediate solutions to our customers



Rep Spotlight

through innovative engineering, superior customer service and products of the highest value." Family owned and operated since 1927 they are known for their high morals and values within the business. They are the perfect example of a company Nationwide Boiler wants to work with.

In recent news, Nationwide Boiler teamed up with Power Equipment to sell a reconditioned 20,000 pph transportable steam plant to the their customer in Tennessee. This particular unit was originally built in the '90s by Nationwide Boiler for the Navy, and we bought it back with very few operating hours. It is now on it's way to Tennessee to provide reliable steam for years to come!

Inventory Spotlight



300 HP, 450 PSIG
Used Simoneau ULN
High-Temperature
Hot Water Boiler

475 HP, 250 PSIG
New Superior Pkg.
Firetube Boiler

800 HP, 450 PSIG
Used Simoneau ULN
High-Temperature
Hot Water Boilers

80,000 PPH, 250 PSIG
Used Nebraska Pkg.
Watertube Boiler

75,000 PPH
750 PSIG / 750 F
New Babcock & Wilcox
Pkg. Watertube Boiler

200,000 PPH
750 PSIG / 750 F
New Babcock & Wilcox
Pkg. Watertube Boiler

Contact Tim McBride for a quick quote today:
tmcbride@nationwideboiler.com