

August 2015



# The Nationwide Boiler STEAMLINES

# World's First 1,000 HP Mobile Boiler Room Coming Soon!

At Nationwide Boiler, we like to push the envelope. We strive to provide customers with new products and alternative solutions to better fit their needs and respond to their requests. With over

twenty innovations in our industry throughout our nearly fifty years of service, we continue to research what's missing and what can be improved upon in our industry, and bring new products to market to fill those holes.

Nationwide Boiler is proud to announce yet another innovation in our industry. We have designed and begun production of the largest mobile boiler room available to the rental market today! The

1,000 hp mobile boiler room is scheduled to be available for rent by the end of this year.

Manufactured by Superior Boiler Works in Hutchinson, KS, the custom firetube boiler has been designed with the customer in mind. With an ASME design

pressure of 290 psig, it offers a wider ing typical rental use. range of operating conditions (from 100 to 260 psig) than most other rental units. The boiler will be equipped with a Power Flame 30 ppm low NOx burner with

In addition to the boiler/burner package, the system will incorporate an ASME spray-type deaerator with two feedwater pumps, ASME blowdown separator,

chemical feed system, no. 2 oil pump and air compressor for oil firing. Nationwide Boiler's standard motor control center panel featuring the Honeywell RM7800 burner management system with annunciator and a Siemens 353 PID loop controller for parallel positioning combustion and feedwater control will also be included in the arrangement, along with a sample cooler station for water testing.

dual fuel capabilities of natural gas or #2 oil. In addition, since the high efficiency boiler is less than 40 million BTU input, it will provide a great permitting advantage to customers in some parts of the country. Specifically for users in Texas, no air permit will be required for operation dur-

All equipment will be fully piped and wired and mounted inside a 53 foot container with 3-axle chassis for quick and simple, worldwide delivery. Contact us today to speak to one of our knowledgeable sales representatives and receive a auick quote on this unique mobile boiler!



#### "Service at a Higher Level."

#### **Nationwide Travels: Tradeshows Recap**

Nationwide Boiler exhibits at a number of tradeshows each year to showcase our products and services to the many industries we serve. Tradeshows allow us to be proactive in learning what's happening in different industries, network with other industry professionals, and gain customer and vendor contacts for future opportunities. Representatives from Nationwide recently attended two significant tradeshows in the Midwest: the Council of Industrial Boiler Owners (CIBO) Industrial Emissions Conference, and the first annual Power-Gen Natural Gas show.

The well attended CIBO meeting focused mainly on the EPA's proposed ozone regulation being lowered to the bottom range of the band. Those presenting on the topic gave the impression that the rule will most likely finalize at the 65 ppb level. We learned that boiler owners are more receptive to SCR as the most effective NOx reduction solution, and end users understand the operational stability of an SCR vs. a large FGR system and ultra low NOx burner. A stricter ozone rule, along with the impact of the transport NOx, should drive market demand for NOx reducing equipment such as SCR's throughout the country.

The inaugural meeting of Power-Gen Natural Gas went well. The tradeshow was good for Nationwide in that we met with key contacts and put plans together for further collaboration in new markets and with new partners, however there could have been more end users present to discuss their needs. We learned that the lack of U.S. growth in the natural gas market is attributing to low demand of new projects. We will continue to assess the situation and plan on attending the show next year.





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#### **Tomato Season Calls** For Added Steam Capacity

increased tremendously since the 1900's. The state now accounts 30% of the global harvest. Most of the nearly 300,000 acres in California dedicated to tomato processing are located in the Central Valley.

During the height of the season, California tomato growers produce 2 million pounds of tomatoes per week. On average, 320 truckloads of tomatoes per day are loaded into trucks that can hold 50,000 lbs. or 300,000 tomatoes!

To produce such a large amount of make up tomato season, a long-time customer decided to utilize a rental from Nationwide Boiler to ensure that they had enough steam to fulfill their processing needs. In addition to meeting capacity demand, the boiler of sub 5 ppm NOx. Being in the Central Valley of California, they must until October.

Tomato processing in California has comply with one of the most stringent emission constraints in the country.

In the midst of a busy boiler season, for 95% of the total processing to- Nationwide was able to perform a matoes harvested in the U.S., and guick turnaround and send the boiler equipment to the customer just one week after it returned from a prior rental. The 70,000 lb/hr trailer mounted watertube boiler, designed at 400 psig, included a low NOx burner with the ability to burn natural gas or #2 oil. To meet the 5 ppm NOx requirement of the San Joaquin Valley Air Quality Management District, a Nationwide CataStak<sup>™</sup> SCR system was also supplied.

The equipment was installed by tomatoes in the 3 to 4 months that the customer and brought online at the end of June. The boiler and CataStak<sup>™</sup> passed the area source test easily, averaging 4.0 ppm NOx, ammonia slip below 2.0 ppm, and near zero CO emissions.

Tomato season for the company had to meet emissions requirements began just one day after the fourth of July holiday and is expected to last



#### Nationwide's Central Valley Office

Visalia, California is the fifth largest city in the San Joaquin Valley and is now the home to Nationwide Boiler's New Central Valley Sales and Service Office. The new office was opened to better serve customers located within the region, which contains 5 of the 6 largest

agricultural counties and the 2 largest oil producing counties in California.

The Visalia team is led by Nationwide's Western US Business Manager, Jim Lieskovan and is joined by Joe Skerl and Stacy Stemple, who contribute decades of boiler experience to the office.

meeting with and listening to new and existing customers to better understand plish it. This new office will allow us to extheir needs and to assist in the development of cost effective, well-engineered boiler plant solutions. Nationwide will also store a number of smaller, quick the Greater Central Valley," stated Jim. ship, ultra-low NOx boiler packages at our new Visalia office so that we can business and the Visalia Team has better respond to the planned and unplanned needs of our local clients. isting customers to spread the word.

In addition to the promotion of Nationwide Boiler's diverse product offerings, the Visalia office will provide "Service at a Higher Level" to those customers seeking consistent, personalized, expert boiler sales, rental and technical support. "Our new Central Valley office, which

is strategically and centrally located between the Counties of Fresno, Tulare, Kern, Merced and San Joaquin, provides Nationwide Boiler with timely access to the vast majority of our local clients. This is something we have been talking about do-

Our Visalia Team is actively engaged in ing for guite some time, and now we have the right people in place to accomtend the exceptional customer service. for which Nationwide Boiler is known, to our new and existing clients within

The new office is officially open for been busy meeting with new and ex-

### **Education Line: The Catalyst**

Selective Catalytic Reduction (SCR) Sys- structure and can be designed for horitems have proven to be the most efficient way of removing nitrogen oxides (NOx) from various off-gases. One of the larger compnents in any SCR system is the catalyst. In the catalytic process, ammonia (NH3) reacts with NOx to form harmless nitrogen and water. Removal rates of well over 90% are achievable in many applications. With that being said, let's discuss the typical characterstics of the catalyst.

All DENOX catalyst consists of several compounds in various forms and amounts. However, the two key ingredients are vanadium pentoxide impregnated on a titanium dioxide carrier. Manufacturer's each have their own unique recipe and configuration designed for the unique application. The catalyst can come in various forms, including corrugated, honeycomb, plate type, or pelletized. It is typically housed in a steel

zontal or vertical flow orientation. DENOX catalyst is also very temperature dependent. The sweet spot for removal activity is typically 550-650F, however the operating range can be designed for as low as 300F and as high as 1000F. Oxidation catalyst can also be incorporated into the SCR for reducing CO levels to single digits.

Nationwide's CataStak<sup>™</sup> SCR systems carefully select and specify the proper catalyst for the application and process conditions. We try to optimize for the following characteristics: high NOx removal activity, low pressure drop, resistance to poisons, low SO2 oxidation rate, light weight, minimal footprint, high thermal shock resistance, and high mechanical performance warranty for catalyst.

Teamwork was a hot topic of discussion at our off site sales meeting a few months back. I had recently come across a book written by retired General Stanley McChrystal, entitled "Team Of

Teams". In the book, McChrystal and his colleagues discuss the trials and tribulations they faced while commanding the Joint Special Operations Task Force in 2004 and how their findings can relate to many businesses and organizations.

**Creating a** "Team of Teams"

In summary, McChrystal didn't follow the traditional way of leading and remade his army into something new; "a network that combined extremely transparent communication with decentralized decision-making authority". In other words, he instilled teamwork, and worked as a democracy rather than a bureaucracy.

Once I finished the book, I derived upon the following main points: (1) we must make necessary changes to the way we are doing things to make a big difference, (2) people operating, and a company operating independently does not work, (3) teamwork is less about preparing people to follow precise orders than it is about developing trust and ability to adapt within a small group, (4) we need to collaborate and adapt to change, and (5) the stronger the ties between our teams, the more likely we are to achieve the level of cooperation we need for success. In addition, a rule of thumb emerged, "if something supports our effort, as long as it is not immoral or illegal, we can do it".

I felt that every member of our sales team would benefit from reading this book, so I gave them some "homework". At the meeting, I then presented a number of stories referenced in the book that embodied the immense amount of impact that teamwork can make, or could have made, in different situations.

In the next few editions of our Steamlines newsletter, I will share those stories with you as well.



in various demanding applications including firetube boilers, watertube boilers, HRSG's, stability. Manufacturers provide a 3 year refinery fired heaters, and gas turbines, Nationwide's CataStak™ has never failed to With well over 100 units in operation meet the performance guarantees required.



Lieskovan at the New Visalia Office

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# Nationwide Rep Spotlight - ADCO Companies Ltd.

outstanding partner and representative rates for customers. ADCO also profor Nationwide Boiler for nearly 30 years. vides us with knowledgable service In 1986, ADCO rented their first 52,000 technicians to help with start-up and

lb/hr trailer-mounted watertube boiler from Nationwide. That was just the beginning of a long, successful relationship. In the past five years, we have worked on iobs with ADCO an average of 14 times per year.

ADCO has an ideal location

and enough space to accommodate the storage of many of our large watertube boilers in the South. This is an advantage to Nationwide, being able to store equipment on the other side of

**Nationwide Boiler's New Central Valley** Sales Office is Open for **Business!** 

7211 W. Pershing Ct. Suite E **Visalia, CA 93291** 

559-623-9318 559-802-3929 (fax)



installation on jobs in the area, in addition to the quality refurbishing services they provide for some of our used boilers we offer for sale.

ADCO opened their doors in 1963 as a one-man service operation. With offices

now in Alabama and Louisiana, they have grown to become the largest boiler company in their area. They are a Cleaver-Brooks representative and sell new and remanufactured boilers.

#### Upcoming Events

CIBO 37th Annual Meeting, Ponte Vedra Beach, FL coming soon! October 21 - 23, 2015

2015 PFMA Conference, State College, PA October 27, 2015

API Refining Meeting, Long Beach, CA November 16 - 19, 2015

Power-Gen International, Las Vegas, NV December 8 - 10, 2015



ADCO Companies Ltd. has been an the country and offering lower freight in addition to operating a small rental fleet of their own. They offer many other services including boiler repair, burner service, installation, preventative maintenance, and emergency service.





1,000 HP, 290 psig Low NOx Mobile Boiler Room

**NEW ON THE MARKET:** 110,000 pph, 750 psig / 750°F Superheat Mobile Boiler

#### FOR SALE:

Reconditioned 350 HP. 150 psig Cleaver-Brooks Firetube Boiler, Mfg. 2006

New 180,000 pph, 400 psig Babcock & Wilcox Package Boiler (pictured above)

Reconditioned 200,000 pph, 1,000 psig (885 psi @ 750°F) Superheat Babcock & Wilcox Package Boiler, Mfg. 1996

New 200,000 pph, 750 psig / 750°F Superheat Babcock & Wilcox Package Boiler

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WWW.nationwideboiler.com / WWW.catastak.com

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