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LyondellBasell, Chevron, INEOS seek 'values,' practical skills for workforce

CPChem's \$8.5B project to inject more life into Gulf Coast region

HollyFrontier: Operational excellence key to maintenance and reliability programs

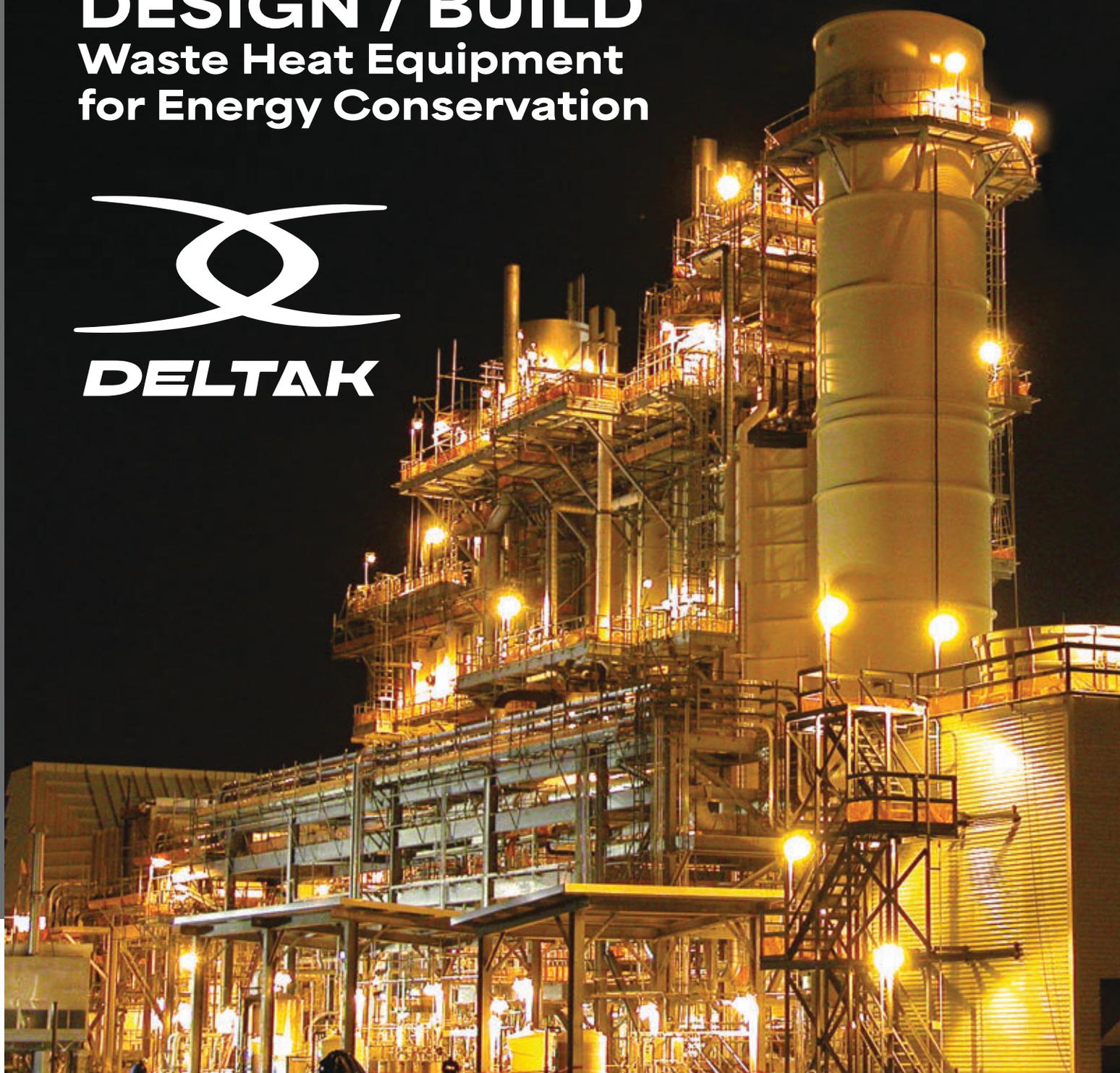
ExxonMobil, Katoen Natie: Supply chain issues not insurmountable

PLUS...



2023 Louisiana
Industrial Facilities Map

DESIGN / BUILD Waste Heat Equipment for Energy Conservation



SEE THE DELTAK ARTICLE BEGINNING ON PAGE 13



Bigger is better: Renter boiler edition

Nationwide Boiler

The very first trailer-mounted, package watertube boilers were introduced in 1967, and this concept signaled the start of the rental boiler industry as we know it today. With the uprising of purpose-built mobile boilers, facilities now had a reliable temporary option that eliminated the need for special cranes to load and off-load. It also cut response time from weeks to as little as 24-hours from dispatch to operation.

After the first trailer-mounted watertube boilers were built and in operation, the need for more saturated steam rental boilers became blatantly apparent. Starting at 20,000 lbs/hr, rental boiler steam capacities continued to increase throughout the years and eventually reached the current standard of 82,500 lbs/hr. Designed for use with an economizer and flue gas recirculation (FGR), the 82,500 lbs/hr rental boiler was able to meet an input of 99.9 MMBtu/hr and comply with more stringent air emissions limits. For temporary, superheated steam requirements, 75,000 lbs/hr trailer-mounted boilers came into play. Also featuring economizers and FGR, these boilers were



Two Nationwide Boiler 75,000 lbs/hr trailer-mounted, superheated steam rental boilers

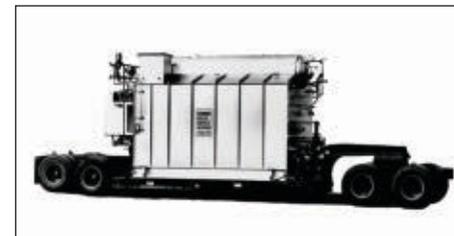
built with a design pressure of 750 psig to accommodate a wider range of operating pressures while producing 750°F superheated steam.

The 75,000 lbs/hr superheated steam and 82,500 lbs/hr saturated steam rental boilers are two of the most common sizes for large, mobile rental boilers on the rental market today. However, Nationwide Boiler maintains one of the world's largest mobile boilers: a 110,000 lbs/hr superheated steam, trailer-mounted rental boiler. This one-of-a-kind unit comes standard with a PLC-based control system, economizer and FGR, and a CataStak™ SCR system can also be pro-

vided for ultra-low NOx emissions compliance. These large, package watertube rental boilers are most utilized in refineries and petrochemical facilities.

Another trailer-mounted rental boiler solution that has changed over the years is the mobile boiler room. Built with a feedwater system, water softener, chemical feed system and blowdown separator, these units are available as complete steam plants requiring only consumables for sustained operation. In the early days of the mobile boiler room, available systems included firetube boilers ranging in size from about 20 HP to 350 HP. Today, many mobile boiler rooms feature firetube boilers with X-ID tubes, allowing for 85% higher capacity in the same footprint. Mobile boiler rooms are now available up to 1,000 HP in size.

As advancements in rental boiler sizes continue to progress, Nationwide Boiler is pushing the limit again with an even larger trailer-mounted boiler currently in production: 150,000 lbs/hr for saturated steam applications. This increase in capacity is achievable with Superior Boiler's



One of Nationwide Boiler's first 24,000 lbs/hr trailer-mounted package watertube rental boilers

new DFW-patented watertube boiler design, which offers a higher steam capacity in the same overall footprint.

Looking back at the innovations in the rental industry, there is one obvious commonality: bigger is better. From 20,000 to 150,000 lbs/hr, the steam capacity of a single, trailer-mounted boiler package has increased by a whopping 650% since the first unit ever built. Only time will tell what is in store next for the rental boiler industry, but if the trend continues, it's likely to include bigger boilers.

For more information, visit nationwideboiler.com.



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