



Burnham's time-saving panel bender takes flat sheet metal and bends it to exact specifications.

# SUSTAINABLE SUCCESS

## BURNHAM INVESTS IN CLEAN ENERGY TECHNOLOGIES, CONTRIBUTING TO A GREENER ENVIRONMENT

The push for cleaner energy solutions is now a top-of-mind concern for many people as they make decisions around replacing or upgrading their heating systems. Homeowners, building owners and installers all want to utilize appliances that support a healthier, more sustainable environment for future generations.

Since 2006, Burnham has taken a leadership role in developing products with higher efficiencies that reduce both CO<sub>2</sub> and NO<sub>x</sub> emissions. Our continued focus on combustion improvements led us to a class-leading, new product — the Alta condensing gas boiler and combi. Scheduled to initially launch in mid-2020, the Alta utilizes an advanced combustion system that constantly adjusts the fuel air mixture to achieve optimum clean combustion, regardless of atmospheric conditions or fuel composition. The Alta's control technology continuously monitors flame ionization via the flue gas stream and adjusts the combustion to ensure the boiler is always running at optimal levels.

This industry-leading technology not only maximizes energy efficiencies while significantly lowering emissions, but it also reduces installation time and service requirements since the control algorithm is consistently monitoring and adjusting the fuel-to-air ratio. At high elevations, the system will automatically adjust to varying oxygen levels in the air and maintain steady, clean combustion.



The new Alta line will begin production later this year with products available under the U.S. Boiler, Velocity and New Yorker Boiler labels.





**The new AMP Commercial Condensing Water Heater is a cost-effective solution for high-volume domestic water heating applications.**

## TECHNICAL INNOVATIONS IGNITE LOWER ENERGY CONSUMPTION

Burnham's sustainability efforts extend beyond the development of the Alta line to a broader commitment to clean-burning, high-efficiency products. The 2019 launch of the AMP Commercial Condensing Water Heater — an extension of the AMP/B-Fit product line — also served as a leader in the high-efficiency category.

2019 also saw the introduction of the Tru-O2 Commercial Combustion System, which provides constant oxygen levels during the combustion cycle's maximum and minimum firing levels, and higher efficiencies throughout the boiler's firing range. This new control technology results in CO<sub>2</sub> and NO<sub>x</sub> emissions well below most national, state and local regulations.

This proprietary system provides building owners with significant opportunities for additional cost savings due to reduced fuel consumption. It also assures the technology in Burnham heating appliances is at the forefront of what's available in the industry today.

Finally, Eco Propel Pumping Technology — available on select Thermal Solutions and Bryan Steam products — is yet another control innovation. The Eco Propel system adjusts the running speed of the boiler pumps, delivering 85% savings on electrical consumption and an additional 3% savings on fuel costs.





# FULL STEAM AHEAD

Well over 100 years after steam power helped drive the industrial revolution across the globe, steam boilers remain an integral component of major industries for any number of industrial processes and a cost-effective means of heating large residential and commercial buildings.

During 2019, Burnham commercial worked closely with its independent sales representative agency in New York City to design and trim out a number of 800-horsepower steam boilers for installations in 48-foot trailers that are used as

portable boiler rooms around the greater New York City metro area.

These trailers support a multitude of equipment upgrade projects throughout New York City as part of the city's boiler room efficiency and reliability improvement program. Steam remains the heat transfer of choice in larger buildings since it provides heat at a constant temperature that can move throughout the building without mechanical means, like energy-consuming pumps, compressors or fans.

It's clear that Burnham Commercial's modern steam boilers — when equipped with the latest combustion equipment and controls — are the perfect choice for a variety of applications requiring a significant amount of energy for process or heating.



In 2019, Burnham Commercial introduced specialized high-capacity steam boilers to be used in portable boiler rooms that supported a variety of energy upgrade projects throughout the New York City metro area.

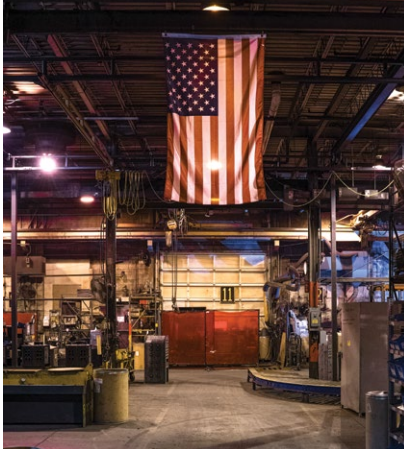
## HEATING THE COOLEST PLACES

Burnham Holdings' products can be found in some pretty cool places. Ultra Lo-NOx Thermal Solutions boilers were recently installed at Skywalker Ranch, George Lucas' production facility outside San Francisco, California. Thermal Solutions was specifically chosen for its ability to satisfy California's stringent NOx standards — the lowest in the country. Burnham Holdings' products are also heating up areas like Gorilla World at the Cincinnati Zoo, the Callaway Fitting Center, the World Equestrian Center in Florida, numerous Great Wolf Lodge's throughout the United States and multiple locations at Ohio State University.

**The Burnham Commercial Series scotch boiler offers a higher efficiency due to the larger furnace and higher heat transfer design.**







## COMMITMENT TO INDUSTRY. COMMITMENT TO BURNHAM.

2020 marks the end of two remarkable careers as we are pleased to honor the retirement of two individuals who have left a tremendous impact on both Burnham Holdings and the boiler industry — Ed Johann, director of engineering and quality at U.S. Boiler, and Elaine Phillips, president of New Yorker Boiler.

Ed joined U.S. Boiler just six years ago, but he has been a pioneer in the industry since he began his career in 1981. Since then, Ed has received multiple patents in combustion and heat exchanger design and has played a pivotal role in developing the first high-efficiency equipment for residential gas and oil platforms.

During his time with U.S. Boiler, Ed developed the state-of-the-art U.S. Boiler engineering lab while leading an engineering team that designed and released 39 new products. Although Ed is retiring, he will continue to serve as a senior engineering advisor.

Elaine began working for the boiler industry in 1976 as a receptionist. In 1986, New Yorker Boiler was acquired by Burnham. Since then, she began taking on leadership positions in a largely male-dominated industry.

After working as a customer service manager, and then a regional sales manager, Elaine was named president of New Yorker Boiler in 2001. The various roles she served during her career gave her a holistic perspective of the boiler industry, and a keen insight into what customers were looking for in heating products.

We are grateful to both Ed and Elaine for their service to their respective companies within the Burnham Holdings portfolio of businesses, and the lasting impact their legacies will leave on the boiler industry.

### Well Done and Thank You!

