



# Not All Boilers Are Created Equal

*"The bitterness of poor quality remains long after the sweetness of low price is forgotten." - Benjamin Franklin.*

Superior Boiler manufactures equipment that is built to last. Learn about the features and benefits that make our product the superior option for longevity, reliability, efficiency, and quality.

## BETTER INSULATION

Superior uses mineral wool instead of fiberglass insulation, which has a lower 'R' factor and density. Mineral wool is firmer and more dense, reducing heat loss while increasing overall boiler efficiency.

## THICKER TUBESHEETS

Superior's tube sheets are an average of 40% thicker, providing added strength and corrosion protection while reducing the likelihood of cracking and premature failure.

## THICKER SHELL

Superior's shell averages 8% thicker than the minimum ASME requirement used by other manufacturers, providing extended corrosion resistance and greater life expectancy.

## HEAVY GAUGE TUBES

The .105" thick, heavy wall tubes are almost 10% thicker than those used by other manufacturers. That's 10% more corrosion allowance and strength, which adds to the long-term durability of the pressure vessel.

## CLEANER TUBES

Superior removes the mill grease from the tubes prior to installation, which aids in fabrication by providing an improved tubesheet seal and fewer contaminants within the boiler upon delivery.

## IMPROVED STEAM RELEASE

Superior's shell is 12% larger in diameter for enhanced steam release performance and improved off-cycle steam storage volume.

## BOILER TYPES OFFERED

Built for water and steam in a variety of pressures and temperatures, boiler types offered include:

- Three or Four Pass Wetback
- Two or Three Pass Dryback
- Three Pass Firebox
- Waste Heat Gas Recovery

## BURNERS AND CONTROLS

To accommodate the unique requirements of each end-user, Superior offers a variety of industry leading burner and control packages from manufacturers that include Webster, Oilon, Powerflame, and Siemens. Custom, open architecture and non-proprietary control systems can also be supplied.

## LARGER FURNACE

The average size of Superior's furnace is 21% greater than other boilers. To protect the rear tubesheet against overheating, the flame must be fully contained within the furnace. The larger diameter and longer furnace is particularly beneficial for applications where low and ultra NOx emissions are mandated.

## OPTIMIZED HEAT RELEASE

Our published heat release data is for the furnace only. Other boiler manufacturers include the rear turnaround volume to reach numbers that are close to Superior. The lower BTU per square foot rating reduces thermal stress and minimizes scaling potential on the furnace, resulting in a longer life and better efficiency.



## ADDITIONAL HANDHOLES

No matter how well a boiler is built, at some point it may need to be serviced or repaired. To facilitate these tasks, Superior includes handholes in the front tubesheet. These strategically placed handholes provide a clear view of the vessel belly and allow accumulated scale to be removed more easily and more completely. In the event of a tube replacement, the additional handholes offer greater convenience in removal of the old tubes, saving both time and costly ASME alterations.

## PRE-SHIPMENT TESTING

While every boiler/burner package that leaves our facility undergoes a thorough electrical test, a complete factory fire test is also available and can significantly streamline the field installation and commissioning process. Customers have the choice to witness this testing virtually or in-person.

## NON-PROPRIETARY COMPONENTS

While some manufacturer's utilize proprietary components designed to lock customers into a single source for parts and service, Superior Boiler uses industry standard gaskets and components that can be sourced from and serviced by the vendor of your choosing.

