

Low NOx



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America's Boiler Company

Burnham Commercial has been designing and producing boilers for 140+ years, and we sell and service through the largest and most experienced network of sales representatives in the country. Our representatives are capable of providing technical assistance, competent pricing, start-up, and long term servicing. It's no wonder we are America's Boiler Company!

Low NOx Needs

Being America's Boiler Company, we know what burner vendors are looking for in boiler designs when it comes to reduced NOx combustion levels—**large furnaces, high heat transfer, and low draft losses:**

- Large furnaces mean low volumetric release rates.
- High heat transfer for the most efficient boiler for your application.
- Less burner motor horsepower so less energy is used to operate your boiler.



Combining these three features contribute to an ideal low NOx package application.

Our firebox design provides the largest

furnace possible in a firetube, and our scotch boilers have some of the largest furnaces available in our market—meaning we can meet all your Low NOx needs.

Important Design Considerations

Our proven designs use the very latest low NOx techniques and standards. Our furnace, the workhorse of the boiler, is designed for low volumetric heat release. The lower the release rates, the “easier” your boiler works. As your boiler works easier, less stress is put upon the steel, tube ends, refractory, etc., resulting in a longer lasting boiler. In addition to longevity, a larger boiler makes for ease in firing using any selected burner vendor.



Smaller furnaces are extremely susceptible to erratic flame

patterns. Deformed flame patterns cause uneven heat distribution, uneven absorption and localized hot spots, which can lead to overheating and over stressing. Our selections give the customer the choice of any of the major low NOx burner manufacturers. Because we have so many proven product design selections to choose from, we can custom fit any of our products to your boiler room. Burnham Commercial can offer you firebox, three-pass or four-pass wetback scotch. We are the only manufacturer who can offer their packages complete with flue gas recirculation piping, when necessary. That eliminates extra design responsibility and field installation costs.

Proven Product Applications

Unlike any other manufacturer, every Burnham Commercial Low NOx package is design application approved by our own Engineering Department and our burner vendors' Engineering and Applications Design Groups. Our 140+ years successful track record assures you that our products, and our vendor selection, are the best available.