

LOW NO_x - LOW CO HIGH EFFICIENCY STEAM GENERATORS AND FLUID HEATERS

Clayton
INDUSTRIES

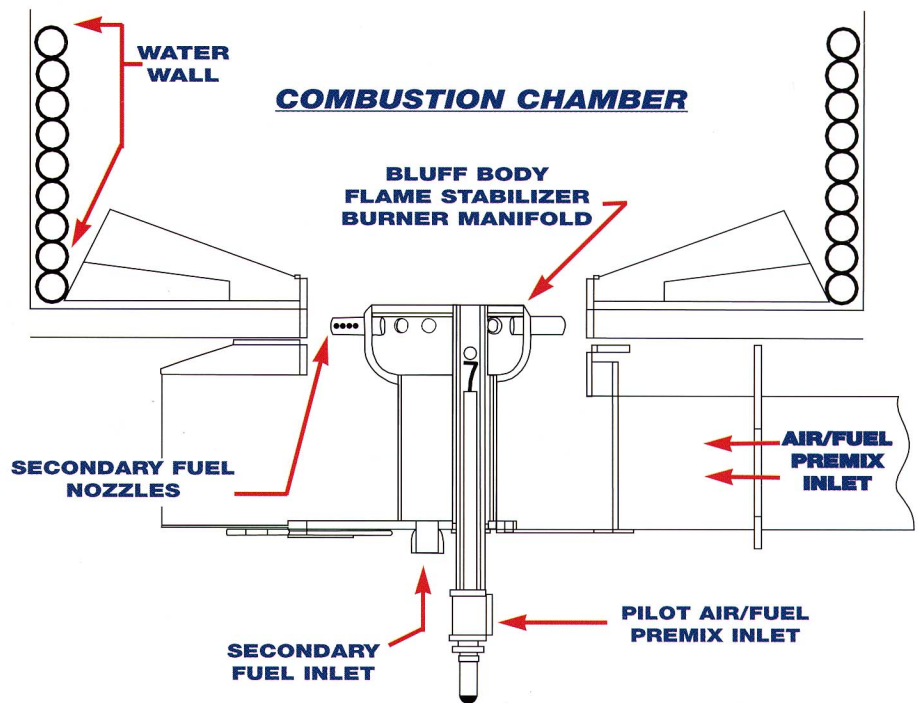


Not just a step ahead,

A STEP BEYOND™

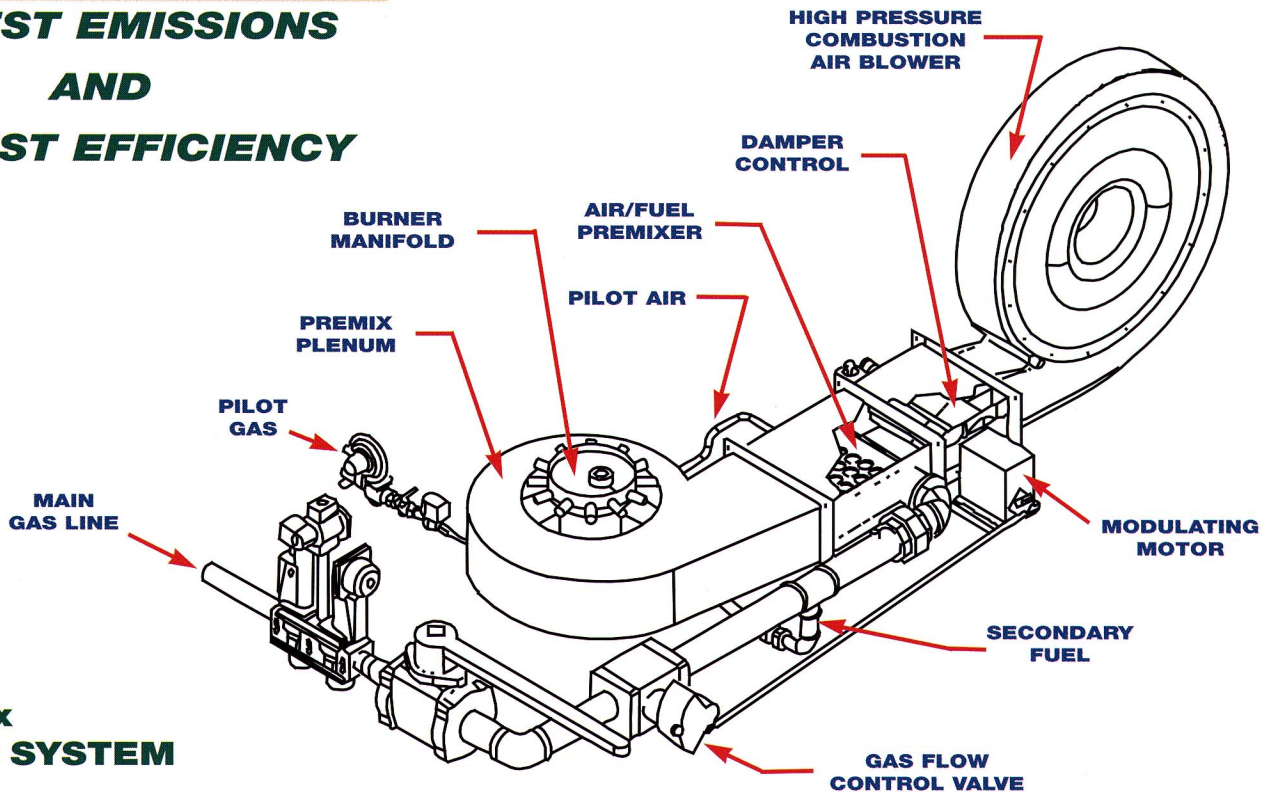
Low Emissions Burner

Clayton's Low NO_x - Low CO burner system achieves low emissions through a combination of technologies including improved fuel and air mixing, ultra lean flame design and a low flame residence time. The system consists of a main combustion air blower, modulating air damper, patented fuel/air premixing chamber, premix plenum, patented burner manifold and an advanced micro-ratio adjustable fuel flow control system. Air and gas fuel are thoroughly mixed in the premix chamber then introduced into the combustion chamber via the premix plenum and burner manifold. Secondary fuel nozzles are also used in the burner manifold to provide stable operation at low system loads. The system is automatically controlled and is capable of a nominal 4:1 turndown ratio.



**LOW NO_x BURNER
COMBUSTION CHAMBER**

INDUSTRY LEADING TECHNOLOGY LOWEST EMISSIONS AND HIGHEST EFFICIENCY



**LOW NO_x
BURNER SYSTEM**

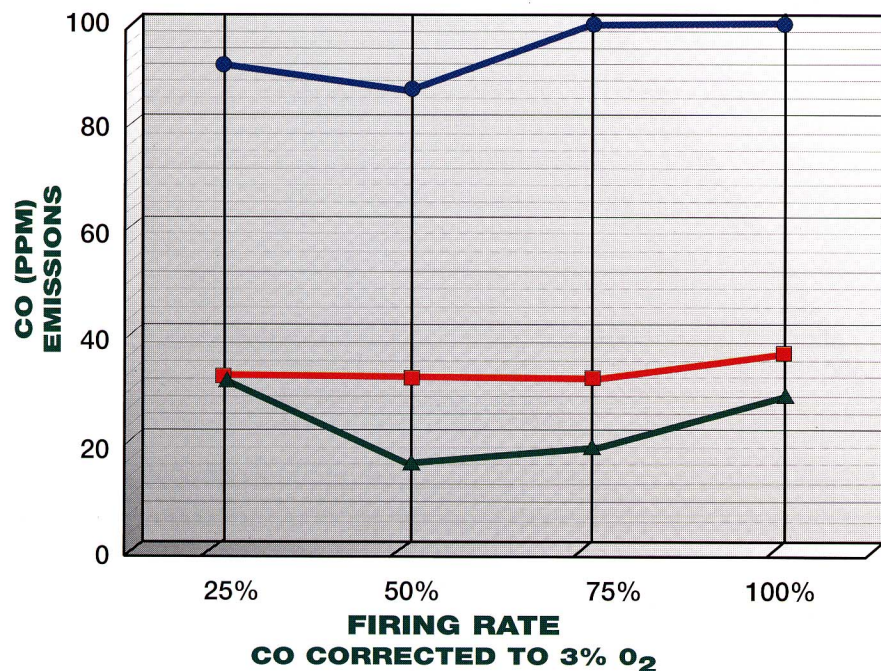
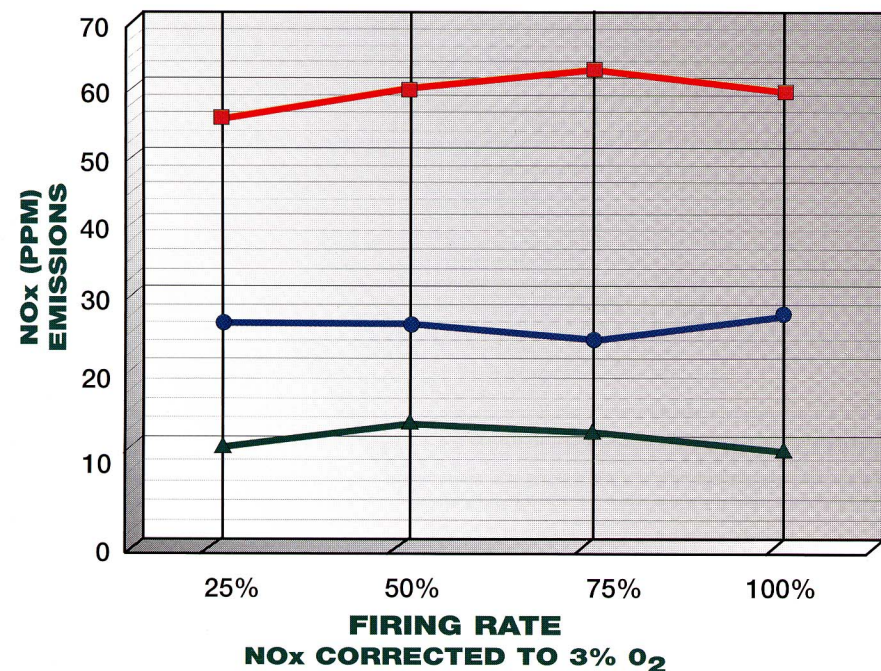
Clayton's Line of Low NO_x Low CO Burners (LNB):

Since its inception in 1930, Clayton Industries has been a leader in the development and manufacture of innovative, highly efficient Steam Generating and Fluid Heating equipment. Backed by a worldwide sales and service organization, our unique Steam Generators and Fluid Heaters have proven their superiority and ability to provide reliable, cost effective steam production around the world. Working from proven designs and philosophies, our commitment to continuing research and development has made Clayton Industries one of the most respected names in the boiler industry. In keeping with this strong background we are pleased to introduce our latest product line of very Low NO_x - Low CO Steam Generators and Fluid Heaters. This unique combustion system provides extremely low emissions without sacrificing efficiency and reliability. Clayton's clean emissions technology is "not just a step ahead, but **A STEP BEYOND.**"

Clayton Industries' Dedication to Cleaner Skies

Industry today is faced with tighter regulations with regards to emissions. The requirement to clean-up the environment has placed an ever increasing burden on all of us to look for better and cleaner ways to utilize our natural resources. In keeping with a long standing tradition of innovation and quality, Clayton Industries is pleased to introduce a new Low NO_x - Low CO burner design for our Steam Generators and Fluid Heaters to answer the challenge. Developed by Clayton Industries and the American Gas Association Research Laboratories, with support from Southern California Gas Company, the South Coast Air Quality Management District (SCAQMD) and Gas Research Institute (GRI), this exciting and advanced burner technology provides ultra-low emissions, combined with highest thermal efficiencies typically found in Clayton Steam Generators and Fluid Heaters.

ACTUAL BURNER PERFORMANCE



■
STANDARD

●
FGR

▲
LOW NO_x

8.4MM BTU BURNER

Low Emissions Unit

- > LOWEST NO_x AND CO EMISSIONS IN THE PACKAGE BOILER INDUSTRY
- > HIGHEST THERMAL EFFICIENCIES THROUGHOUT THE OPERATING RANGE
- > LOW MAINTENANCE AND OPERATION COST
- > AVAILABLE WITH FULL PLC AUTOMATION
- > NO_x EMISSION CREDITS
- > AVAILABLE FROM 100 TO 750 BHP
- > SIMPLE, RELIABLE, EASY TO MAINTAIN
- > NO AUXILIARY EQUIPMENT; ELIMINATES THE NEED FOR FGR

Features & Benefits:

- > RAPID RESPONSE TO LOAD CHANGES
- > COMPACT SIZE
- > RAPID START-UP
- > HIGHEST LEVEL OF SAFETY
- > HIGH QUALITY STEAM
- > LOW BLOWDOWN RATES
- > LOW MAINTENANCE
- > RELIABLE PERFORMANCE