



**NOXmatic®**

*Compliance out-of-the-box*

## Delivers Hassle-free Compliance ... Again

### Site Information

User: San Bernardino Community Hospital  
Location: San Bernardino, CA  
Boiler: Cleaver Brooks - firetube  
Contractor: Tri-Service Co. Inc., So. El Monte, CA  
Burner: NOXmatic™ A-Type  
Capacity: 125 HP  
Fuel: Natural Gas  
Emission Limit: 12 ppm NOx

### Situation

The San Bernardino Community Hospital needed a reliable low NOx burner to meet their operating permit requiring 12 ppm NOx. After traumatic experiences with low NOx burners from a competitor which took over a year to commission on two of their four boilers, the hospital needed a burner solution that would deliver hassle-free compliance. They selected an S.T. Johnson NOXmatic™ burner that requires no Flue Gas Recirculation to achieve ultra low NOx.

### Solution

S.T. Johnson Company delivered a NOXmatic™ Type-A burner system. The main benefit of the NOXmatic™ burner is that it does not require flue gas recirculation to achieve ultra low NOx emissions, thereby eliminating the added expense of installing, operating and maintaining an FGR system.

The NOXmatic™ Type-A burner incorporates S.T. Johnson's trademark axial-flow air blower arrangement with swing-open housing to provide easy access to all burner internals for the most ease of maintenance. This allows S.T. Johnson to provide a streamlined, compact package designed to minimize installation work, which was key in avoiding expensive modifications to replace the original burner on this Cleaver Brooks boiler.



The overall result was a very quick, cost-effective and clean installation.

The burner system included Fireye PPC-6000 parallel positioning linkage-less controls. System efficiency was further enhanced by the use of an AB PowerFlex variable frequency drive to modulate combustion air fan speed in accordance with burner load.

### Results

The S.T. Johnson NOXmatic™ burner installation and commissioning took a grand total of 3 days. Final settings were as follows.

NOx limit:	12 ppm @ ref. 3% O <sub>2</sub> , dry
NOx emission actual:	10 ppm @ ref. 3% O <sub>2</sub> , dry
CO emission actual:	9 ppm @ ref. 3% O <sub>2</sub> , dry

For more information, call your authorized S.T. Johnson distributor. Find a complete list of distributors at [www.johnsonburners.com](http://www.johnsonburners.com)

NMA Case 2 (3/9/09)

**S.T. Johnson Company**

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