

Guys' Hospital

London, England

Guy's Hospital in central London has reported excellent energy savings and carbon emissions reduction following the completion of a turnkey burner and controls retrofit for its heating boilers.

This project was awarded to Autoflame Service & Support following the outstanding success of similar retrofit project at St. Thomas' Hospital NHS Trust back in 2017.



THE PROBLEM

Inefficient Saacke rotary-cup burners at the end of their useful life were **unreliable** and **difficult to maintain** extremely **poor combustion**.



THE GOALS

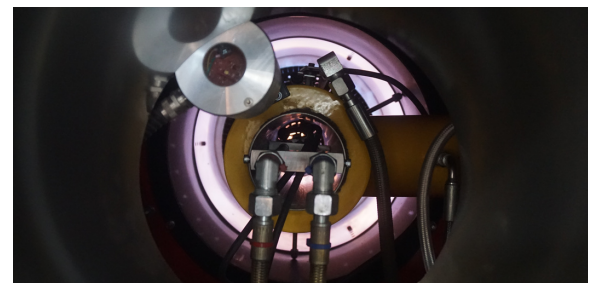
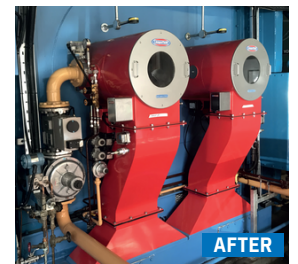
1. Increase the efficacy of their existing boilers
2. To lower and measure harmful emissions (CO₂, NO_x, SO₂)
3. To reduce unexpected downtime of the plant and its reliance on frequent maintenance and emergency call-out teams



THE STRATEGY

An in-depth survey of the 4 watertube boilers at Guy's Hospital and produced a bespoke energy efficiency report and a proposal highlighting the current used combustion technology and the projected savings and benefits that can result from upgrading the old burners and control technology.

Autoflame's team of highly experienced engineers developed a bespoke twin- burner design solution for each one of the 4 boilers at Guy's Hospital, the design was based on Limpsfield High Efficiency custom burner with Autoflame Mk8 Micro-Modulation controls to replace the existing rotary cup burners which were running inefficiently with poor reliability.



Autoflame Service & Support's engineering team worked around the needs of the hospital ensuring that 3 out of the 4 boilers were online throughout the implementation phase of the project to meet heating demand.



This project was awarded to Autoflame Service & Support following the outstanding success of similar retrofit project at St. Thomas' Hospital NHS Trust back in 2017. St. Thomas' Hospital experienced significant reduction in its gas consumption, a huge cut in its harmful carbon emissions as well as improved reliability of its steam boilers following a retrofit with Limpsfield High-Efficiency burners and Autoflame controls.

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THE RESULTS

The hospital monitored an impressive fuel saving and drastic reduction in carbon emissions as well as significant improvement in reliability following the completion of this retrofit project.

- Improved combustion
- Fuel usage reduction
- Lowered carbon emissions
- Reduced thermal stress on boilers
- Reduced labour and maintenance costs



THE EQUIPMENT

Pre-Existing

- 2 x Saccke Rotary Cup Burners
- 1 x Autoflame Mk6 EGA Evo
- 2 x Autoflame Servo Motors



Newly Installed

- 1 x Limsfield low NOx burner
- 1 x Autoflame Floor standing panel with 2 x Mk8 MM controllers
- 1 x Autoflame Mk8 EGA Evo Exhaust Gas Analyser

