

# City of London Academy

## London

City of London Academy, Southwark is a co-educational secondary school and sixth form located in the London Borough of Southwark, England. Autoflame Service & Support completed a vital boiler & controls upgrade project as a pivotal step toward achieving the school's net-zero targets and reducing operational energy costs.



CITY OF LONDON  
**ACADEMY**  
S O U T H W A R K



### THE PROBLEM

At over 20 years old the components used in the manufacture of the boiler plant were obsolete and spares were scarce. Two of the three boiler units had failed, leaving the Academy at increased risk of single point failure. Inefficient combustion controls meant fuel usage was high and outdated burner controllers prevented ease of use and data visibility.



### THE GOALS

- Modernise The Boiler Plant: Replace the ageing boilers, burners, and controls with the industry leading boiler/ burner package.
- Guaranteed Spares: Readily available critical spares to prevent further unplanned downtimes.
- Reduce Energy Costs & Carbon: Implement advanced turndown ratios and optimise combustion to lower gas consumption and school energy bills.



### THE RESULTS

Autoflame Service & Support took a consultative approach to identify site load requirements and redesign the boiler plant; replacing the three ageing boilers with two BKBD-3 boiler-burner packages.

Manufactured in the UK just 13 miles from central London, the BKBD boilers, Limpsfield burners, and Autoflame controls offer the school local access to critical spares preventing the risk of unplanned downtimes.





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## THE STRATEGY

- **High-Efficiency Boiler Replacement:** Two fully-condensing BKBD-3 boiler-burner packages were installed. Utilising Autoflame combustion management controls and boasting a unique Four-Pass design, the BKBD boilers offer optimum combustion performance for reduced fuel consumption and emissions. The fully modulating Limpsfield burners achieve a 4:1 turndown: allowing the BKBD output to accurately match the heating demand.
- **Modern Control System:** The user-friendly Mini Mk9 controllers allow full visibility of boiler and burner operations for ease of system management and data consolidation.
- **Centralised Data Integration:** An Autoflame Mk8 Data Transfer Interface (DTI) was installed, allowing full BMS integration with the Autoflame system including Intelligent Boiler Sequencing (IBS) and remote monitoring and control of the boiler plant; aiding facility management.

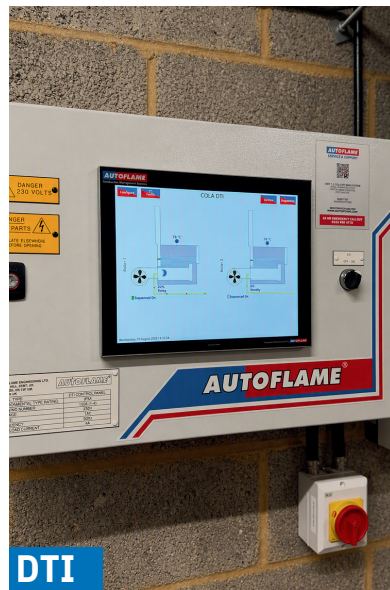
## THE EQUIPMENT

### Pre-Existing

- 3x Viessmann Vitocrossal 300 boilers
- 3x Weishaupt burners
- Outdated combustion management systems

### Newly Installed

- 2x BKBD-3 Boilers with a PHE
- 2x Limpsfield LP2/880 Burners
- 2x Autoflame Mini Mk9 Control Panels
- 1x Autoflame Data Transfer Interface (DTI)



DTI



Mini Mk9

