Five Schools Save Thousands With Boiler Upgrades

London Borough of Brent utilised Autoflame's Combustion Efficiency Report to ascertain the potential to save energy and cut carbon emissions for boiler houses for a number of their schools including Roe Green Junior School, Salusbury Primary School, Preston Manor School, Copland Community School and St Andrews and St Francis Primary School. Sampling flue gases from the boiler plant enabled Autoflame to make realistic energy savings projections specific to the schools equipment.

Common findings were boiler plant with high/low control where efficiency gains could be made through retrofit of Autoflame Micro Modulation controls. Alternatively, a more sustainable option was to retrofit a high performance modulating Limpsfield burner with integrated Autoflame controls. This would extend the life of the boiler plant and offer a quicker payback through delivering bigger energy savings.

The boiler plants in many of the schools visited were due for an upgrade, and Brent used this opportunity to install the most efficient equipment via Salix funding for five schools.

Limpsfield burners are manufactured locally in London and built bespoke for the existing boiler, enabling maximum heat output. Autoflame Micro Modulation controls provide optimal control, reducing fuel bills and cutting harmful emissions. The proposed solution was to replace the existing burners with a high efficiency Limpsfield burner equipped with Autoflame's Mini Mk 5 Evo burner controls. This sophisticated system accurately controls fuel and air delivered to the burner ensuring that combustion efficiency is always optimised – minimising fuel use. Installation was able to take place during term time and was very straightforward with a dedicated Project Manager overseeing the work and liaising with each school throughout.

Existing Equipment:

Dated boiler plants and burners due for an upgrade

Solution:

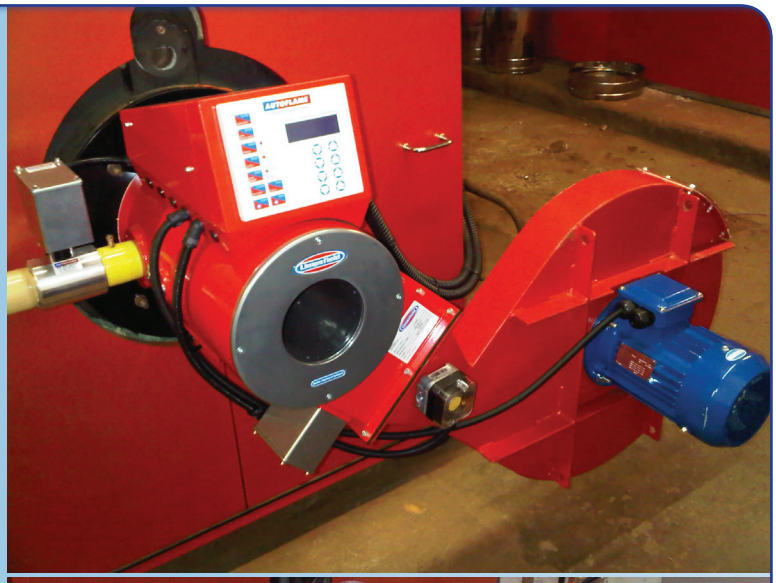
Limpsfield Burners with integrated Autoflame Mini Mk5 Controllers

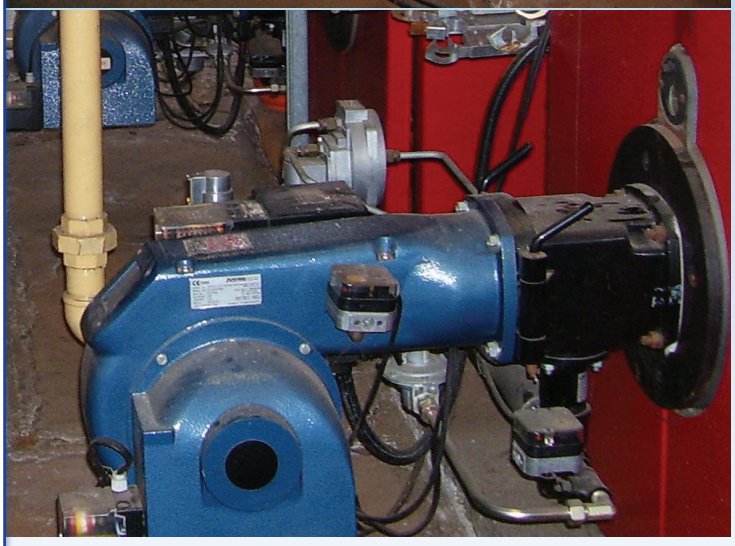
Benefits:

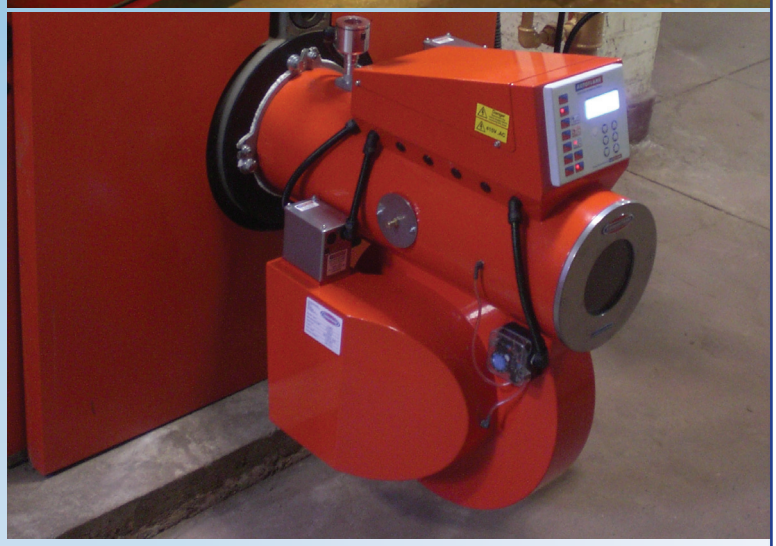
- High Efficiency
- 18.8% (average) CO_2 emission reduction
- Reduced labor and maintenance costs
- 4550 litres annual fuel usage reduction
- £1734 (average) annual fuel cost reduction
- Accurate fuel/air ratio control

CASE STUDY

AUTOFLAME®







Before:

- Mechanical linkage-based system
- Complex to maintain
- System is prone to degrading performance due to play in linkage over time (hysteresis)

After:

- Servomotor-based system
- Built-in controller simplifies installation/ maintenance and reduces labor
- System will operate to commissioned settings for years without adjustment

Autoflame operates worldwide with 60+ technology centres performing installation and support. Founded in 1972, Autoflame is a British manufacturer based near London. It ensures industry-leading quality control and innovation by performing in-house R&D, engineering, software development, manufacturing production, and technical support.

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Contact us to receive a complimentary fuel savings and emission reduction report.

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