

Customer: Coca Cola



Location:Buckinghamshire, UK

Boiler Type:Cochran Thermax

Burner Model: LCN36

Fuels: Natural Gas

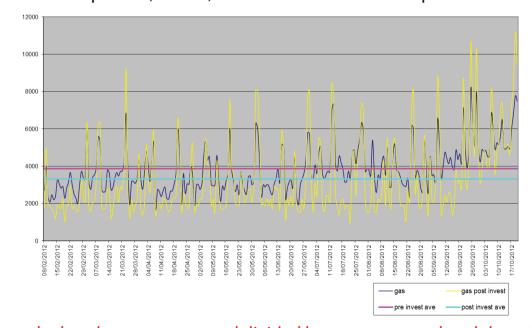
Fuel Savings: 13%

The scope of this was project was to completely upgrade the boiler house at a Coca Cola plant in Milton Keynes, UK by replacing the antiquated burners on three Cochran Thermax boilers. Although substantial fuel savings had already been achieved previously by retrofitting Autoflame controls onto the Cochran burners in order to ensure repeatability, they were still deemed inefficient following combustion and emissions testing, due to their low turndown ratios.

Limpsfield burners were recommended as the most ideal replacement due to their well-known reputation for high efficiency/turndowns and low emissions, hence the boiler house was upgraded with three Limpsfield LCN36 burners firing Natural Gas, which were specifically designed and sized to suit the corresponding boilers. These burners have a turndown ratio of 6:1 and came with a performance guarantee to operate at O2 levels of 3% whilst maintaining CO at below 10ppm.

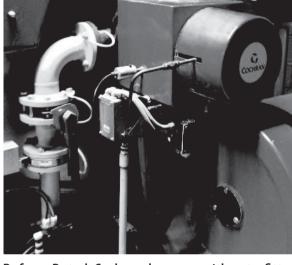
This would in turn provide the following benefits to the boiler house:

- Significant fuel savings due to improved combustion
- Reduction of harmful emission to the environment.
- Improved, stable, and consistent emission profiles.



"We have calculated steam generated divided by gas consumed and the ratio has moved from 4.49 to 5.818 average after the install date an improvement of 23%."

Paul Baden, Engineering Manager Coca Cola Enterprises, Milton Keynes



Before: Dated Cochran burners with retrofitted Autoflame controls



After: Limpsfield LCN36 burners using the existing Autoflame controls

Fuel savings were evident immediately as shown in the above graph which compares the combustion performance of the boiler house before and after the upgrade to Limpsfield burners. The annual savings achieved by the plant were calculated at 13% over the first year, meaning a fairly rapid payback period. Further benefits realised included a quieter boiler house and improved work environment. As a result of the success of this project, Coca Cola Enterprises (CCE) now recommend Limpsfield burners and Autoflame controls for all their sites.



