

CASE STUDY JOHN LEWIS KINGSTON



The 359,000 sq. ft. John Lewis store in Kingston upon Thames

John Lewis Kingston - New heating system drives up efficiency and lowers emissions

“With over 900 staff and hundreds of members of the public visiting the Kingston shop every day, a high-efficiency heating system is a key priority to maintain an excellent in-store environment.”

John Powell, Maintenance Manager responsible for the John Lewis Kingston department store

Situation

John Lewis in Kingston upon Thames, which recently celebrated its 25th anniversary, selected Remeha to provide an improved and more efficient heating solution for its department store which covers 359,000 square feet. EOGB were selected to supply the commercial burners for the new installation.

The store, which operates seven days a week, relies on its heating systems to maintain a pleasant environment for shoppers and over 900 members of staff.

Solution

The new heating solution involved the installation of two Remeha P520-24 sectional boilers, each powered by Baltur TBG 210MC fully modulating gas burners producing a total output capability of 3 MW.

John Lewis

<< Benefits

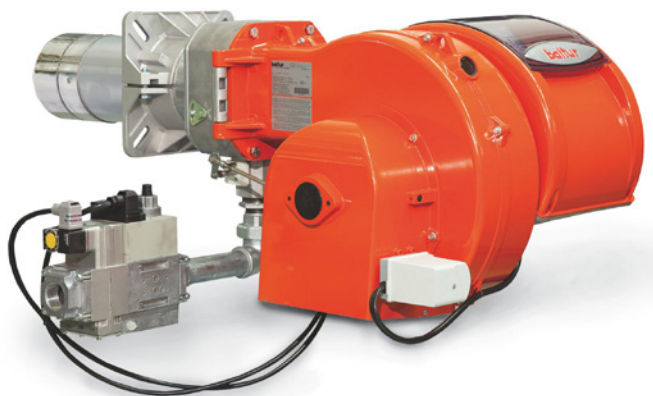
In keeping with its environmental commitments, by replacing the existing atmospheric boilers with boilers powered by fully-modulating EOGB/Baltur burners, the store now benefits from significant efficiency gains leading to energy savings and CO₂ and NO_x reductions. At the same time, the units have superior reliability and lower maintenance costs.

Martin Cooke, Technical Manager at EOGB, said:

"The match of pressurised hot water boilers and fully-modulating burners in this heating system is extremely energy efficient and enables the burners to operate at a 4:1 turndown ratio which significantly improves performance when compared to the previous installation.

"The Baltur TBG range of fully-modulating burners provides optimum combustion and performance which means that heating can be controlled in a more efficient manner, resulting in reduced fuel bills."

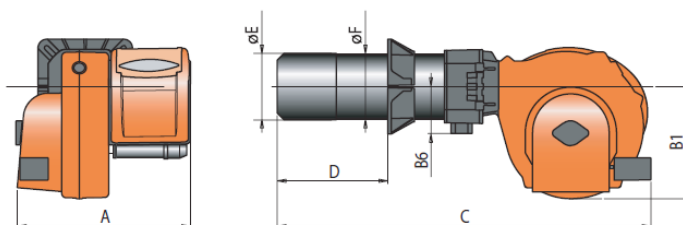
John Powell, responsible for the maintenance of the department store, added: **"As well as improving performance, the new installation will also be beneficial in lowering our heating costs and carbon footprint."**



Baltur TBG 210MC burner used in the new heating system for the John Lewis Kingston store

Technical

The EOGB/Baltur fully modulating gas burner range is available with outputs from 50kW to 45MW. The burners have low CO and NO_x emissions and are easy to install which enables a trouble-free commissioning which is fully supported by EOGB engineers.



Baltur TBG 210MC fully modulating gas burner

The Baltur TBG 210MC burner is a low NO_x and CO emissions gas burner compliant with European standard EN676 'Classe III'. Features include:

- Gas-fired burner CE certified according to standard EN676
- Two-stage progressive/modulating operation
- Multiblock Dungs gas valve with integral regulator and adjustable throughput
- Partial combustion gas recirculation blast pipe with low NO_x emissions (class II)
- High ventilation efficiency, low electrical input, low noise
- Hinge opening on both sides for easy access to the combustion head when burner is installed
- Air capacity adjustment with linear opening controlled by electric servo motor
- Air damper closing when burner does not work
- Electrical panel that connects by 4 and 7 pole plugs/sockets (standard accessories)
- Electrical panel with protection rating of IP 55
- Sliding boiler coupling flange to adapt to head protrus