EOGB
Reliable energy. Flexible approach.

CASE STUDY CITY OF BRISTOL COLLEGE

The College Green Centre at the City of Bristol College which caters for over 1,500 students

Top marks for new heating system at City of Bristol College

"The new heating system will be extremely beneficial for the college in both lowering our heating costs and our carbon footprint."

Ean Robertson, Building Services Engineer at the City of Bristol College

CITY of BRISTOL COLLEGE

Situation

City of Bristol College is one of the UK's largest further and higher education colleges, offering over 1,000 courses to more than 30,000 learners. The college relies heavily on the heating systems across its campus in order to maintain a comfortable learning environment for its students.

The college asked Remeha to provide an improved and more efficient heating solution for its College Green Centre, which covers approximately 150,000 square feet and caters for more than 1,500 students. EOGB were selected to supply the burners for the new installation.

Solution

The new heating solution involved the installation of four Remeha P420 12 Section boilers located in the east and west plant rooms on the roof of the building, each powered by EOGB/Baltur TBG 85pn fully modulating gas burners producing a total output capability of 2900kW. >>

<< Benefits

By replacing the old two-stage burners with fully-modulating EOGB/Baltur burners, the college has benefitted from efficiency gains of more than 30%, leading to significant energy savings and CO2 and NOx reductions. At the same time, the units have superior reliability and lower maintenance costs.

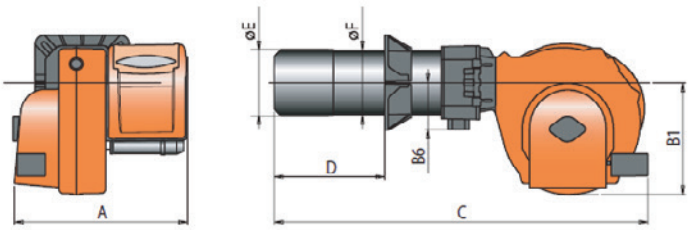
Martin Cooke, Technical Manager at EOGB, said:
"The burner-boiler match in this heating system is very effective and enables the burners to operate at a 4:1 turndown ratio which significantly improves efficiency when compared to the old installation. The Baltur PN range of air to gas ratio burners are well established and provide optimum combustion and performance which will heat the City of Bristol College in a more efficient manner for many years to come."

Ean Robertson, Building Services Engineer at the college, added:
"With 30,000 students across the campus, reducing our impact on the environment is a key priority and this high-efficiency heating system is a further step in improving our sustainability."

The improved heating installation at the City of Bristol College is highly-efficient and makes use of the latest technology

Technical

The EOGB/Baltur fully modulating gas burner range is available with outputs from 50kW to 10,850kW. The burners have low CO and NOx emissions and are easy to install which enables a trouble-free commissioning which is fully supported by EOGB engineers.



The Baltur TBG 85pn burner is a low NOx and CO emissions gas burner compliant with European standard EN676 `Classe III'. Features include:

- **Two-stage progressive/modulating operation**
- **Ability to operate with output modulation by means of automatic LC3 regulator mounted on the control panel (to be ordered separately with the modulation kit)**
- **Modulation ratio 1:4**
- **High ventilation efficiency, low electrical input and low noise**
- **Exhaust gas recycling combustion head able to achieve very low pollutant emissions, particularly with regard to nitrous oxides (NOx)**
- **Maintenance facilitated by the fact that the mixing unit can be removed without having to remove the burner from the boiler**
- **Regulation of air flow rate for first and second stage with damper closure on standby to prevent in-flue heat dispersion**
- **Gas regulation by means of a proportional working valve that is pneumatically driven**
- **Possibility to choose gas train with valve tightness control**
- **Equipped with one 4 and 7-pole connector, variable depth sliding flange**

For more information about EOGB and how we can improve the efficiency of your heating system, email **sales@eogb.co.uk** or call **01480 477066**

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