



COLUMBAN MISSIONARIES AT DALGAN PARK UPGRADES TO HIGH-EFFICIENCY & CONDENSING PLANTROOM

WE ARE THE EXPERTS...

During March 2015, the mechanical renovation of the Irish Missionaries Union Institute in Dagan Park, Navan was completed, commissioned and handed over to the client the Columban Missionaries.

The project required the replacement of the complete Mechanical Installation and a full boiler house refurbishment. A new packaged plantroom concept was deemed to be the most cost effective solution. The central plant replacement was 1.4mW of boiler power plus all associated circuit distribution, pressurization units and expansion equipment.

In a bid to ensure the replacement plant was matched correctly to the actual demand a data logger was installed to record the building actual load for an 18 month period prior to the new installation. This profiling enabled the mechanical contractor to produce a detailed report stating their projected performance of the entire building.

The mechanical contractor was also able to demonstrate to their client,

the actual savings on the running costs and the clearly improved comfort levels achieved throughout the building since installing the new high efficient plantroom.

The installed replacement plant was selected from the De Dietrich commercial range, utilizing 6 no. C230 ECO 217kW floor standing, condensing boilers c/w the Jeremias Flue System and circulators, pressurization units and boosters selected from the Wilo range. Plant selection was driven by the clients demand to ensure modern, efficient and condensing equipment was utilized but also the site requirement to temporarily use LPG prior to the availability of natural gas as the main fuel source. This allowed temporary operation on LPG while awaiting a permanent natural gas supply on site. HEVAC Ltd.'s range of ECO C230 gas condensing boilers can provide a large range of outputs varying between 18kW – 217kW with an annual operating efficiency up to 109%, this is achieved through the use of pre-mix gas modulating burners that are incorporated in the boiler unit.

PROJECT : DALGAN PARK



Plantroom detailing the De Dietrich ECO C230 Boilers in Cascade c/w Jeremias Flues and Wilo Circulators.



Plantroom Installation

Boilers are Triple-E registered with the SEAL and have an annual operating efficiency of 109%. Low pollutant emissions.



*Primary Reverse Return Header System
Incorporating Wilo Circulators.*



Dune Cast Iron sectional Radiators were built to size and supplied pressure tested and fully assembled by HEVAC from their Santry warehouse.



The plantroom image to the left, details the layout with the DeDietrich ECO C230 range with a back to back configuration in this 6 No. boiler cascade. Boilers are configured in Master and Slave control with the duty-rotation and full weather compensation controlled by the De Dietrich Diematic Master controller. The installation also incorporates Jeremias twin wall stainless steel DW ECO 316 Flue supplied by Hevac and suitable for all condensing boiler applications. All Wilo circulators, pressurisation units and boosters supplied by Hevac Limited.



Boilerhouse was temporarily supplied with LPG while the contractor (Kingmek Limited) organised to have natural gas on site. This demonstrates the capability & diversity of the De Dietrich boilers with an adjustment of the gas valve allowing the boilers to be fired on LPG and then converted to natural gas once supply was available.



DeDietrich Diematic M3 master panel supplied with the ECO 230 Master boiler allowing control of all 6 boilers on site through one panel. The De Dietrich Eco boilers are supplied with all water and gas connections made from the boiler top, allowing for boiler back to back positioning. The Dietrich panel is interchangeable i.e. side or front facing

Client

Columban Missionaries

Dalgan Park, Navan Co. Meath

Dalgan Park is located beside the Hill of Tara, the prehistoric religious and political centre of Ireland. Nearby are the ancient religious monuments of Bru na Boinne and the remains of the ancient monasteries of Monasterboice, Mellifont and Bective. Within the grounds are the ruins of a twelfth century Cistercian Church.

Set in 500 acres of parkland and woods, which is also a sanctuary for wildlife. Dalgan Park offers an ideal setting for rest and relaxation and an opportunity to get in touch with the basic natural rhythms of life, which may have been lost in the pressures, and demands of much of modern living.

Mechanical Contractor



Kingmek Limited are a medium sized engineering contractor and having set up in

2003 have established an expertise in Design & Build contracting.

Kingmek's approach to contracting is to work in partnership with their clients and they are fully committed to developing an open and honest, professional & personal relationship.

Kingmek's ethos along with their 'Hands-On' approach has successfully led to their high levels of repeat business and client satisfaction.



Supplier



Hevac Limited is one of Ireland's leading domestic, commercial & industrial plumbing & heating specialists. Hevac operates in two Dublin locations and also in Cork comprising over 10,000 square meters of warehouse space.

The focus of Hevac is to provide quality solutions that lower energy costs, whilst offering maximum efficiency and comfort to our clients.

Hevac supply every plumbing & heating component imaginable to the residential, commercial and industrial sectors and can offer in house specialists including design engineers, CAD technicians and system specialists. Hevac, through our vast product range and in conjunction with our group companies offer unrivaled design and supply capability on projects from residential schemes through to large industrial steam systems to district heating and other renewable energy projects.

Should you require further details or additional technical information or support, Hevac would be delighted to assist you with your design enquiry.

Please do not hesitate to contact Hevac support at Tel: +3531 4191919, email: info@hevac.ie or submit your details on our web site www.hevac.ie

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