

The University of Warwick, Tennis Centre

Products

- Purewell VariHeat boilers
- Dorchester DR-FC water heater

Sector

- Leisure
- Sports & education

Building

- Tennis centre
- New build

Application

- Space heating 140kW
- Modular boilers
- Hot water 936 litres/hour



The University of Warwick's sports centre



The tennis centre at Warwick University

The Tennis Centre at the University of Warwick is part of the university's development plan to provide first class sports facilities for students. Containing a modern plant room housing Purewell VariHeat condensing boilers and a Dorchester condensing direct fired water heater, the centre is part of an ongoing programme aimed at providing educational excellence whilst creating minimal environmental impact.

Our Solution

The mechanical design was done in-house by Gerard Hunter, Warwick's mechanical engineer, who specified the boilers and water heater, and the building has been awarded a BREEAM Excellent rating from the Building Research Establishment (BRE) for the building.

"Hamworthy Heating has been a supplier of boilers to the University for many years. They have been chosen for this application because of energy efficiency, reliability, performance and the excellent levels of service provided by Hamworthy," he commented.

Says Hunter, "The building has been designed to be 10% more efficient than the minimum requirements in the latest Building Regulations; further reducing CO² emissions, which will save an additional 17 tonnes of CO² per annum over and above the requirements of Part L."

The Dorchester DR-FC direct-fired condensing water heater meets the centre's requirements for all domestic hot water, with a continuous output of 936 litres per hour based on a 44°C temperature rise, and with a storage capacity of 386 litres.

The centre's heating system is designed with a constant temperature circuit supplying air handling units in the changing rooms, main halls and ancillary areas of the building, whilst a variable temperature circuit via radiators maximises the condensing performance of the system. These loads are satisfied by two Hamworthy Purewell VariHeat 70c condensing boilers, delivering a maximum output of 140kW at 50/30°C.

The Purewell VariHeat's robust cast iron heat exchanger is complemented by an integral secondary condensing heat exchanger to provide exceptional seasonal efficiencies up to 108% nett. This made it an obvious choice at Warwick University where output modulates to match heat demand for maximum or part load conditions, maintaining high efficiency performance, and always providing the benefits of lower emissions.



Purewell VariHeat boilers and a DR-FC water heater at work