

The Hive, Manchester

Products

- Wessex ModuMax boilers

Sector

- Sustainable construction

Building

- New build
- Office space

Application

- Space heating 750kW
- Modular boilers



The Hive sustainable workspace setting a new standard in construction



'Green' approach to city construction

A Wessex ModuMax 250/750 condensing boiler from Hamworthy Heating was selected for the Hive, in the heart of Manchester's Northern Quarter, and is making a valuable contribution to this landmark building's excellent environmental credentials.

Erected by Bardsley Construction for its owners, Argent Estates, the Hive is a hub for creative businesses with around 80,000 sq ft of cutting edge office space and workspace. As part of the ongoing regeneration of the Northern Quarter it is intended to tap into the inspirational spirit of the area and set a new standard for future developments.

Our Solution

Its environmental achievements, to which the Wessex ModuMax boiler has contributed, include a BREEAM 'Excellent' rating and a grade 'B' energy performance rating. The former is recognition of top level sustainable design as confirmed through independent assessment and certification. "The 'B' energy performance rating is as good as it gets for a naturally ventilated building," says Dave Grzelka from the building's mechanical and electrical services designers, NPS North West.

The ModuMax configuration in the Hive uses three 250kW modules. The choice of this Hamworthy condensing boiler was steered by both commercial and environmental considerations and takes full advantage of the advances in multiple boiler design and use of full modulating capability.

From the strictly commercial angle, a small footprint boiler was essential. The building was designed to have the smallest possible plant room in order to provide

the maximum area of lettable space. Fortunately, large boiler outputs are easily achievable within a minimal environment with Wessex ModuMax. The range packs nearly 1MW into one square metre of floor space, with condensing performance that maximises efficiency, although in this instance just 750kW was sufficient.

The BREEAM 'Excellent' rating requires both low NOx and low carbon emissions. Wessex ModuMax boilers come into their own on the former, with the top rating for low NOx emissions, European Class 5 performance. Further factors include the Wessex ModuMax's fully modulating pre-mix burner, which can accurately match the building load requirements using the optimum number of modules.

The modulating burner operates to 20 per cent of full output per module for very close load matching on demand. The boiler casing is air cooled and requires no fibrous insulation material, increasing the environmentally friendly attributes of the product and lowering its carbon footprint. Standing losses are extremely low at less than one per cent.

Fifteen condensing models are available with outputs from 100kW – 750kW and nine high efficiency models offer outputs from 110kW – 660kW. Completing the Wessex ModuMax package is a range of optional manifold kits that simplify design and are factory tested and assembled for ease of installation.

The controls package for Wessex ModuMax boilers is extremely versatile and is tailored to meet the exact needs of the heating system, integrating the boiler and the other system components, for a cohesive solution.



Wessex ModuMax boilers