Case study 301 Energy Centre Testing

A well-established company specialising in providing short break holidays in the UK are building a new holiday village set in ancient woodland in Bedfordshire. This holiday park was designed with the aim of being the most energy efficient site within the group, and is intended to add significant biodiversity to the whole area.

With this in mind, the centre wanted to create a sustainable heating system for the entire park. A district heating system and energy centre was planned; for which Andrews Sykes was contacted by the specialist design consultant to supply and install a 2megawatt temporary heat dissipation system. This would test the system and allow for the commissioning of the boiler system. Due to a strict building schedule, the company were in desperate need of advice and guidance on how to commission the boilers.

By creating a district heating system, heating could be supplied to all areas of the holiday village, including the accommodation. This meant that eight boilers could supply heat to the entire site instead of each lodge having an individual boiler. To provide heating to two hundred and fifty holiday lodges, a two megawatt boiler supplied a ring main system where branches off the system supplied the heat to individual lodges. An eight megawatt plate heat exchanger was supplied alongside eight 300kW air handling units.

When the equipment worked together, it simulated the load that the boiler would be put under when the site was fully operational. The boiler system worked perfectly when tested and this meant the building program was kept on schedule as the system could be tested without the holiday homes having to be completed. The holiday company were thrilled that the building works went according to plan and that people would be able to move into their holiday lodges on time.







Power supply 415 V 3 ph 50 Hz N+E Run 30 A/hr Noise level (max) 81 dBA @ 5 meters Weight 2,150kg Dimension 3,780 x 2,340 x 2,590 Plug type BS4343 5 Pin 32 A Duct length (max) 50 metres Duct size 4 x 600 mm Nominal cooling capacity 300 kW 1, 023, 600 btu Nominal heating capacity 600 kW 2,047,200 btu Integral thermostat No Integral condensate pump Yes Fan speed controller No





