

CASE STUDY 37

Client: Specialist On-Site Services

End User: 2 Sisters Food Group

Project: DHW Upgrade

Products: HevaCal CSS Semi-Storage Calorifiers & HevaPak DHW Pump Station

Date: February 2017

Project Description

Arbe won an order for the design and supply of 3 off HevaCal CSS semi-storage calorifiers. The units were sized to suit the existing DHW system which currently had issues with lack of hot water and pressure. The units each had a capacity of 2000 litres with a heat input of 614 kW

The controls for the package were designed using PID controllers for controls of pumps and valves. The pumps used on the packages are high efficiency with single phase motors and integral protection. The control valves installed as part of our standard HevaCal CSS calorifiers have integral overheat protection and, as such, comply with all G3 Building Regulations so there is no need for additional high limit valves supplied by the contractor.

The system provides hot water at 60 DegC with a return temperature of 55 DegC with a peak output flowrate of 18 litres/second for 10 minutes. This equates to an instantaneous heat load of 3,770 kW across the 3 packages.

Arbe also supplied as part of the contract, a secondary pumping package to circulate hot water throughout the factory. This also had to be sized and designed by Arbe engineers and the unit was supplied c/w inverters to ensure an accurate flowrate was provided around the factory, to meet all required building and hot water regulations

