

CASE STUDY 24

Client: Green Cooling
End User: KPMG Canary Wharf - Project Nexus
Project: Chiller Heat Recovery Package
Products: Thermal Stores, Plate Heat Exchanger, Pumps & Controls
Date: May 2015

Project Description

Arbe were tasked with designing a system to recover heat from the newly installed Co2 chillers which would normally be dumped to atmosphere. The chillers had a CHW output of 20 kW and we had the possibility to recover 25 kW per chiller. We designed a package to take the heat and store it in 3 thermal stores arranged in series, providing 4500 litres of process water, with temperatures up to 70 DegC. The heated water was then pumped through a heat exchanger in which the building cold feed was fed through so it was preheated prior to entering the gas fired water heaters. The package was factory built, delivered to site in sections and reassembled with all final pipework and terminations carried out on site

After commissioning, the preheated water was entering the water heaters at up to 50 DegC with an minimum of 25 DegC, making significant savings on gas consumption

