

BP M&S
Bush Centre (Shepherds Bush, London)



Refrigeration Refresh Project

Carter Synergy were approached by one of our leading clients (BP) to install the Integrated CO₂ Heat Recovery System into one of their existing stores. The plan was to remove all of the existing Refrigeration & AC equipment and install a 40Kw Green & Cool Dual Temperature Pack whilst keeping the store and forecourt trading throughout the duration of the project.

This was a Carter Synergy led project, and all aspects of Electrical, Build, Shop-Fitting works were to be managed by us. The M&S style Brooklands Chillers would be New, supplied & installed by Carter Retail Equipment.

Overview

The store, which is located on a very busy High Street in West London, has had historical issues with a congested plant area with hot and cold air blowing into various components, integral shopfloor Chillers not ventilated, blowing warm air towards the display Chillers and an ageing store in need of a Refresh.

The CO₂ plant will not only remove these legacy issues but:

Reduce energy use for heating/refrigeration by around 50% as seen in various sites throughout the UK installed by Carter Synergy.

Give a fully natural refrigerant based system meaning completely F-Gas legislation proof.



MORE INFORMATION

visit: www.cartersynergy.com
email: sales@cartersynergy.com

Installation & Design

The installation of the refrigeration services is in K65 copper to support the system operating pressures. New Kelvion (Searle) CO₂ HT & LT Evaporators were installed, The Walk-In Chiller & Freezer Rooms also had an LED lighting upgrade. 2no Heating Only shop-floor Cassettes were installed, with a LPHW Air Curtain also.

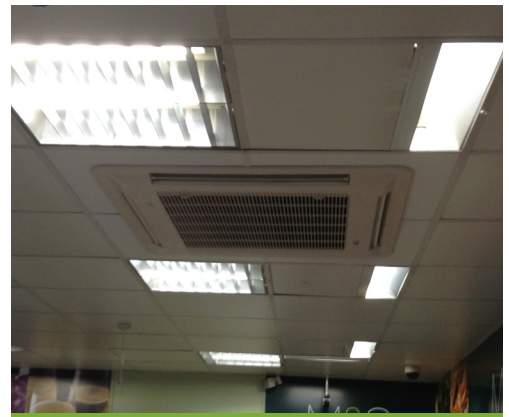
All new RDM Monitoring Equipment was installed, bringing the store up to date with the latest design and specification.

CPC Leak Detection Equipment was installed in both the Walk in Chiller & Freezer Rooms.

The heating side of the system which employed a Low Pressure Hot Water (LPHW) solution, the source of heat for the water is a plate heat exchanger (PHE) in the MT discharge on the pack which is recovering heat from the refrigeration system that is typically rejected to atmosphere in traditional HFC systems. The equipment for this side of the system is pre-fitted off site in an external HVAC Housing Unit, which contains the Grundfoss Dual Pump, Pressurisation Unit, and Dosing Pot and was installed adjacent to the Green & Cool Plant.

The project was the first "Refresh" Project completed by BP which handed on time, snag free and received greatly from the client.

Carter Synergy Service will now maintain this store for 12 months as part of the project.



Carter Synergy Limited Call: 0121 250 1000
Redhill Road Fax: 0121 250 1250
Hay Mills Email: sales@cartersynergy.com
Birmingham B25 8EY Web: www.cartersynergy.com