



“...it was reassuring to know they would go the extra mile for us...”

Geoff Bates, Maintenance Manager, Sheraton Grand Hotel

The Customer

The Sheraton Grand Hotel & Spa in Edinburgh is the UK's Flagship Sheraton Hotel and part of the Starwood Hotels & Resorts Group, with more than 1,000 hotels worldwide in 100 Countries.

The Challenge

We needed to replace 25 year old plant running on soon to be defunct R22 gas in a live kitchen whilst also designing enough capacity for future expansion plans as a full refurbishment of the hotel was planned for the following year. In addition we also wanted to reduce the energy consumption of the refrigeration equipment.

Tailored Indemnified Design

At ACE Refrigeration, our indemnified design allowed us to replace the refrigeration systems with the foresight to design in enough capacity for them to be relocated when the full hotel refurbishment took place. ACE were able to design & build the refrigeration in the new banqueting kitchen with an energy saving design and management control systems at its core. The new refrigeration element contained nine walk in chills, two walk in freezers, 1 blast chill and chilled displays as well as chilled preparation areas including the specialist banquet preparation area, pictured above.

RACE Energy Saving System – Minimum 25% Savings!

ACE Refrigeration replaced a series of 11 condensing units in these rooms with 2 purpose manufactured compressor packs – one Low temperature and one Medium temperature. The resulting energy usage reduction was vast; the old system used 78,110 kWh p.a. where the new system uses only 54,684 kWh p.a.; a saving of 23,425 kWh, with an average cost of 15p per kWh that's a saving of £3,513 p.a. The design ensured the maximum possible reduction was achieved using inverter controlled packs, electronic valves versus mechanical valves and utilised proportional control logic; where output adapts to meet demand perfectly and therefore operates far more efficiently.

Free Hot Water !

ACE also designed and incorporated a heat exchange facility to give FREE hot water! And the hotel further reduced its running costs by at least 10% by using an RDM controller; which ensures the entire system always operates at peak performance, reducing energy costs and pinpointing any potential issues before they become a problem, as well as allowing remote access to monitor the entire system.

In addition to the new condensing units the controller also manages the existing integral refrigerated cabinets giving Head Chef, Malcolm Webster, full control at his finger tips.

R22 Deadline

The use of virgin R22 gas is already prohibited and the use of recycled and/or reclaimed gas will be prohibited after 31st Dec 2014. Best options for its replacement depend on a number of factors including the age and state of your equipment. For some of our customers in the UK, we have been able to help secure substantial grant funding for the replacement and renewal of outdated plant.

What the Customer has to say...

Geoff Bates, Maintenance Manager at the Sheraton Hotel, said: “Having relied on ACE Refrigeration for six years to service and maintain our refrigeration equipment, it was reassuring to know they would go the extra mile for us in the energy saving design of our new refrigeration requirements.”

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