

HVAC Solution for an Internal Plant Room

ICS assisted a London based consultancy group when they were tasked to replace their clients current R22 chiller.

The company was looking to replace their existing R22 unit, which was sited in their Internal Plant Room. While upgrading to an energy efficient refrigerant the customer also wanted to improve the cooling system on energy costs for the future.

EU Regulations

Under EU Ozone regulation EC2037/2000 no new equipment containing R22 can be sold to businesses in the UK and Europe, and by the end of 2014 no recycled R22 can be used by which time all R22 gas in equipment will become illegal to operate. Although it is anticipated that the EU may bring this date forward by up to 3 years.

ICS Sales Engineer **Owen Hymers** visited site to assess the application and site access.

Following his site survey it was apparent that access to the chiller was restricted and this would need to be considered for access to position and install the unit but also the overall unit size.

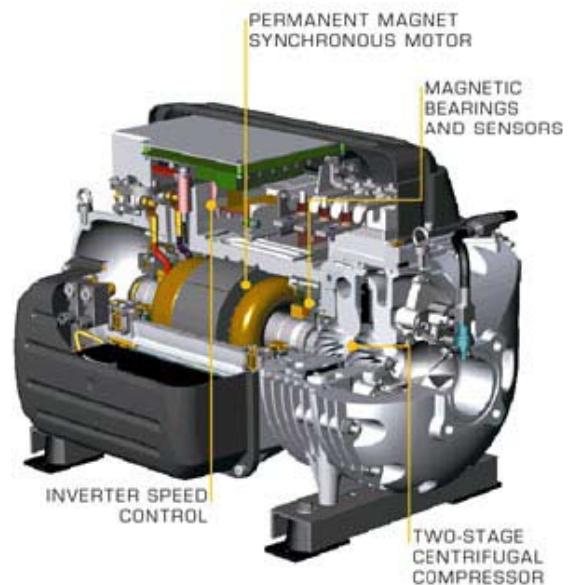
40% Energy Savings

Taking this into consideration **Owen** recommended a Water Cooled Turbocor system.



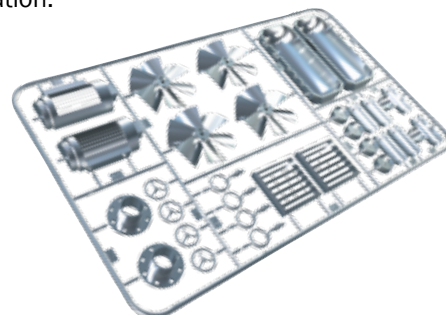
Turbocor chiller systems feature the latest energy efficient technology with a Turbocor compressor, capable of offering up to 40% in energy savings on standard units. Furthermore with a cooling capacity of **475-1091kW** the unit was more than capable of meeting the applications requirement.

(Turbocor System pictured below)



Flat Pack Solution

Although suitable for the application modifications to the unit were required to locate the chiller through areas of restricted access. To do this **ICS' flat pack capabilities** were installed. An ICS team dismantled the chiller into sections suitable for the site. Each section was transported to site where the unit was re-assembled in the required location. Once in place the unit was tested, commissioned and fitted to the application.



This installation solved all of the application and logistical issues, the chiller was installed and R22 concerns were resolved. The unit was flat packed and re-built in situ, causing minimal disruption and offering a highly efficient solution. The energy efficient properties of the turbocor unit vastly improved efficiency and energy costs.