

CASE STUDY – HVAC SERVICES



Cooling tower upgrade

The incumbent facilities company working on behalf of one of the UK's largest grocery retailers asked our HVAC Services division to undertake an assessment of the existing cooling tower HVAC plant at its London offices. We were asked to assess the HVAC plant's condition and identify energy-saving opportunities.

Using state-of-the-art monitoring equipment, vibration levels of the fans were measured and the airflows confirmed. We recognised that the fans had reached an age and condition that meant they were beyond economical repair.

In terms of control, we identified that there were many occasions when the fan motors did not need to run at full speed, which proved to be an ideal opportunity to employ variable-speed drives. Using the drives, a 20% reduction in fan speed provides a 50% power saving.

As the towers were in good order, and undergoing an overhaul themselves, we determined that we could replace the scroll fans and along with a set of ABB drives. Gibbons undertook a full package of works, removing the old fans, designing and manufacturing new steel fan frames, supplying and installing the new drives and making necessary modifications to the control panels.

In order to allow the facility to remain operational at all times, this project was carried out on a rolling programme.

