

AHU Installation

CASE STUDY

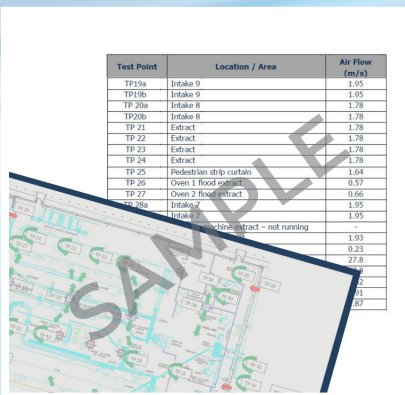
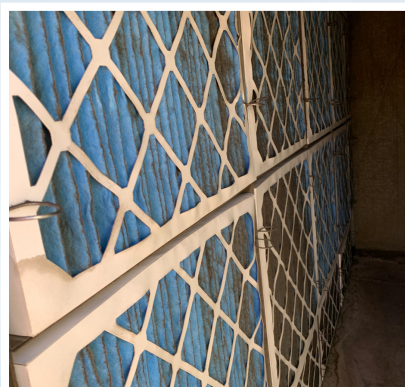
FOOD MANUFACTURING INDUSTRY

CHALLENGE

We were contacted by the engineering manager of a large UK bakery. Following a BRCGS audit, the high care production area was found to have insufficient positive air pressure. HVDS engineers completed an air mapping survey and issued a report to the site. This report gave details of all the air handling units (AHU's) feeding the area, including the relevant air flows produced and any issues identified within each system. The report also identified areas where positive air was being emitted via redundant ductwork or ductwork in need of repair. In brief the report found the following:

- AHU's with missing or worn belts and broken pulleys
- AHU with faulty fan motor
- AHU's not switched on during certain shift patterns
- Ductwork in the roof void disconnected from the system
- Redundant extract fans not sealed off
- Areas with extract air only and no fresh air input

We outlined all necessary remedial works and benefits of those to the production area. We also indicated what new positive air we still needed to produce.



HVDS
Your Trusted Partner in Clean Air



SOLUTION

The additional positive air input came from the supply and installation of a new AHU and ducting system designed in-house at HVDS. The location of the new AHU and the ducting was AutoCAD designed and installed to a layout and strict schedule of work, agreed during site surveys.

HVDS engineers designed:

- A new AHU, calculated to produce the airflow required to meet BRCGS audit standards
- A subframe to spread the weight of the AHU and ducting on the roof of the building. This was fabricated in-house
- A duct route to enable the positive pressure air to reach the required location, passing through an external brick wall and a re-enforced concrete internal floor. The floor was diamond cut using an accredited sub-contract specialist.
- A stainless steel fabricated air intake plenum box to feed 2 separate areas

Once the installation was completed, a new air mapping survey was completed to document the improvements made in readiness for the next BRCGS audit.

FOOD MANUFACTURING INDUSTRY

