

Bio Science & Technology Laboratories

Pharmaceutical Case Study



Providing energy efficient upgrades during a complete AHU refurbishment to improve reliability and performance at a business park, home to over 200 companies.

THE PROJECT

The existing air handling units were manufactured in 2001 and required extensive upgrades to meet the new specification for the areas served and extend the life cycle of the units. There was a requirement to retrofit heat recovery to the AHUs to improve energy efficiency, upgrade the belt driven fans to direct drive AC plug fans to achieve the new design air volume, and also replace the chilled water cooling coils to meet the required cooling duties.

THE SOLUTION

Mansfield Pollard relocated several AHU components within the unit to allow space for the new heat recovery run around coils. The new coils were supplied and installed in split sections to overcome the on-site access restrictions. Not only did the newly installed AC plug fans create additional space within the unit for the relocated components, but they can also achieve a larger design air volume to meet the specification.



- ✓ **Energy Efficiency**
The new run around coils provides heat recovery at 68% efficiency
- ✓ **Increased Performance**
The new AC plug fans are able to deliver a larger volume of air to meet the new specification
- ✓ **Increased Life Cycle**
The AHUs are now able to continue operation with an extended life expectancy for the end client
- ✓ **Improved Reliability**
AC plug fans are direct driven which means no belts and pulleys and eliminates multiple points of failure