



TABLET MANUFACTURING SUITE HEATING, VENTILATION AND AIR CONDITIONING SYSTEM UPGRADE

CLIENT | LOCATION

Global pharmaceutical manufacturer, South Africa

SECTOR

Pharmaceutical manufacturing

PROJECT BRIEF

EECO2 was asked to assist in reducing energy demand at a tablet manufacturing facility without compromising product quality or regulatory compliance. Challenges included:

- High volumes of fresh air requiring dehumidification in very challenging ambient conditions
- Adapting the HVAC system to meet current manufacturing requirements
- Reducing the volume of the dust extraction system and install VSD
- Initiating no operational setbacks.

SOLUTION

- Install a fresh air cooling coil to eliminate dehumidification within the air handling unit (AHU).
- Rebalance the areas dust extraction system to eliminate nozzles no longer required.
- Install a VSD onto the dust extraction unit to maintain pipework carrier velocity consequently enabling a reduced fresh air volume.
- Rebalance the Air Change Rates to reflect area manufacturing change of use.
- Initiate non-operational air volume reductions.
- Optimise BMS system.
- Product risk assessments were developed with the site QA, production & engineering team.
- Risk mitigation was evaluated and included where required.
- Final design changes reflected a risk averse approach.

RESULTS



£36,000

Energy cost savings (per year)

336 tonnes of CO₂

Emissions reduction (per year)

363,000 kWh

Energy savings (per year)

The project had a simple payback period of 18 months.

“ It’s going to be a tough year and to know that we have such a good team supporting some of these changes makes the job a lot easier.

Manufacturing Support Manager

FOR FURTHER INFO

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