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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