



## DESIGN CASE STUDY NO 3

### Pharmaceutical Production

- Concept Design
- Innovative LEV Solution
- Process Improvement
- Detailed Methanol Design

Engaged at a very early stage, we provided a full design service from concept through to detailed design and coordination for a new cGMP Grade D Pharmaceutical Production Facility for a Blue Chip client.

BES provided a fully integrated in house design service, including architectural, HVAC, Process Mechanical and Electrical. Working closely with the end users we were able to challenge current practices and develop significant process improvements to their current practice. An innovative LEV was designed to provide a safer and ergonomically more effective environment. As part of the design process a full scale Mock Up was constructed to test the new LEV scheme



- HVAC Schematics and Detailed 3D Drawings
- Equipment Schedules and Specifications
- Design of New Methanol Delivery System
- Process Chilled Water
- Electrical and Instrumentation Specifications
- P&IDs and Layouts

- Concept Architectural Design
- Process and Personnel Flows
- Close Interaction with End Users
- HAZOP and Hazard Area Classifications
- +/-10% Cost Plans Provided at an Early Stage
- Detailed Design Programming

