



## DESIGN CASE STUDY NO 21

### Manufacturing Facility

- Principal Designer
- Front End Study
- Collaboration with Process Partner
- Process Improvements

BES carried out the complete design of a new facility with a link to an existing manufacturing building in order to improve production and modernise and expand process capabilities in future.

Our in-house design team along with our process partner developed a 4 storey facility to meet client's objectives and maximise both production and storage capacity. Working in close collaboration with end users, we successfully identified where the process could be improved, including additional automation, CIP capability and a vertically stacked process flow. Due to the nature of the facility, our experts had to ensure the ATEX rated process zones were suitably considered and complied with hazardous area classification studies.



- Significant improvements to the process
- A +/-20% estimate and a level 2 construction programme
- 3D Images to aid User Visualisation
- Flexibility and improved raw material
- finished product storage
- ATEX rated process areas

- Enhanced Automation
- CIP capability and a vertically stacked process flow
- FM Global and GMP compliant
- Improved process control, repeatability
- 'Closed processing' – contamination risk minimised
- Fully optimised process in terms of yield, batch times

