

National Industrial Biotechnology Facility



Achievements

Working to a very broad brief, CPI's Sustainable Engineering team was contracted to deliver feasibility studies and process modelling for both National Industrial Biotechnology facilities at Wilton. In each case, the team went on to devise concept and then detailed designs for the pilot and demonstrator facilities.

Specifically, the team's work included scoping the project and devising an optimum process flow. This then allowed them to go on to specify a detailed equipment specification and advise on the layout of plant and equipment within the chosen premises. Their work extended to advising the contractor on procurement and even entering into supplier discussions.

The over-riding objective of the project was that the configuration of equipment needed to be as adaptable as possible, to accommodate any number and application of client projects.

Deadlines were tight, so the team took a realistic approach and worked on design detail while the build was already in progress.

Benefits

The team's store of experience gained in industry allowed them to devise a configuration of equipment that would allow processes to operate smoothly and at maximum efficiency.

Also, very little time was available between the approval of the project and the deadline for completion. The team's high skill levels enabled them to achieve this deadline – with the initial stages up to the specification for contractors being delivered in just one month.

“ Unlike most IB fermenters, which use one feedstock to make a single product, week in, week out, the NIBF facilities will be used for a vast range of experimental combinations of fuel and product. Therefore, the equipment had to be genuinely flexible and broadly applicable. Also, the layout needed to accommodate any future equipment additions and changes of configuration. This needed the experience of engineers who'd worked on a very wide range of IB applications and who understood how such facilities need to work in an industrial environment.”

– Technology and Engineering Manager,
Steve Donegan