

RB Plant have a huge wealth of direct and indirect experience of managing designs and projects within the food industry. This includes sterilising, heating and drying products such a soup powder line for Premier Foods. Furthermore we carry out handling and processing bulk liquids and solid products, such as the detailed design and EPCM of a major Somerset dairy or a massive hydraulic press to extract and recover the sugar cane juice for Tate and Lyle.

We have also successfully undertaken several brewery projects mainly within the UK. RB Plant also provide the full range of civil, structural, architectural, mechanical, site services and logistics consultancy required to support commercial food and drink production.

Case Study 1 - Leavening Agent Production

SCOPE

RB Plant's client, a global manufacturer and supplier of technical leavening agents, was experiencing increased demands in export markets. This identified a requirement for increased production and upsizing of the current facility. RB Plant were engaged to provide design for both relocation of existing equipment and expansion into existing buildings.

CHALLENGE

RB Plant has to date designed schemes based on this original scope and more recently new schemes as our client has subsequently committed to an additional building and a new build on the same site. We have had to be creative in our design to accommodate improved layouts of existing equipment as well as new installations over three identified phases of work.

OUTCOME

RB Plant has also supplied construction phase cost estimates to provide civil / structural, electrical, mechanical and HVAC engineering disciplines, detailed design and project management, construction management, CDM and procurement services. Our client has approved these estimates and has therefore proceeded on this basis.

BENEFIT

RB Plant has satisfied all deliverables to date whilst processing changing scope demands and scheme options. RB Plant has provided consultancy services in excess of 650 man-hours and are looking forward to moving on to the next phase of work. We have satisfied our client's expectations and look forward to a continuing and mutually beneficial relationship.

Case Study 2 - Upgrade Of Wheat Starch Production to 21T/Hr

SCOPE

RB Plant's client's project was to increase the capacity of the Mill & Starch manufacturing facility to 240000 tons of wheat grind/year with an annual operating throughput. RB Plant's initial role was to carry out a preliminary study to encompass:

- Detailed process schematics
- Accurate project costs
- Process layout
- Project timescale & preliminary program
- Equipment & line capacities
- Production plan & outage schedule
- Numerical catalogue of project tasks & activities

From the above RB Plant was then tasked with the construction/installation of the plant & equipment to achieve the required processing improvement as listed below.

CHALLENGE

RB Plant's main challenges were the following:

FLOUR MILL

- Install additional Satake Debranning Technology to increase mill capacity to 21t/Hr

DOUGH PREPARATION & SEPARATION

- Install flour water mixer to client's standard
- Install batter residence loop
- Install hydrocyclone separators to the client's "Pate Mole" standard.

GLUTEN DRYING & MILLING

- Up rate gluten dryer feed system
- Install additional gluten dewatering equipment
- Up rate gluten milling system with standard client's -Freres Mill
- Up rate existing dryers
- Install intermediate starch slurry storage
- Upgrade finished product storage and out load

STARCH REFINING PROCESS

- Install additional fibre removal equipment to client's standard
- Replace current refining hydrocyclone system with client's standard
- Install QX separator equipment on secondary starch (A)- stream

SOLUBLE PROCESS

- Pipe work to be reviewed
- De-bottleneck solubles evaporation stage

UTILITIES

- Replace the starch Provox system with Foxboro system
- Upgrade compressed air system
- Upgrade electrical distribution system
- Install additional boiler water treatment capacity

UPGRADE BUILDINGS AND ROADS

- All other work identified and defined by Pre-Project study

OUTCOME

RB Plant's end result of all the works above was beneficial to the operation and completed on time and within budget allowing for increased production capacity to begin on schedule.

BENEFIT

RB Plant's main benefits to the client were through their increased processing capacity and plant throughput increase. Also by updating their electrical & control systems, better process control was achieved reducing losses through better overall control of the plant.



Location

Lenham
Kent, UK



Resources

50+ staff



Key Contacts

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