

PAPER & PACKAGING

RB Group secures follow-up project after successful engineering support for paper production facility

RB Group was engaged to provide engineering design and implementation support services for a toilet and kitchen paper production facility. The client was so impressed with RB's service it awarded it with a similar separate FEED project.

BACKGROUND

RB Group has played a key role in numerous multi-million-pound design and construction projects for leading paper manufacturers across the UK. Our engineers are stationed at various client sites throughout the country, working seamlessly within client teams on projects of diverse scales.



SCOPE

RB Group’s remit for this project encompassed a comprehensive range of engineering services, ensuring the successful design and implementation of critical systems. This included the design of :

- ✔ natural gas pipework and pressure drop stations
- ✔ steam pipework with stress analysis
- ✔ fire suppression systems
- ✔ LV electrical design, incorporating earthing and lightning protection
- ✔ fire detection, CCTV, and IT/security infrastructure.

The project also required the design of internal and external lighting systems, HVAC, LEV, and smoke and heat building ventilation, as well as syphonic building drainage. Each system was carefully tailored to meet the project’s complex requirements, ensuring safety, functionality, and efficiency throughout the facility.

RB Group collaborated with an Austrian design consultancy to ensure that all design work complied with UK standards and approvals. The team prepared comprehensive technical vendor bid packages for all design elements, actively participating in technical bid analysis to ensure quality and adherence to specifications. Additionally, RB Group conducted thorough reviews of all vendor factory drawings and developed a full 3D model, complete with drawings and Bills of Quantities/Material Take-Offs. Following the success of this project, RB Group was awarded a separate FEED (Front-End Engineering Design) package, which is currently progressing well.

MECHANICAL CHALLENGES

RB Group encountered several mechanical challenges during the project, including the need to tie into existing systems with limited ‘as-built’ information available. To overcome this, the team conducted detailed site surveys to create accurate records, ensuring the new design could be seamlessly integrated with the existing infrastructure.

ELECTRICAL CHALLENGES

RB Group encountered specific electrical challenges during the project, including the design of external lighting in close proximity to public railways and roads, which required careful planning to ensure safety and compliance. Additionally, the internal lighting fittings had to be specified for use in an aggressive atmosphere containing chlorides, necessitating the selection of durable, corrosion-resistant materials.

SOLUTION

RB Group provided the client with comprehensive documentation and designs as follows:

- ✔ Detailed electrical documentation including Single Line Diagrams (SLDS), Cable Block
- ✔ Diagrams, Cable Schedules, Cable Sizing Calculations, Equipment Layouts, Lighting Layouts, and cable containment designs.
- ✔ Identification of optimal tie-in points for services and utilities, ensuring accessibility and adequacy for future upgrades.
- ✔ Detailed vendor packages featuring full UK specification designs and Bills of Quantities.



ABOUT RB GROUP

RB Group provides professional engineering consultancy, design, project, and construction management services across a wide range of sectors from Pharmaceuticals to Heavy Engineering – applying vision, purpose, and cutting-edge expertise.

We undertake every stage of a project lifecycle from initial conception to commissioning, both globally and within the UK.

Our highly skilled and qualified Process, Mechanical, Civil and Structural, HVAC, CDM, Electrical, Control & Instrumentation Engineers undertake engineering projects of all sizes. These range from smaller scale projects such as plant modifications, expansions,

and upgrades, through to multi-million construction projects. We apply the same levels of client focus and professionalism to every project, regardless of size.

Our high proportion of repeat business coupled with an organically growing new customer base is no accident and reflects our unique approach that make us stand out in the market-place.



FIND OUT MORE

- ✓ Our experienced engineering team could support you on your next project. Why not contact Genghis Perriman our Business Development Manager to discuss further for a no-obligation discussion?

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