

FOOD, DRINK AND CONSUMER INDUSTRY – A WSP CAPABILITY



As a multi-national consultancy WSP has extensive experience in engineering design and implementation of projects within the food and drink industry. The wide range of diverse products within the sector has ensured that we have the expertise and advanced technical experience to provide optimal solutions for our clients, based on the most recent industry technology and cost effective solutions. We have the ability to add exceptional outcomes as well as ensuring the highest level of health, safety and regulatory standards to meet the requirements of this consumer driven industry.

The constantly changing product trends and margins associated with the demands of the FMCG (Fast Moving Consumer Goods) market dictate that we are competent and sufficiently flexible to accommodate these project drivers in terms of resource profiling, time constraints and project execution.

Our diversified range of skills and specialist knowledge within WSP enables us to offer our clients holistic integrated solutions encompassing all engineering disciplines and utility services, whilst allowing our clients the benefits associated with single point responsibility and accountability.

Our global reach through our offices worldwide means we have the ability to assist our clients to facilitate their projects throughout the world, thus maintaining their international standards and specifications whilst at the same time as receiving the added value of local knowledge in terms of conditions and regulatory protocols.

WSP's broad depth of knowledge helps us to provide our clients with a full 'one-stop-shop' approach from the strategy development, to design and implementation of their complete facility, including specialist; storage systems of raw and packing materials, process plants, material handling, clean-in-place and sanitation systems, filling and packing, finished goods storage (including frozen, perishable and dry goods) as well as the requirements associated with distribution warehousing.

We have the ability to contribute with our depth of expertise and vast experience at all stages of development, from the infancy phase to the project handover. This includes:

- Strategising & Master Planning
- Capability Modelling
- Pre-feasibility & Feasibility Studies
- Process, Mechanical, Electrical & Automation Engineering
- Plant & Energy Optimisation
- Health, Safety & Environmental
- Process Risk Analysis (HAZOP, HAZAN, HACCP)
- Full Project & Construction Management & Design Co-ordination during the design and implementation phases of the project.

All our procedures at WSP with regard to both design and implementation, are strongly aligned to the most recent international GMP (Good Manufacturing Practice) philosophies and sound quality assurance and we are at all times looking to find the ultimate and most cost effective solution for all our clients.

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FOOD, DRINK AND CONSUMER INDUSTRY – OUR REFERENCES



Diageo

WSP has developed a strong relationship with this client on an international basis. One of the more complex projects was the design and construction of a spirits tank farm at their Leven facility in the UK. The project included the design of 15 x120m³ vats for multiple product storage. Conflicting complexities associated with cleanliness together with the safety requirements associated with the storage of hazardous substances needed to be overcome. These were addressed via sound process designs which encompassed hard-wired overfill protection systems, containment bunds, ATEX rated equipment and foam fire protection systems. Utilising mix proof valve technology allows multiple operations, whilst all vessels and routes can be hot CIP cleaned simultaneously. The project was delivered on an EPCM basis and completed on time and within budget.

SAB Miller – Brewing and Malting

WSP has extensive experience in industrial utilities for this client. Our previous work extends from large industrial plants within the breweries to smaller commercial refrigeration projects. It includes steam raising, CO₂ collection, liquefaction and storage, compressed air services and water reticulation systems. From a global perspective we have worked in America, Russian Federation, Czech Republic, Romania, Ukraine, South Africa, Angola, Mozambique, Cameroun, Nigeria, Ethiopia, Uganda, Liberia, Botswana, Tanzania and Kenya. The Newlands plant Cellar 4 enclosure project in South Africa was a “Brownfield” site that involved demolition of existing facilities and the installation and integration of 6 new vessels which required cellar cooling and dehumidification. All utility services, refrigeration, dehumidification and insulated structures fell within the WSP scope of services.

Cereal Partners – New Breakfast Cereal Manufacturing Facility

This project in Staverton, Wiltshire in the UK, was successfully completed within 2 years on a design, build and project management basis by WSP. The need for the facility arose as a result of the requirement to satisfy the increasing UK market share. The project followed an initial detailed front-end study which encompassed possible and suitable locations, as well as cost and design implication considerations. Several new processes from raw ingredient intake to palletization were embraced and the chosen location required extensive building refurbishment and new construction.

Al Azizia Panda United – Riyadh Distribution Centre – Saudi Arabia

This is the largest refrigerated distribution facility in Saudi Arabia. With a total floor area of 72,500m², it has the capacity for dry goods (42,000m²), perishables (14,700m²) and frozen products (3,050m²). Specialised cooling requirements, jointless fibre reinforced concrete floors with static and mobile racking to heights of 12.5m were notable design features by WSP. In addition WSP were responsible for the overall project management and coordination.