



ENGINEERING SERVICES

www.elb.co.za

Fast Moving Consumer Goods





ABOUT ELB ENGINEERING SERVICES

ELB Engineering Services (ELB) is an internationally recognised technology driven holistic solutions provider to the mining, power, port, construction and industrial sectors.

Our engineered solutions are based on our own extensive in-house developed expertise and innovation, and enhanced by the supply of the equipment and technology from our world class partners and the ELB Group of companies.

Our comprehensive services include in-house construction, electrical, control and instrumentation, spares and life extensions and total logistics solutions as an integral part of the overall business.

From design to advice, ELB offers quality engineering services that benefit Stay in Business and Greenfield's operations. Our internationally accredited quality assurance system, coupled with efficient project management protocols, ensures that the client receives a consistently high quality product.

We tailor our services to the needs of our growing client base, and focus on maintaining and building long-term relationships with our clients.

OUR APPROACH TO THE FMCG MARKET

Servicing the Fast Moving Consumer Goods (FMCG) sector, ELB provides a One Stop Solution from receiving the raw material to dispatch of the finished product - thus enabling a seamless integration between all stages of and disciplines involved in a project.

ELB Engineering Services Offers

- *Management and overall engineering* for the complete plant,
- *Partners with leading providers of technology for the processing component of the value chain,*
- *Lean engineering,* designing systems and layouts that optimize the man/material/logistics interface and work flow through in-depth work studies at all stages along the value chain,
- *Maximised energy efficiency* for environment-friendly FMCG plants that ensure the best return on investment,
- *Early involvement* with the client from concept stage to ensure an in-depth understanding of the client's needs, ensuring that all services along the process chain are fully aligned with the core process for an optimized plant,

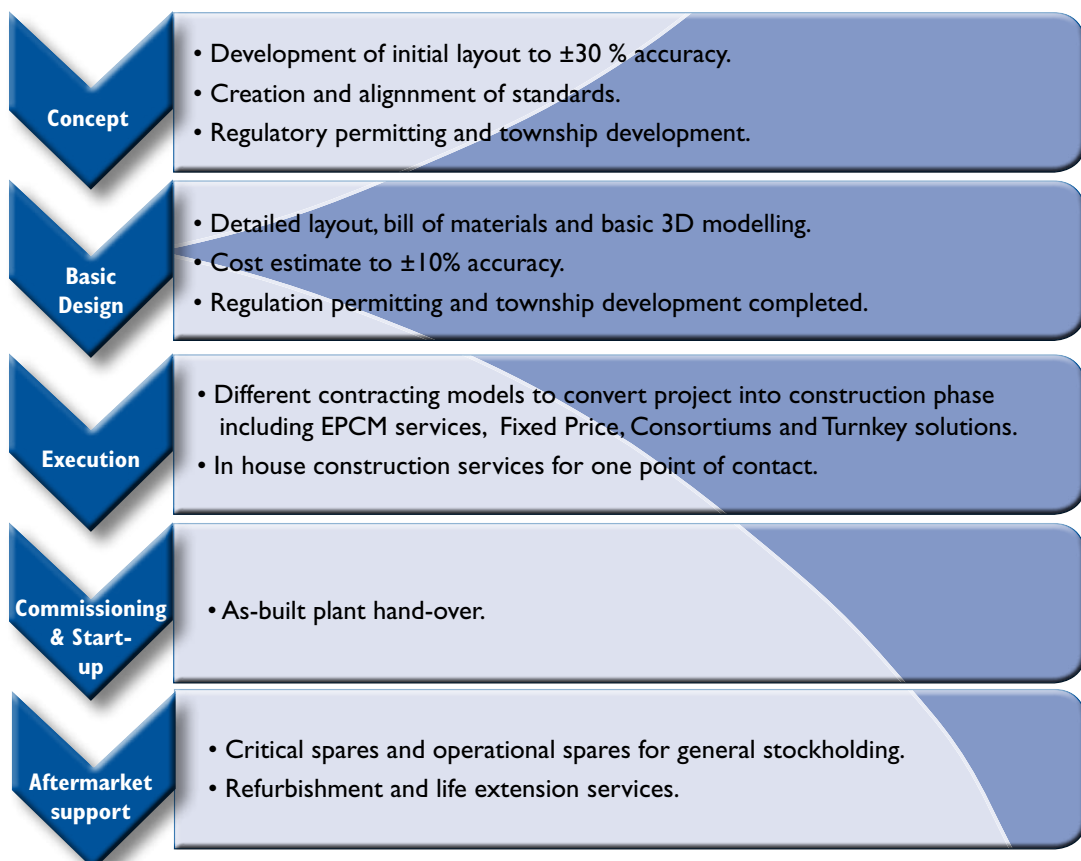




OUR APPROACH TO THE FMCG MARKET - continued

- Combined *value engineering with innovative designs*, specifically tailored to the African environment, made possible by our extensive experience base,
- *In-house construction* providing the complete suite of construction services to deliver a project that fully delivers on our client's expectations:
 - Reduced project risk profile from tight control over costing and scheduling of a project,
 - Comprehensive services ranging from mobilizing site, through to erection, quality and materials control, safety management, hot and cold commissioning and handover,
 - Greenfield and brownfield projects of varying scope and complexity, providing cost-effective services for small to major construction installations.

CONCEPT TO COMMISSIONING AND PLANT HAND-OVER





FAST MOVING CONSUMER GOODS VALUE CHAIN

FOOD, BEVERAGE AND GENERAL CONSUMER GOODS

ELB has experience in the design and supply of facilities which comply with hygienic standards and lean engineering principles.

Where required ELB has partnered with the client's process engineers or preferred technology suppliers to offer a turnkey solution for a complete manufacturing facility including building infrastructure, material receiving and storage, core processes from spray driers to mixing, packaging, finished goods storage and dispatch and auxiliary services.

CEMENT

ELB offers a turnkey solution to the cement industry through our technology partners. We have in-house capabilities for all phases of pneumatic conveying, silo design and bulk out-loading into rail and road transport.

Through our technology partners we offer stockyard equipment, clinker cooling, packing and dispatch, grinding, milling, calcining and classification of fly ash which would be used as extenders to the cement industry.

PAPER AND PULP

ELB has capability in the paper and pulp industry in bulk material handling, air pollution control and auxiliary services. ELB has technology to provide steam or electricity from waste material from the industry. ELB Group also offer yellow machinery for the handling of bulk material in the forest and wood receiving areas.



We provide or partner to provide Piping, Civils, Electrics and Construction for every stage of your FCMG project.

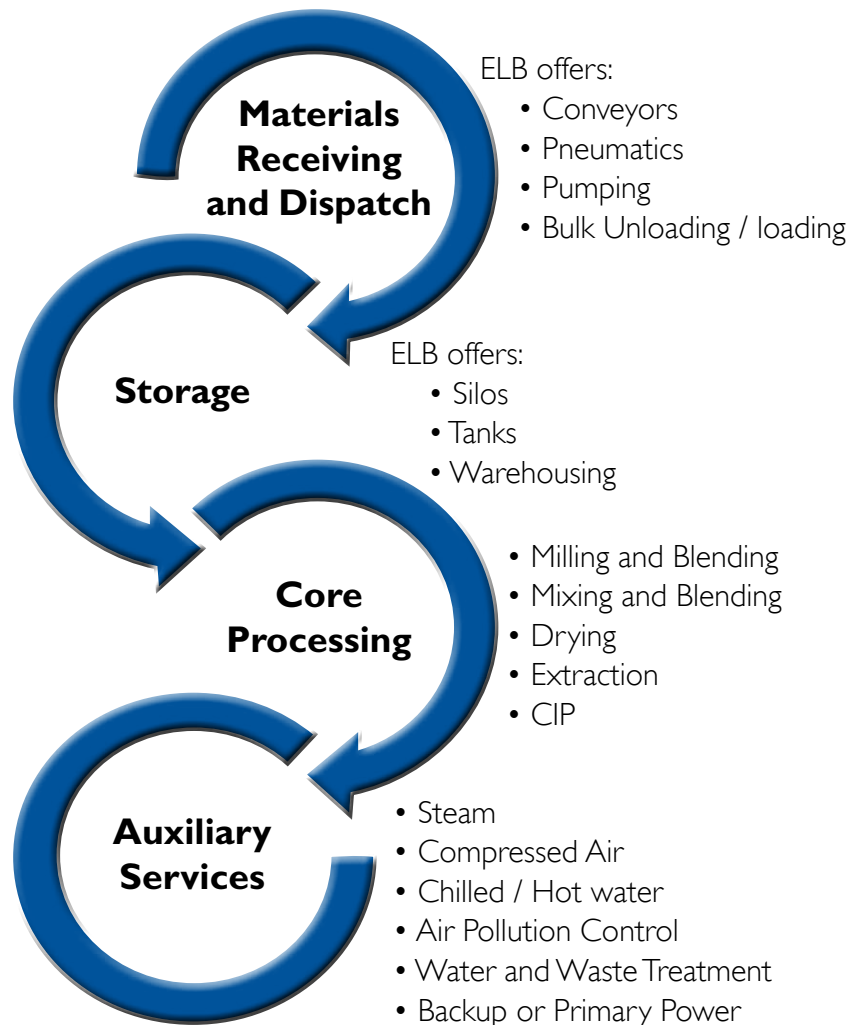


FAST MOVING CONSUMER GOODS VALUE CHAIN - continued

Working with leading partners for the core process design, ELB provides engineering driven project management and innovative solutions at every stage of your FMCG project, including the provision of auxiliary services such as dust and fume control, steam and chilled water, water and effluent treatment.

Our comprehensive services include in-house construction, E&I and total logistics solutions as an integral part of the overall business.

Solutions provided by ELB are tailored to the specific requirements of FMCG products, ranging from food and beverages such as concentrates and coffee beans through to industrial products such as wood chips and cement.



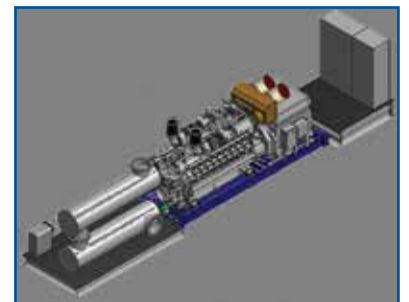


ELB TECHNOLOGIES

Through a global network of technology partners, ELB offers the FMCG sector state-of-the-art, specialist technologies for:

BULK MATERIALS HANDLING

ELB designs and supplies bulk material technologies that enable optimal feeding of a silo, plant, warehouse or even a vessel by means of in-plant conveyors, elevators and tippler technology.



FINE POWDER HANDLING

ELB provides:

- Negative and positive systems to convey powdered granular and pellet materials using dense, lean and semi-dense and vacuum phase conveying,
- Drycon technology for the simultaneous transport and drying of particulate materials, based on lean phase flow, optimising the combined conveying/drying process and effectively drying material which has a feed moisture content.





AIR POLLUTION CONTROL

ELB's dust and fume control technologies and systems are guaranteed to make our clients' facilities comply with the stringent state and local emission standards.

Technologies covered:

- NOX and SOX control systems, electrostatic precipitators, baghouses and bagfilters, cartridge filters, cyclones, scrubbers, flue-gas desulphurization and filtration systems.

WATER TREATMENT

Innovative but proven solutions for industrial water and wastewater treatment, for zero discharge and integrated industrial systems.

Technologies applied include:

- Reverse Osmosis,
- UV Filtration,
- Sand / Charcoal Filtration.

POWER SUPPLY

ELB offers the following solutions for backup or Primary power solutions:

- Biogas / natural gas gensets (with or without heat recovery),
- HFO (Heavy Fuel Oil) gensets (with or without heat recovery),
- Diesel gensets (with or without heat recovery),
- Static / rotary UPS.



ZERO HARM

The ELB Health, Safety & the Environment (SHE) policy guides all of ELB Engineering Services activities and operations to minimise risk to employee health and safety as it continuously strives for zero harm. Business processes are certified in compliance with OHSAS 18001. As part of its commitment to a harm-free environment, ELB projects are conducted in a sustainable manner to ensure minimal impact on the environment.



QUALITY

ELB is committed to meeting and exceeding best practices and standards within the industry. The company is certified for compliance with international quality management standards (ISO 9001) and proactively manages quality control throughout all its own and its sub-contractors' operations using a formal quality assurance procedure.



PROJECT MANAGEMENT

Leading-edge project-management systems ensure a high level of control over all stages of a project, with cost and time overruns minimised by timeous management techniques. Productive utilisation of project resources is achieved by integrating the entire project process using best-of-breed software for design, engineering, 3D modelling, cost management, planning, materials control and document tracking and control.



RISK MANAGEMENT

ELB's de-risking capability co-ordinates the company's collective technical, project execution, construction, financial and relationship building skills, using:

- Structured risk and project management tools that take into account that each project is unique in size, shape, complexity and execution.
- Qualitative and quantitative de-risking methods, supplemented by a broad risk management plan, to continuously evaluate projects in terms of risk from business development to completion and hand-over.

CONTRACT MANAGEMENT (FLEXIBILITY) AND PROJECT FINANCING

ELB offers flexible contracting options tailored to the requirements of small to mega-sized projects, covering technical audits, studies, EPCM services, turnkey solutions, and life extension and after-sales services.

A project financing facility operates in conjunction with a leading financial institution.



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