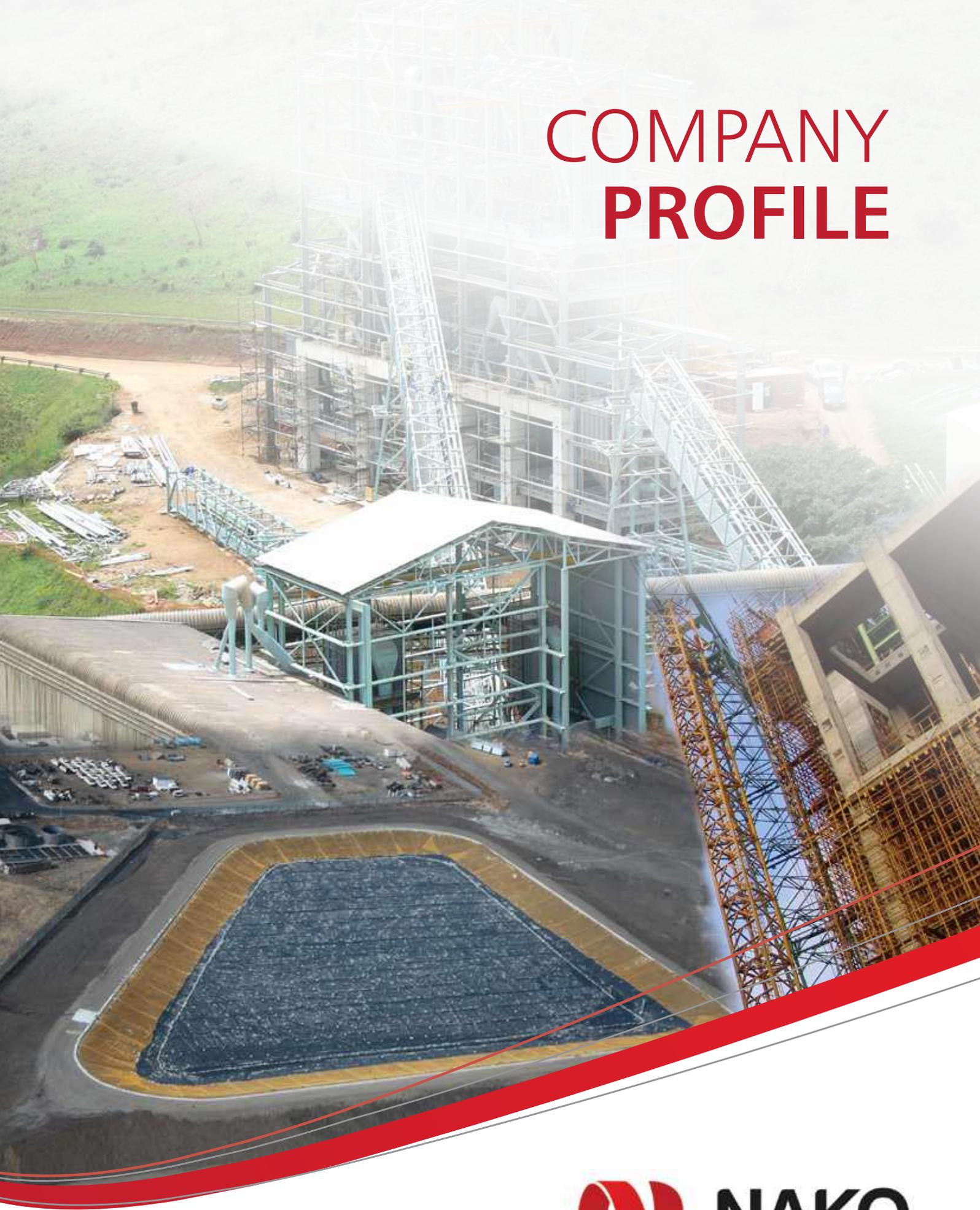


COMPANY PROFILE





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NAKO

LBE

ABOUT US

NAKO LBE provides specialised civil and structural engineering solutions to clients in the Oil & Gas, Chemical, Mining, Power Generation, Manufacturing, Processing, Food and Beverages, Pharmaceutical and other Industrial sectors.

Established in 1995, NAKO LBE has accumulated an enviable portfolio of projects. NAKO LBE is proficient in combining the principles of industrial civil engineering with decades of practical experience. These factors are assimilated with global best-practice and the latest technology, to create world-class, customised client solutions.

NAKO LBE provides civil and structural engineering, procurement and construction management expertise to deliver cost-effective, sustainable solutions, which are technically sound and aligned with the client's expectations.

In 2014, NAKO LBE entered into a long-term partnership with ILISO Consulting and Triocon Consulting Engineers to form NAKO Group, an African owned, multi-disciplinary consulting engineering group.

In 2018, after an extensive collaboration period, Pollock, Williams, James & Partners joined the NAKO Group, trading as NAKO LBE.



COMPANY OVERVIEW



NAKO LBE VALUE PROPOSITION

NAKO LBE is committed to three key strategies to create long-term value for its clients:

- Partnerships: To foster long term partnerships with clients in order to form a unique understanding of their requirements.
- Project teams: To adapt services through the use of project-specific teams with industry expertise that result in highly competent and proficient services.
- Integration: Value is created through the integration of capital cost, technical considerations, risk factors, life-cycle costs, sustainability and other operational issues, which all impact on the long-term outcome of a project.

OUR PEOPLE

Our key professional employees have the level of expertise and a combination of the skills, which are necessary to find unique solutions to every technical challenge. These individuals are supported by engineers, technologists, technicians, draughtsman, construction technicians as well as project support and administrative personnel.

Ongoing professional development of our employees ensures that the company remains at the cutting edge of the latest technological developments in the Civil and Structural Engineering discipline.

Nako LBE is dedicated to fostering a safety culture that seeks to protect the health and safety of all our employees. Our commitment to safety underpins the nature of our operations and we strive for excellence in safety and quality at all times.



DIRECTORS



Gerdus Bouwer Pr Eng
CEO



Fuzile Felix Fongoqa Pr Eng
DIRECTOR



Anton van Dyk Pr Eng
DIRECTOR



Frits Adendorff Pr Eng
TECHNICAL DIRECTOR



Zuzeka Mtotywa
DIRECTOR



Nolan Pillay Pr Eng
TECHNICAL DIRECTOR

SERVICE OFFERINGS & CORE COMPETENCIES



ENGINEERING MANAGEMENT

Increased competition requires shorter project lead times and a reduction in cost structures. Riskier business environments require better risk mitigation strategies.

Proper Engineering Management has become essential to ensure that project outcomes address those factors that may impact a project's development. NAKO LBE uses Engineering Management to improve each client's position in the marketplace and to implement its total value proposition: Partnerships with clients, the creation of projects specific teams and integration of all potential project factors.

Engineering Management includes:

- Investigations and Reports
- Feasibility, Concept and Preliminary Design Studies
- Concept and Design Development, Basic Engineering (FEED)
- Management and Integration of Detail Engineering activities
- Bid Documentation and Bidding Process
- Construction Contract Administration
- Construction Contractor Management



INDUSTRIAL CIVIL ENGINEERING

Industrial civil engineering requires unique solutions that may have to address vibration, chemical resistance, corrosion, handling of solid and liquid effluent, as well as other functional requirements. Projects often take place in high-risk environments requiring stringent safety, operational and quality control measures. NAKO LBE's knowledgeable project teams understand the requirements of the various plant and process infrastructure in the industrial and mining sectors, which allows them to implement those control measures to ensure that risks are assessed, managed and contained.

Industrial Civil Engineering Services include:

- Engineering, Design and Draughting
- Process Plant Infrastructure
- Process Plant Structures
- Bulk Fuel Storage Facilities and Infrastructure
- Effluent Water Systems
- Ash/Waste Disposal Infrastructure
- Materials Handling Structures
- Workshops and Warehouses
- Electrical and Control Buildings
- Administration Buildings



STRUCTURAL ENGINEERING

NAKO LBE's wealth of experience in structural analysis and design ensures versatility and efficiency in the use of steel, concrete, masonry and composite materials. The NAKO LBE design teams use a practical approach to ensure that engineering specifications result in ease of construction, safely, time and cost sensitive.

Structural Engineering Services include:

- Structural Analysis and Design
- Specialised Analysis, considering seismic, blast resistant and other
- Dynamic loading conditions
- Engineering, Design and Draughting of structural steel, concrete and masonry
- Structural Audits and Assessments
- Foundation Engineering
- Concrete Technology
- Concrete Rehabilitation
- Corrosion Protection
- Building Structural Design and Specifications



WATER, SEWER & SERVICES ENGINEERING

Water is the lifeblood of society making sustainable water management an increasingly important consideration. NAKO LBE has been involved in numerous projects to create sustainable engineering solutions in Water supply projects, Effluent handling systems, Mine service water supply, Storm Water management and Pollution containment systems. Project life cycles, operational factors and environmental factors are all integrated to provide sustainable solutions that ensure ease of operation.

Water & Services Engineering Services include:

- Pressure and Gravity pipelines
- Open Canals
- Pump Stations
- Weirs and Reservoirs
- Pollution Control Dams
- Industrial and Domestic sewers
- Storm water Management
- Water Demand and Network Analysis
- Water and Fire Water Supply and Distribution Systems



ROADS & TRANSPORT ENGINEERING

New and existing road networks necessitate the correct balance between capital expenditure and maintenance interventions to optimise the economic lifespan of each road. NAKO LBE weighs alternative designs against traffic projections and life cycle costs to recommend appropriate pavement management strategies to ensure that its clients achieve the maximum return on their investment.

Roads & Transport Engineering Services include:

- Route Determination
- Geometric Design
- Pavement Design
- Road Rehabilitation
- Parking Areas
- Railways and Private sidings
- Traffic Engineering
- Pavement Management



OPERATING & MAINTENANCE SUPPORT

NAKO LBE is proficient in the Operating and Maintenance Support of Industrial Plant operations. Its expertise and experience includes: Engineering and design, preparation of construction drawings, Engineering and design for shutdown projects, Periodic structural inspections of existing plants and Structural projects during plant shutdowns.

Operating & Maintenance Services include:

- Rehabilitation and replacement of corroded steel structures
- Dam maintenance and statutory inspections
- Concrete rehabilitation/replacement
- Visual inspection of pipelines
- Road and services rehabilitation and maintenance
- Improved access to operating and maintenance valves and equipment
- Prioritisation and implementation of civil and structural maintenance
- Modifications to existing structures to improve means to remove equipment
- Extensions and modifications to process plant infrastructure
- Extensions and modifications to process plants
- Building modifications, extensions and upgrading



CIVIL GEOGRAPHIC INFORMATION SYSTEMS

A geographic information system (GIS) is any system that captures, stores, analyses, manages, and presents data that are linked to location. GIS is a special-purpose digital database, in which a common spatial coordinate system is the primary means of reference. Comprehensive GIS requires a means of:

- Data input from maps, aerial photos, satellites, surveys and other sources
- Data storage, retrieval and query
- Data transformation, analysis and modelling (including spatial statistics)
- Data reporting such as maps, reports and plans

NAKO LBE has recognised the opportunity to apply this technology to initiate and develop a Bentley Map Software tool that can assist in the facilities management of complex and technologically advanced infrastructure such as process plants, power stations and other industrial developments.

GIS Expertise and Experience include:

- Using the Bentley Map together with Microsoft Access and SQL Server
- Accessing GIS with web browser tool
- Redrawing input from existing drawings to CAD and linking to GIS
- Converting data between different Geodetic and Local Coordinate systems
- Development, administration and maintenance of the GIS database
- Linking existing and new electronic data to GIS
- Populating existing databases to the GIS and creating linked objects to location infrastructure



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