

GRAIN AND MILLING

CAPABILITY STATEMENT

GRAIN AND MILLING

Ascon Africa have been active over the last 40 years, delivering quality Grain handling, storage and Milling projects in Africa.

At an early stage, Ascon Africa developed techniques that enabled the building design and construction to proceed in parallel with the machine development and manufacture, thus improving the prospects for earlier than normal commissioning.

The Firm has experience in both the Public and Private sectors, providing services starting with economic and viability studies, human resources, conceptual designs, final designs, tendering and procurement, and management of implementation.

We outline below the capability of Ascon Africa as it relates to Grain handling and storage, Milling, and associated activities.

Grain transportation

- Offloading (Road and Rail)
- Out loading (Road and Rail)
- Conveying
- Weighing

Infrastructure

- Master planning
- Water supply
- Power supply
- Waste disposal
- Road
- Rail
- Security
- Environmental control

Storage

- National Strategic Storage
- Bulk silos
- Conditioning bins
- Finished product bins
- Warehousing

Processing

- Feed mills
- Maize mills
- Wheat mills

Associated Industries

- Pasta Factories
- Bakeries
- Biscuit Factories
- Oil extraction plants

Over the past 40 years, Ascon Africa has completed over 300 projects in milling related infrastructure, and over 600 in the food industry as a whole.

Of these, 20 have been complete new Mills, and a further 10 have been major overhauls and/or new bulk handling facilities.

It is pleasing to note that in each case, the projects were completed on time and within budget.

ASCON AFRICA AND MILLING

Ascon Africa has provided consultancy/EPC services to the milling industry for some forty years. Much of the activity has been in Africa, where an enormous range of milling and milling related projects have been successfully executed. These have included Flour Mills, Maize Mills, and Feed Mills as well as Oil Mills along with all the materials handling and storage requirements. We also specialise in Pasta and Biscuit Factories, and of course Bakeries. We are able to provide full supporting infrastructure on all projects.

The traditional role of the consultancy has been to provide engineering design and supervisory services in the civil, structural and electrical disciplines. However over the last twelve years, this has extended into much broader involvement in the delivery of the final product, either by construction management, or by turnkey/EPC contracts.

By working closely with manufacturers, specialists and customers, over the years, the Firm has developed a strong understanding of the milling industry, and it's requirements. This enables us to customise projects to maximise long term efficiencies, whilst minimising capital expenditure, and the total life cost of the project.

The Milling team is highly mobile, and able to procure projects in remote locations, often where there is limited supporting infrastructure.

SAMPLE PROJECTS:

**Merec Socimol, Machava -
Maputo, Mozambique**
300T per 24 hour new extension
to the existing 250T Mill at
Machava. .



Bakhresa SA (Pty) Ltd

E.P.C project - Overall planning
and re modelling of an existing
mill near Durban port. Included
production bins, Mill building,
warehousing.



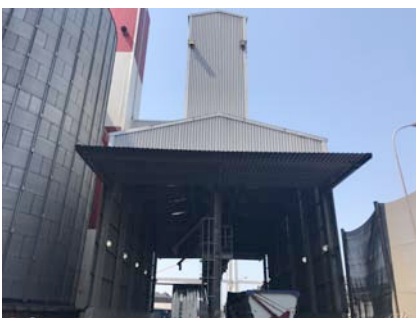
Agrival Madagascar

Feed Mill structure and
processing bins supplied and
erected



Maputo Grain Terminal, Mozambique

25 000MT bulk storage facility



Bolux Milling, Ramotswa, Botswana

Flour Mill complex at Ramotswa,
Botswana. Complex design of
mill, warehouse, silo support
cones, weighbridge, road and rail
facilities and ancillary buildings.
Provision of 30 000 tons of
Storage silos for wheat including
rail siding layout and bulk intake
hoppers.

Mpongwe Milling, Zambia

Master planning for the expansion of bulk storage for both Maize and Wheat.



Victoria Foods (Pvt) Ltd

New flour mill and grain handling and storage facility, including total project management and roadworks.

NATIONAL FOODS, ASPINDALE PARK



The Firm was appointed by National Foods Ltd, as the lead consultant for the design and supervision of construction to develop the Aspindale Park site complex over a ten year period. Specialist sub-consultants were appointed in the disciplines of architecture, mechanical and electrical engineering and quantity surveying.

The firm was required to coordinate and manage all the input by professional teams including the process suppliers and designers. This involved structuring and managing all meetings, filing and other administrative systems and ensuring communication between the various designers.

The Firm assembled all the necessary tender and contract documentation for approximately 40 construction, supply and installation contracts on the project.

During the construction stage, the Firm, with its sub-consultants, provided site management and supervisory teams which coordinated the activities of the numerous contractors and suppliers, provided inspections to ensure adequate quality control, monitored progress and performance against contract time schedules and specifications and provided a complete management service to control the costs of the projects.

Reports for the Client were produced monthly and regular meetings held to communicate with top management on the important issues that cropped up from time to time.

The overall project comprised three new maize mills with attendant bulk handling and storage facilities (silos), stockfeeds plant, edible oil solvent extraction plant, expeller, bottling plant, vehicle and mechanical workshops, a laboratory and other service facilities. The highly complex nature of some of the mechanical elements involved significant input to ensure various machines and services were designed to be placed into the process buildings without clashes and in an orderly structured fashion to optimise construction and installation time and costs.

BULK MATERIAL STORAGE + HANDLING



The Firm has been involved in a number of projects making use of varying forms of bulk materials storage.

We have encompassed a wide range of structural and materials handling applications, each one having its own function and special requirements. The firm has recognised the need to assess the detailed objectives of individual clients particularly in appreciation of requirements of local authorities, local communities and the environment in which the project is situated.



Our world-wide network of regional offices assists in gaining at first hand, knowledge and understanding of the many local issues frequently involved in any project.

In a number of cases, projects have made use of many disciplines and skills available within the firm to ensure a co-ordinated, cost effective and successful completion.

In the Southern African region we have also been involved in a number of projects that have made use of silos for bulk storage.

Applications have included:

- Raw materials and finished products storage in maize mills
- Stockfeeds factories
- Cement works
- Breweries and other industrial applications

Experience has been gained in inter-relating the materials handling side of the installation to achieve efficient use of the storage facilities.

Applications in this regard include :

- Wheat and maize mills
- Vegetable oil processing plants

and associated works in the form of :

- Weigh bridges
- Reclaim tunnels
- Warehousing
- Rail and road intake
- Loading hoppers
- Breweries and other industrial applications

