

## Case study No. 2

02/2010

### SASKO GRAINS

- SASKO Grain is an operating division within Pioneer Foods (Pty) Ltd and manufactures a diversified portfolio of grain-based, quality staple foods. The company's operational structure consists of seven wheat and three maize mills, packing plants and distribution depots.



### Problem Definition

SASKO Grains was expanding their Malmesbury mills' capacity from 10ton to 22tons per hour. This involved an increase in finished goods pallet storage requirements from 2700 to 6800 pallet positions. Due to site constraint, conventional storage methods were not able to meet these storage requirements. A high density storage solution, in the form of the "Pallet Mole" had to be implemented



### Challenge

SASKO Grains had various requirements laid down, in expanding it's milling facility at Malmesbury , South-Africa. These included but were not limited to the following:

- Accommodate an increased capacity of 220% within an additional 2800m<sup>2</sup> warehouse
- Reduce product damage
- Provide FIFO operations
- Provide for increased stock & traffic throughput
- Introduce separate Receiving & Despatch for Buy-Out stock
- Provide upgraded Load-assembly facilities

### Solution

- Provide Input Control Station
- Provide Mole Pallet Racking for bulk, Fast-Movers : 26 Lanes - 17 deep, 5 High
- Provide APR racking for the balance of the stock



## Design Considerations

- Optimal Utilisation Of Space

Capacity and specifically the utilisation of the planned allocated storage areas had to allow for the peak utilisation of each area, after completion.

- Material Types and Flows

Only 4 types of different material types were to be received at the Production Entry point at any particular time. Only Full Pallets were to be registered and received into the Warehouse from the production area.



- Bottlenecks

Bottlenecks had to be limited, but necessary bottlenecks effectively managed, to ensure optimal operational effectiveness throughout the supply chain

## Reasons for Choosing Pallet Mole

- 70 – 80 % Floor utilisation
- Minimum gang ways
- Satisfied the need for a FIFO operation
- Perfect for “High volume-Low SKU” situations
- **Automatic stock taking function – Exclusive to Pallet Mole.**
- Operational flexibility



## Advantages obtained

- Long-travel conveyance without operators
- Individual Pallet tractability
- Eliminate crushing
- Improved FIFO batch control
- Maximum utilisation of Reach Truck capability
- Flexibility for future changes
- Improved inventory management
- Effective cube utilisation
- Storage capacity requirements were met.