

# Moveable Bulk Robot Weigher

## Process

The moveable Van Aarsen Bulk Robot Weigher has been designed for fully automatic loading of bulk transport vans with animal feed. The Van Aarsen Bulk weighers are equipped with some of today's most innovative features for maximum efficiency, performance, and ease of operation.

## The Moveable Bulk Robot Weigher consists of the following main components:

- ▶ An **automatically moved frame construction**, which is provided with rubber profile on the top side, to minimise dust escape during filling of the weighing bin. The dust sealed frame is moved electro-pneumatically. A flexible, dust tight,

connection is made between the frame and the weighing bin.

- ▶ A **supporting frame**, supported on the non weighing frame structure, for the dust sealed frame.
- ▶ A **weighing bin**, with rounded corners and upper measurements ca. 2300 x 3000 mm, on bottom side provided with 4 electro-pneumatically operated dump-slides for partial dosing into the contra sets. The weighing bin is made of 3 mm steel plate, and is provided with the necessary supports and a de-aeration pipe.
- ▶ A **weighing system**, consists of 4 load cells, mounted under the main supporting channels of the weighing bin. The weight indicator is provided with a RS232C-connection, for integration in an existing production line control system.
- ▶ A steel **supporting structure**, with in total 8 travelling wheels, diameter Ø 250 mm. Each wheel-set is assembled in a wheel casing. All wheels are individually driven by a geared motor, with a frequency controlled drive and brake. The positioning of the X and Y position of the Bulk Robot is determined by laser measuring.
- ▶ **Transport and weighing of fines**, build on Bulk Robot. Fines are removed by a flight conveyor.

## Security provisions

- ▶ Two emergency stops, which will stop the weigher on both rail ends, made up of limit switches and rubber buffers.
- ▶ A pull-rope system on both sides of the Bulk Robot
- ▶ An 'anti bump' provision with use of photo cell, which will switch off the drive motors of the bulk weigher.

## Flexibility

- ▶ One system for transport from all production lines to all silos

## Operational costs

- ▶ Low energy consumption
- ▶ Low maintenance

## Feed quality

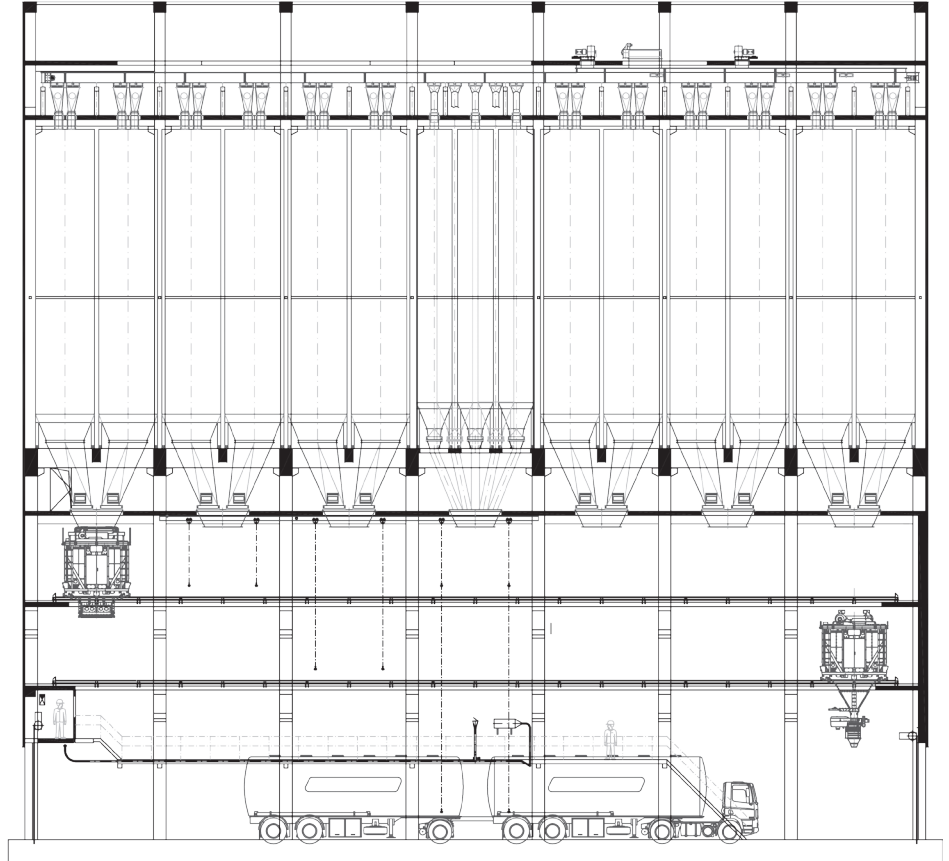
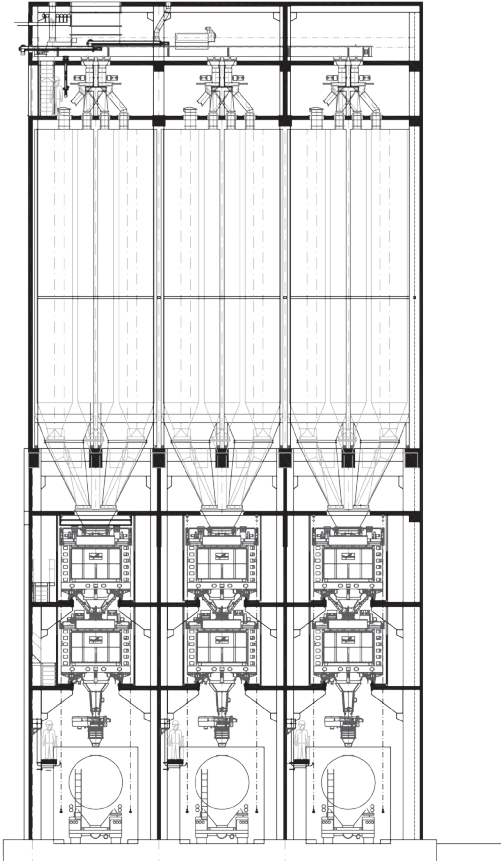
- ▶ Minimized contamination
- ▶ Gentle product handling

## Dust prevention

- ▶ Integrated aspiration



# Datasheet



Weighing capacity: 4000 kg.  
Maximum weight read-out: 110% from weighing capacity.

