

# SID Small Ingredient Dosing

## Process

The Van Aarsen SID is designed to dose and weigh small quantities of ingredients which are suitable for a wide range of products used in the animal feed milling industry. These ingredients all have different bulk densities and flow characteristics.

The Van Aarsen ingredient dosing weigher range consists of 3 types:

- 1) Small Ingredient Dosing system, SID (max. 200 kg),
- 2) Micro Ingredient Dosing system, MID (max. 50 kg)
- 3) Precision Ingredient Dosing system, PID (max. 1 kg).

## Benefits and features

### High effectiveness

- ▶ Large dosing and weighing range from 75 to 200 kg
- ▶ Very accurate dosing with slide openings operating in sequence for fine and coarse dosing
- ▶ Short dosing time
- ▶ First-in first-out principle by silo design in combination with slides
- ▶ Two butterfly valves under the hopper
- ▶ Pneumatic beater on the weighing hopper
- ▶ Stirring device in the product hopper(s) (option)

### Energy efficiency

- ▶ Total installed power only 1.2 kW

### Low maintenance costs

- ▶ Due to the application of self-lubricating plastic frames around the moving parts the machine operates smoothly with a minimum of wear
- ▶ Very low maintenance due to minimum of moving parts

### Easy and safe operation

- ▶ All moving parts are shielded for the safety of operating personnel
- ▶ Good accessibility to the weighing hopper

### High feed quality

- ▶ Parts in contact with product made of stainless steel
- ▶ Dosing by means of slides resulting in gentle product handling and no product damage
- ▶ Minimum contamination of product
- ▶ Built completely according to the latest regulations and standards for homogeneity, hygiene and safety



### Flexibility

- ▶ Wide dosing and weighing capacity range
- ▶ Vitamins, minerals and additives can be dosed with high accuracy for premix/concentrate production or direct mixing into finished feed.
- ▶ The SID has a weighing and dosing range from 75-200 kg and an accuracy of 20-50 gram, dependent on machine type.
- ▶ Silo extensions for new or existing dosing units by means of screw conveyor

### High automation level

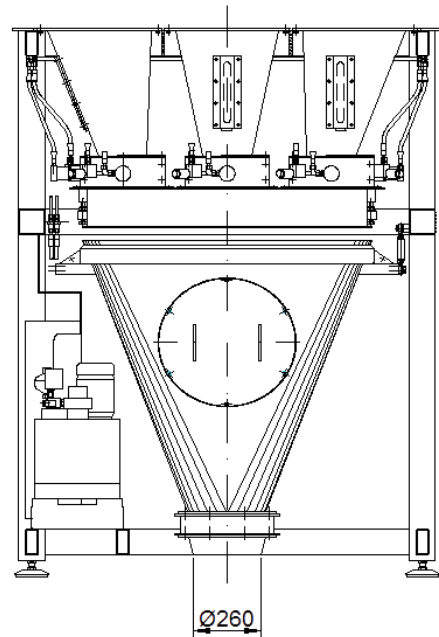
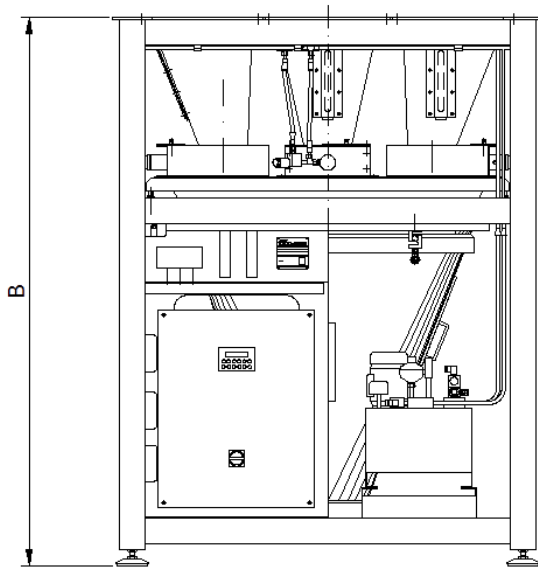
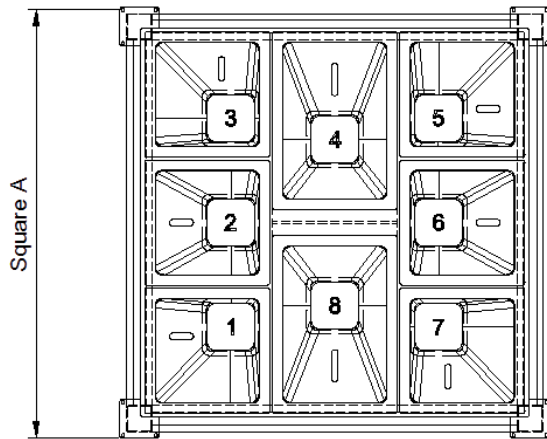
- ▶ In case of a power breakdown the dosing slides will automatically return to a closed position thus avoiding loss of product
- ▶ Integrated electrical control panel with reusable data
- ▶ Accurate monitoring of dosing slide position
- ▶ Operating in 'slave function' to the feedmill automation

### Design

- ▶ Compact design
- ▶ Durable construction
- ▶ Product hoppers integrated in design
- ▶ Silos on top of the dosing unit (option)



# Datasheet



Dimensions	A=1600 mm B=2100 mm
Product silos	8
Volume weighing hopper	0.5 m <sup>3</sup> (gross volume)
Discharge outlet	300 mm

Maximum batch weight	Smallest component:	Weight increments on display	Weight accuracy: *
75 kg	1500 g	20 g	35 g
100 kg	2000 g	20 g	35 g
200 kg	4000 g	50 g	52 g
Mechanical dosing accuracy **	10 g		
Number of load cells	3		
Load cell accuracy	0.04%		

\* Weight accuracy (system) is the maximum deviation from the real value of the weight. This depends on the type of load cell used.  
 \*\* Mechanical dosing accuracy describes the maximum feasible accuracy done by the dosing slides.