



*Proportioning of each ingredient forming part of the ready feed mixture is one of the most important processes when producing feed, but also a difficult one. It is important to know beforehand which raw materials the dosing plant is to handle, and in which quantities.*

## Dosing systems

A proportioning system is made up of flexible augers, tubular augers, trough augers, or chain conveyors, which dose material from hoppers or silos to a weighing unit. The choice of dosing unit depends on requested capacity and/or price

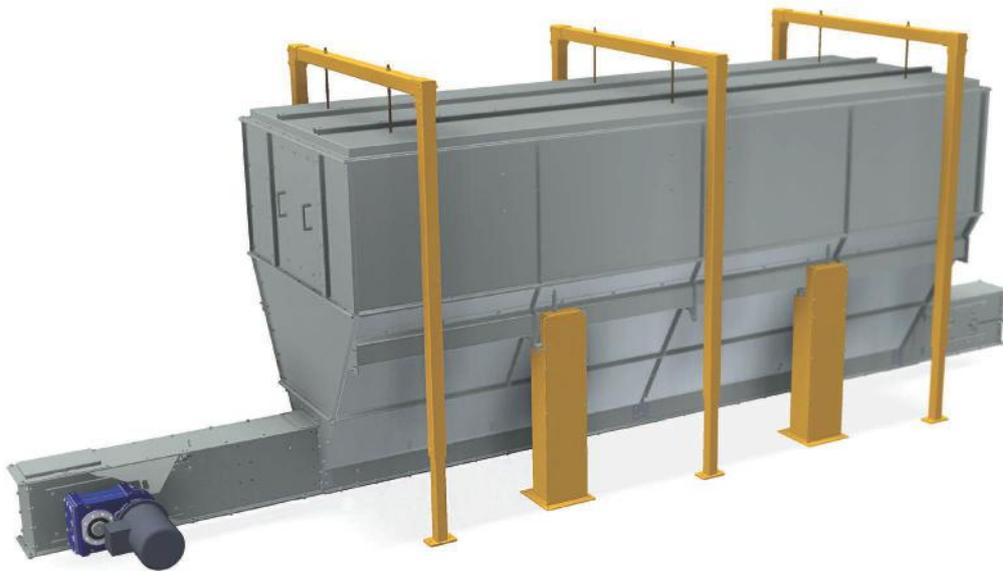
There are many different systems for weighing of raw materials in the feed making process. In general, there are two main principles; weighing before or after the grinding process.

### Scales

Weighing before grinding is used in all large SKIOLD plants.

In smaller plants, typically with only one scale, we apply the principle of weighing the single raw materials separately after grinding, for instance in a pre-bin or in a diagonal mixer.

# Macro dosing



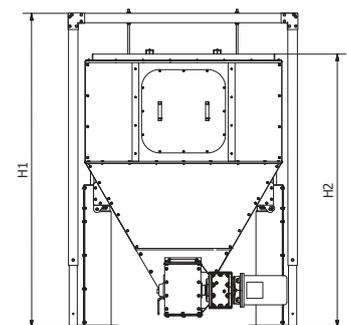
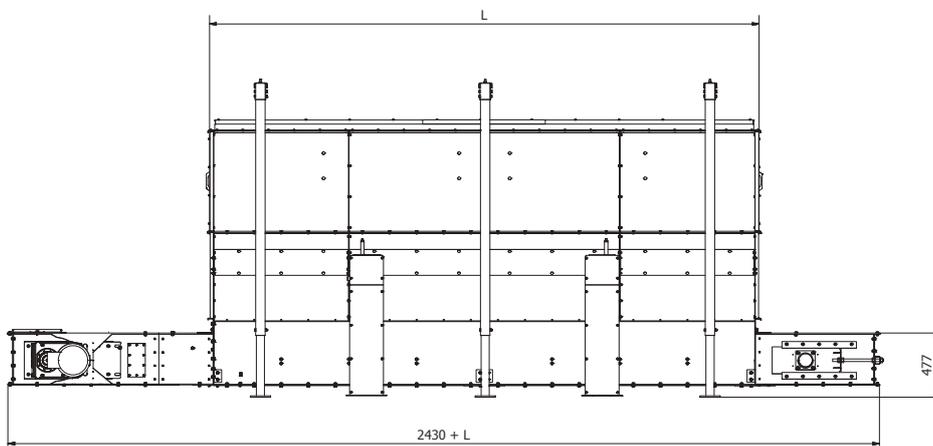
SKIOLD macro dosing systems are used for dosing of raw materials such as grain, protein, etc., with capacities from a low number of kilos, up to several tons per batch.

The weighing bin is typically surrounded by a number of raw materials silos, mounted with a dosing unit such as a tubular auger, trough auger or chain conveyor.

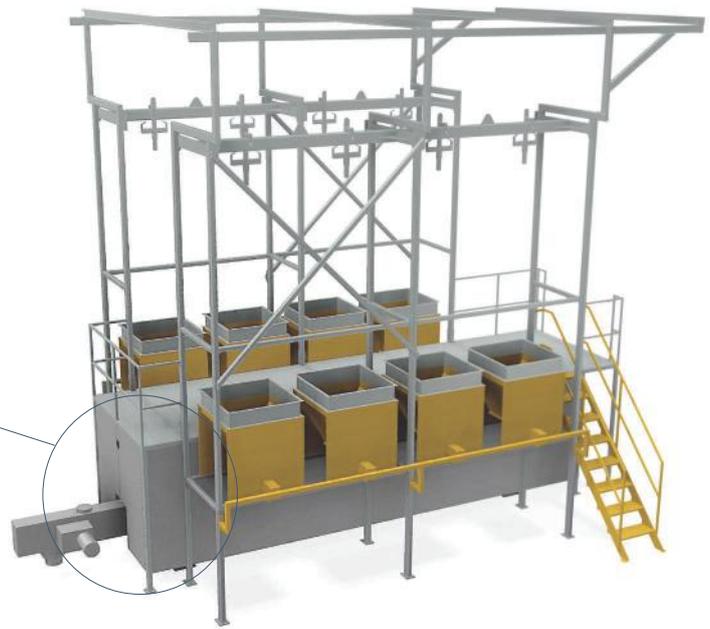
Dosing material to the weighing bin is done through the cover, which is mounted separately from the bin.

The materials are proportioned and weighed out one by one, by means of 4 load cells, and are subsequently transported out by an the build-in chain conveyor.

Macro dosing - Weighing bin data	WB 1500	WB 2500
Height H1, mm.	1964	2339
Height H2, mm.	1661	2036
Max weight, kg.	1500	2500
Volume at L = 4 metres, litres	5000	7000
Volume at L = 6 metres, litres	7500	10500
Volume at L = 8 metres, litres	10000	14000
Volume at L = 10 metres, litres	12500	17500
Max intake one position, liter	500	1000
Emptying capacity, m3/hour	50/100	50/100
Static weighing accuracy, +/-g	100	100



# Small components dosing



SKIOLD small components dosing systems are used for dosing of premix and minerals, with capacities from approx. 1 kg to 100 kg per batch.

The system consists of either mineral hoppers and/or round dosing bins, which dose the material into a central weighing bin. The mineral hoppers and dosing bins are often filled from small bags or Big-Bags, and are available in sizes from 400 l to 1800 l.

The dosing unit is an Ø100 mm tubular auger or a flexible auger.

The hoppers can be supplied with agitator for hard flowing raw materials (e.g. fish meal). Hoppers and agitators are also available in a stainless steel edition for aggressive materials such as salt.

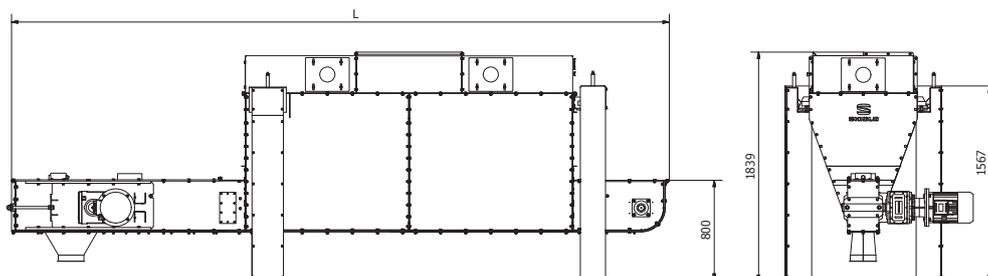
The components are proportioned and weighed out one by one, by means of 3 load cells, and are subsequently transported out by an the build-in chain conveyor.

## Small components dosing - Weighing bin data WB 500

Max weight, kg.	500
Volume at L = 4,8 metres, litres (4 bins)	2270
Volume at L = 7,4 metres, litres (8 bins)	4540
Volume at L = 10 metres, litres (12 bins)	6810
Max intake one position, m3	0,3
Emptying capacity, m3/hour	50
Static weighing accuracy, +/-g	100

## Small components dosing - Weighing bin data WB 300

Max weight, kg.	300
Volume, litres	870
Max intake one position, m3	0,25
Emptying capacity, m3/hour	17,5
Static weighing accuracy, +/-g	100



# Micro dosing



SKIOLD micro dosing plants are used for dosing of vitamins, minerals, and premix, in capacities from few kilos up to 100 kg per batch.

Our standard plant consists of 3 sections, each with 7 bins (2 pcs. 300 l. and 5 pcs. 150 l.). In reality, these numbers often vary due to customization. The bins are available with agitator for hard flowing materials, and in a stainless edition suitable for aggressive materials.

Apart from the dosing bins, the plant consists of a platform for suspension of the bins. The dosing units are mounted in the bottom of the silos, and dose the material, by means of an Ø100 centerless auger, to the weighing bin placed under the silos.

## Micro Dosing - Scale data:

Type	Hopper volume	Static capacity	Weight filling capacity, l/min.	Static weighing accuracy
MD 100	320 liters	50 - 100 kg.	2 - 4	+ / - 25 g.
MD 50	190 liters	20 - 50 kg.	2 - 4	+ / - 15 g.
MD 20	40 liters	10 - 20 kg.	2 - 4	+ / - 10 g.

# Mini dosing

The mini proportioner from SKIOLD works according to the "loss in weight" principle, and is suitable for very accurate dosing of micro components such as vitamins or acids in dry form.

The dosing unit is an Ø45 mm auger in stainless steel. The mini proportioner is typically used for dosing of a few hundred grams and up to 3-5 kilos per batch.

The basic unit consists of 1 to 3 proportioning bins. The system can be extended with additional bins, if required. One of the advantages of the mini proportioner is that it, due to its small size, easily is incorporated into existing plants.

