

DOL 9940 Feed Weigher

Technical Info



1 Product Description

DOL 9940 is a feed weigher with a portion size of 40 kg. The weigher is used in houses to ensure accurate weighing of food consumption. It consists of a dust and splash proof cabinet with feed supply at the top and feed discharge at the bottom. Inside the cabinet, a weighing container is filled and emptied based on signals from a SKOV A/S house computer. The weighing container is suspended from two load cells.

The amount of feed is controlled and calculated by a SKOV A/S house computer, to which the DOL 9940 is connected.

Two inspection panels at the top make it possible to insert four 10 kg weights to be used for calibration. This is done in connection with a calibration program in the SKOV A/S house computer.

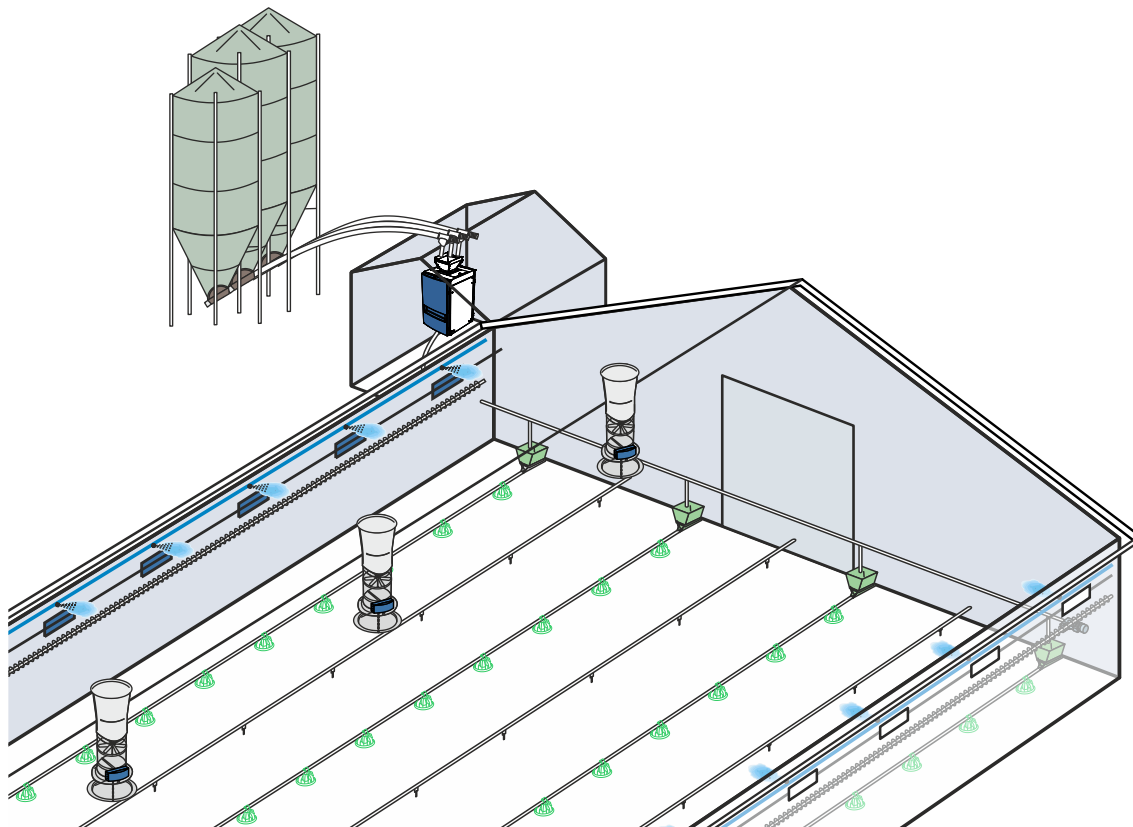


Figure 1: Principle sketch of feeding system

Removable front and rear panels facilitate internal cleaning and inspection of the function of DOL 9940.

Feed is supplied at the top of DOL 9940, possibly through an inlet funnel, which can handle feed from three or five augers/silos.

If a distribution shutter is used, DOL 9940 can supply feed to two feeding systems. The distribution shutter is a power operated shutter, which distributes feed from DOL 9940 to feed system 1 or 2.

Inlet funnels and distribution shutters are available as accessories.

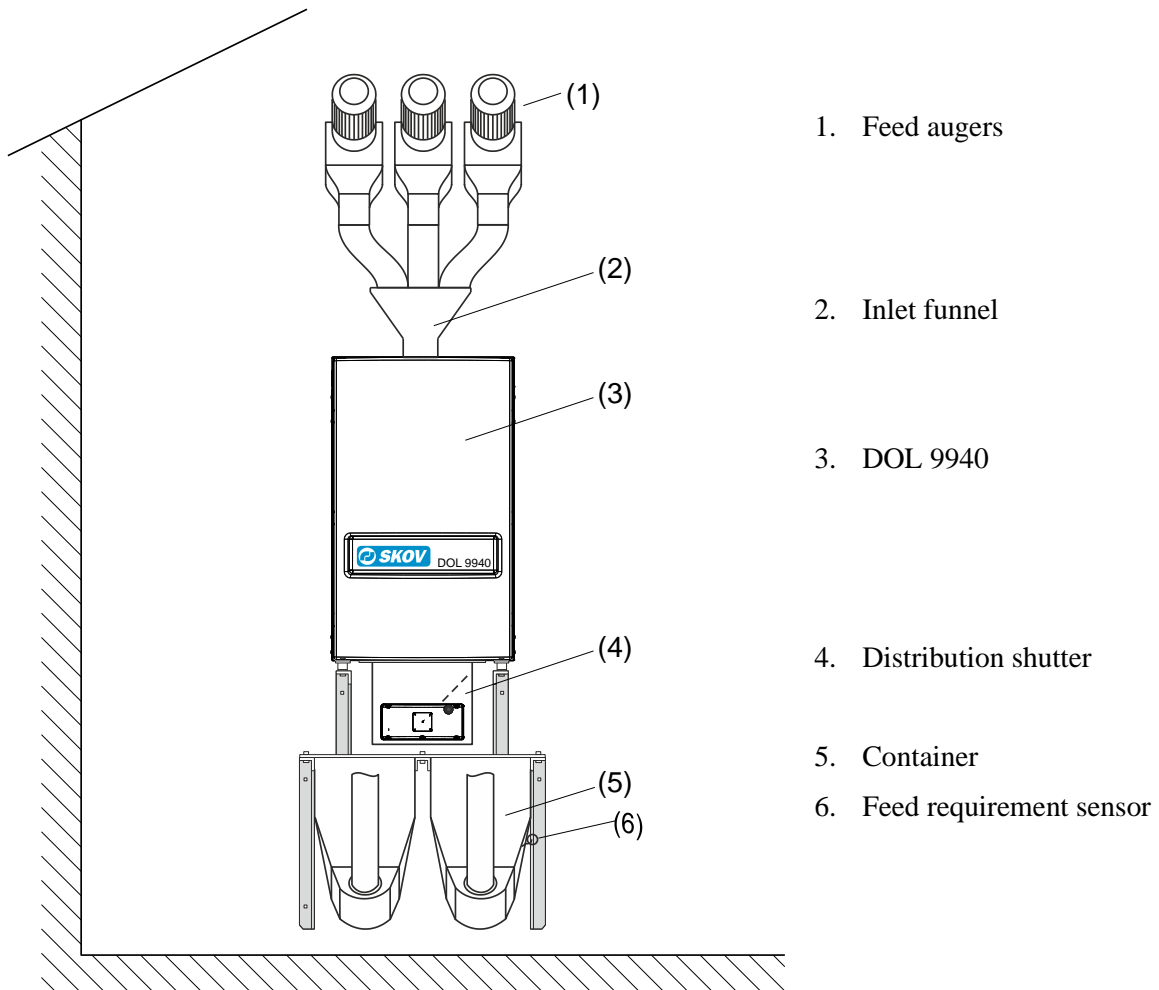


Figure 2: Mounting example for DOL 9940

2 Product Survey

DOL 9940 feed weigher



130340 DOL 9940 feed weigher

Feed weigher for accurate weighing of feed consumption in houses

Nominal voltage: 24 V DC
 Input signal: 24 V DC
 Output signal: 0-10 V DC
 Portion size: Max. 40 kg
 Capacity: Max. 7,000 kg/h with a 12,000 kg/h auger

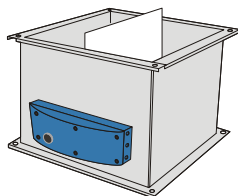
Hopper below
 The weigher: min. capacity 80 kg
 Dimensions: 1000 × 600 × 680 mm
 Weight: 84 kg
 Feed supply: 120 x 120 mm
 Feed delivery: 330 x 330 mm



130343 DOL 9940 filter kit

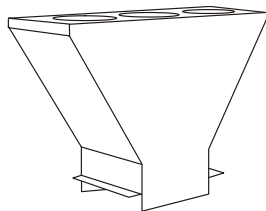
Used to avoid dust from the feed weigher.

The filter is mounted with a velcro hook strip under the front and rear cover.



132652 Feed distribution shutter for feed weigher

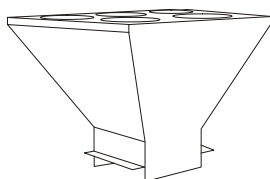
Motorised shutter which distributes the feed between two feeding systems.



132651 Inlet funnel for feed weigher, 3 components

Inlet funnel for 3 feed types.

Ø102 mm connection at the top.



132654 Inlet funnel for feed weigher, 5 components

Inlet funnel for 5 feed types.

Ø102 mm connection at the top.

DOL 9940 feed weigher



132672 Calibration weights for feed weigher, set 4x5 kg

3 Technical Data

DOL 9940

Environment

Ambient temperature, operation	-10 to +45°C, +50 to +113°F
Ambient temperature, warehouse	-25 to +60°C, -13 to +140°F
Ambient humidity, operation	0-80% RH
Protection class	IP 55 The weigher must be protected against the elements of the weather
EMC emission	EN 61000-6-3
EMC immunity	EN 61000-6-2

Mechanical Design

Materials	Cabinet and weighing container: Aluzinc plate Front and rear panels: ABS plastic Electronics: Embedded in special plastic
Appropriate for	Dry, pelleted and granulated feed for poultry
Portion size	10 – 40 kg per weighing
Minimum portion which will be weighed	8 kg
Accuracy with SKOV A/S house computer	0.50% of 40 kg over min. 1 year Independent of afterrun and deposits in weighing container
Dimensions, DOL 9940	H x W x D: 1000 x 600 x 680 mm
Dimensions, DOL 9940 packaged	H x W x D: 1100 x 700 x 780 mm
Volume, DOL 9940 packaged	0.60 m ³
Weight, DOL 9940	84 kg
Weight, DOL 9940 packaged	106 kg

Electrical Design

Load Amplifier

Nominal voltage	20 – 30 V DC
Consumption	80 – 100 mA
Reference output	9.50 – 9.70 V DC
Weighing signal output	1.00 – 6.20 V DC at 0 – 40 kg in weighing container
Linearity	0.03%

Electrical Design

Solenoid

Nominal voltage	24 V DC
Consumption	0.66 A at 24 V DC

Accessories

Inlet funnel for 3 feed types

Material	Aluzinc plate
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Dimensions H x W x D: 240 x 346 x 119 mm
 Weight, inlet funnel 2.3 kg

Inlet funnel for 5 feed types

Material Aluzinc plate
 Dimensions H x W x D: 404 x 389 x 119 mm
 Weight, inlet funnel 4.3 kg

Distribution shutter

Material Aluzinc plate
 Dimensions H x W x D: 255 x 350 x 350 mm
 Weight, distribution shutter DA 74CO 10 kg

DA 74CO

Motor 24 V DC
 Potentiometer 10 kΩ
 Running time, unloaded 70 sec.
 Running time, at max. load 85 sec.
 Max. torque 8 Nm
 Max. power consumption 0.2 A at 24 V DC
 Protection class, cabinet IP 54

3.1 Capacity Chart

Capacity, inlet equipment [kg/hour]	Capacity, 1 component [kg/hour]	Capacity, 2 components [kg/hour]	Capacity, 3 components [kg/hour]
0	0	0	0
2.000	1.800	1.694	1.600
4.000	3.273	2.939	2.667
6.000	4.500	3.892	3.429
8.000	5.538	4.645	4.000
10.000	6.429	5.255	4.444
12.000	7.200	5.760	4.800
14.000	7.875	6.184	5.091
16.000	8.471	6.545	5.333
18.000	9.000	6.857	5.538
20.000	9.474	7.129	5.714



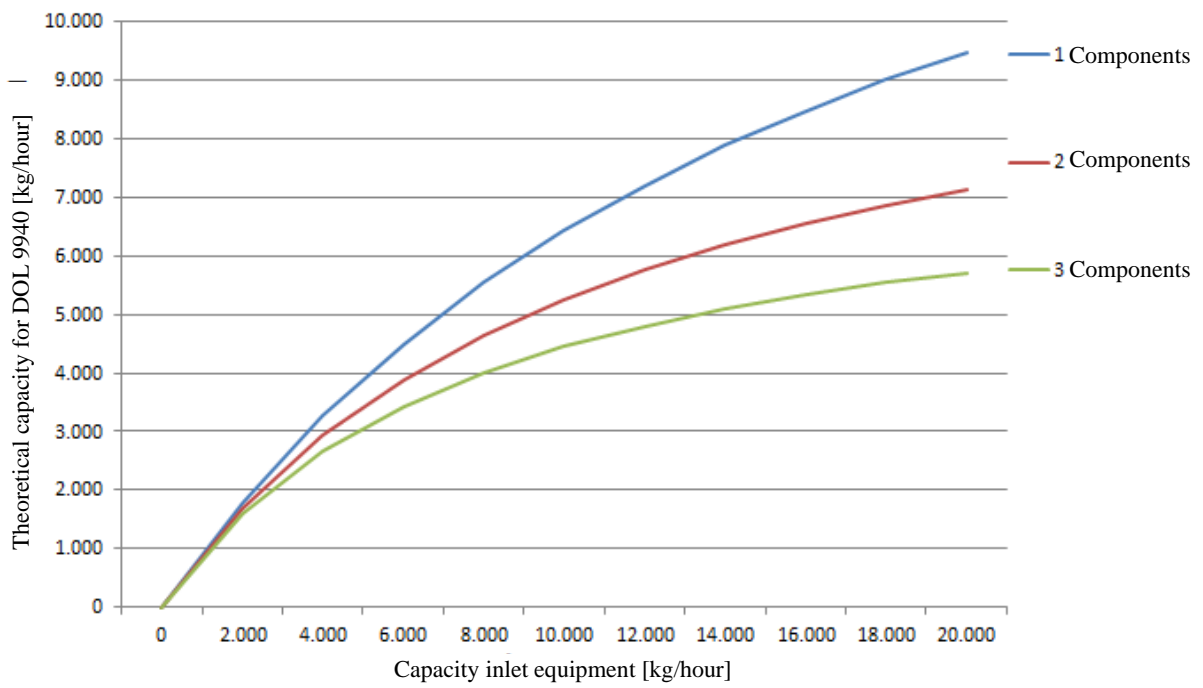


Figure 3: Capacity chart.

3.2 Dimensioned Sketches

All measurements are indicated in mm.

3.2.1 DOL 9940 Feed Weigher

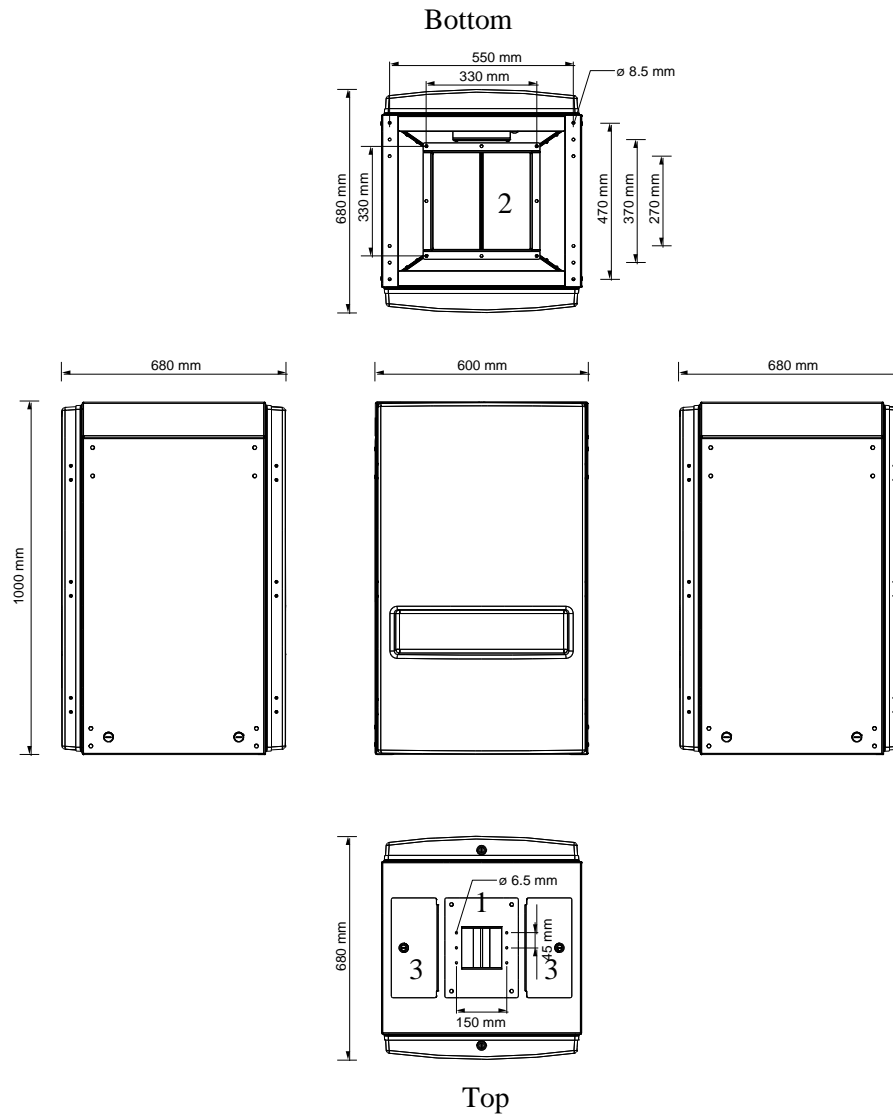


Figure 4: Dimensioned sketch – DOL 9940

1. Feed supply 120 x 120 mm.
2. Feed discharge 330 x 330 mm.
3. Inspection panels.

3.2.2 Distribution Shutter

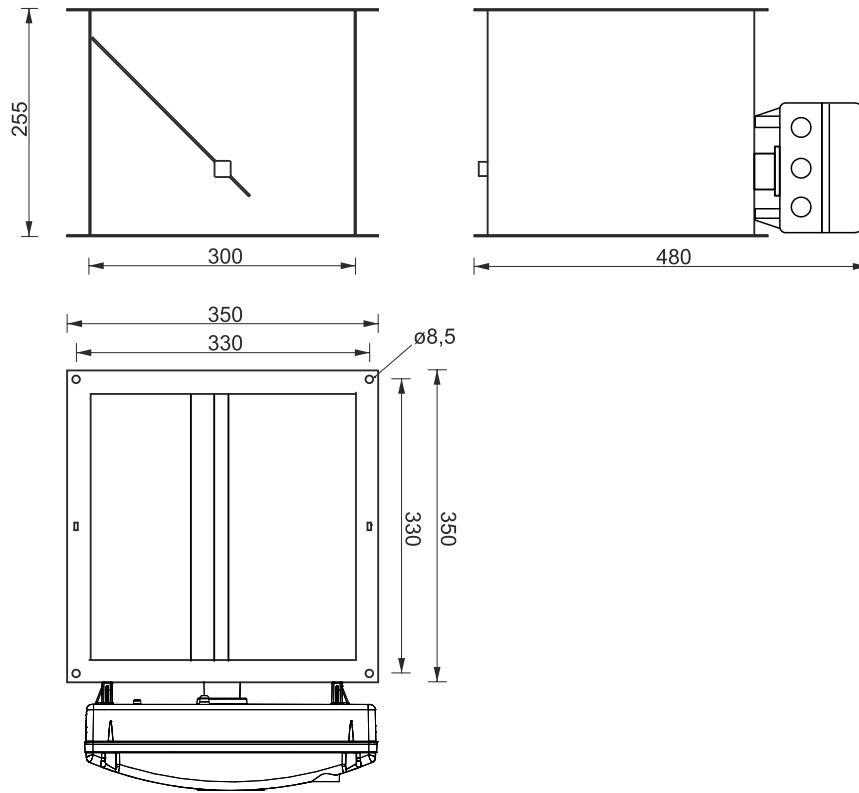


Figure 5: Dimensioned sketch – distribution shutter

3.2.3 Inlet Funnel for 3 Components

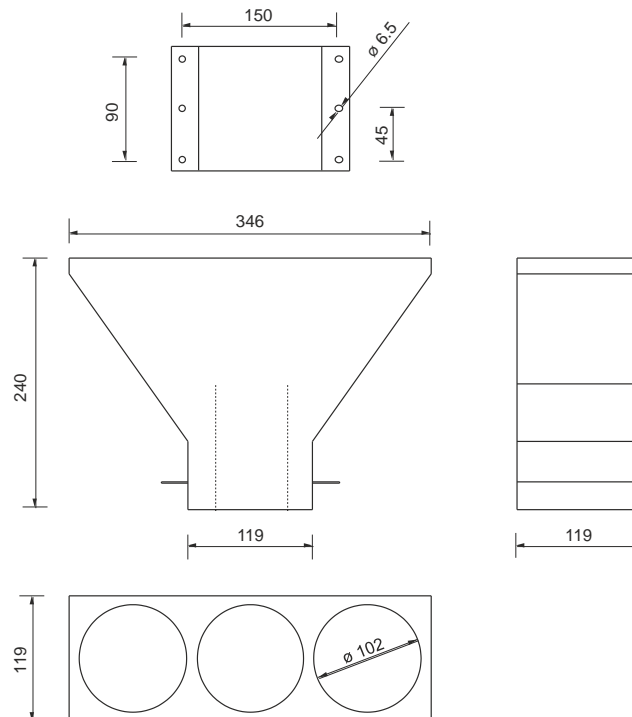


Figure 6: Dimensioned sketch – inlet funnel for 3 feed types

3.2.4 Inlet Funnel for 5 Components

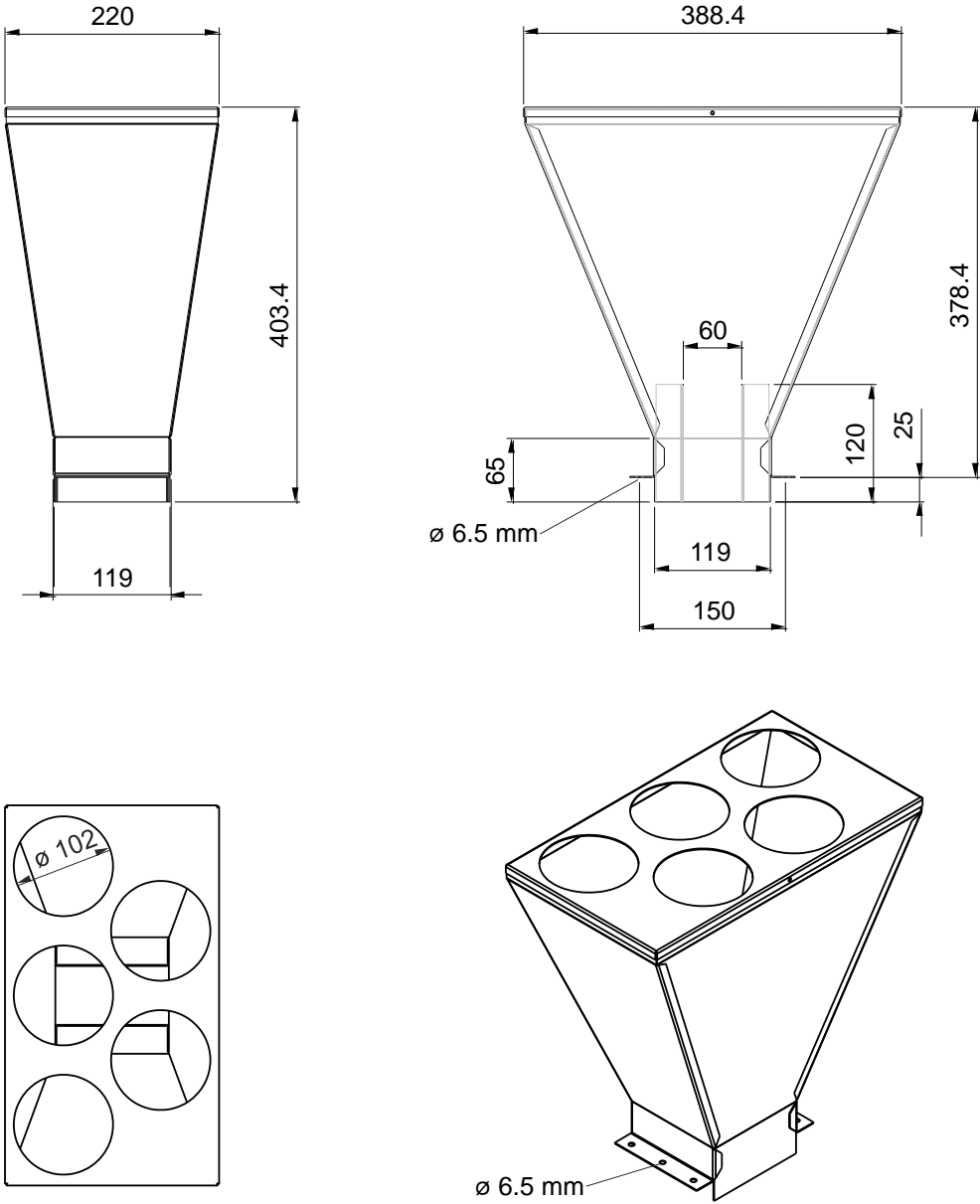


Figure 7: Dimensioned sketch – inlet funnel for 5 feed types

