# Realized projects - LIW systems

Advanced weighers and weighing systems for static, dynamic and continuous weighing





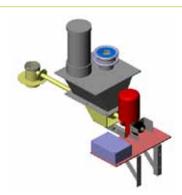
#### LOSS-IN-WEIGHT SYSTEMS WITH SCREW DOSING

#### VDI/EE with T-20 screw

Construction : 103495
Product : Soy products
Density : approx. 0.7 kg/l
Capacity : 2-5 kg/h
Hopper volume : 8 litres gross

Hopper+screw in stainless steel, with replaceable filter cartridge.

Weigher is mounted on 30 kg single-point loadcell.



#### VDI/EE with agitator and T-30 screw

Construction : 100382 (with filter 100585)

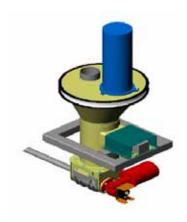
Product : Milk mineral
Density : approx. 0.6 kg/l

Capacity : 10 kg/h

Hopper volume : approx. 30 litres Hopper+screw in stainless steel, with agitating ring around screw.

Hopper+screw is suspended in weighing unit,

carried out as a single-point loadcell.



#### VDI/EE with T-20 Screw

Construction : 201382

Product : Powder

Density : 0,5 t/m³

Max. Capacity : 0,2-5kg

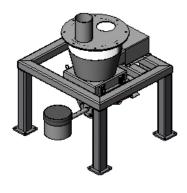
Min. Capacity : 5-20 kg/h

Hopper volume : 12 litre

Static weighing accuracy +/- 2 g

Dynamic weighing accuracy± 2 %

in the area 20-100% of flowcapacity.





#### VDI/EES

Construction : 070205-1 Product : Powder

Density :

Capacity : 200-1000 g/h

Hopper volume : 10 l

Weigh bin is suspended in a Hottinger single-point load cell

mounted on a frame construction.



#### VDI/EE with 0350 scraper bottom

Construction : 104967

Product : Polymerpowder

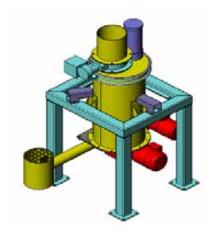
Density : o,8 t/m³ Capacity : 180 kg/t Hopper volumE : 62 l

Weigh bin is carried out in 2,5mm AISI 304 Steel plate.

0350 mm scraper bottom, 0350 x 650 mm silo,

Tetratex filter EN 100, Gear motor, optic electronic incremental encoder.
Weigh bin is suspended in 3 pcs. stainless

Hottinger load cells.



#### VDI/EE with T-114 Screw

Construction : 105140 Product : Cement

Density

Max. Capacity : 400 kg
Hopper volume : ca. 300 litre
Static weighing accuracy ± +/- 2 g
Dynamic weighing accuracy± 1 %
in the area 20-100% of max. capacity.





### LOSS-IN-WEIGHT SYSTEM WITH SCRAPER **BOTTOM AND SCREW**

#### VDI/EE with 0350 scraper bottom

Construction : 101815

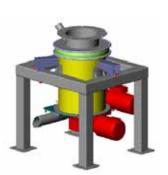
Product : Natriumhydroxide (Soda powder)

Density : approx. o.64 Capacity : 250 kg/h Hopper volume : approx. 30 litres

With 0350 scraper bottom and T-60 dosing screw.

Weigh bin is suspended in 3 pcs.

stainless Hottinger loadcells Z6C3-200 kg.



#### VDI/EE with 0550 scraper bottom

Construction : 100335

Product : Flours/powdered goods Density

: approx. o.5 kg/l : 500 kg/h Capacity Hopper volume : approx. 180 litres Weigh bin is carried out in 3 mm steel plate

mounted with 0550 scraper bottom and

T-100 dosing screw.

Weigh bin is suspended in 3 pcs.

stainless Hottinger loadcells type Z6C3-200 kg.



#### VDI/EE with 0700 scraper bottom

Construction :102206

Product Density

Capacity : 0.5-0.6 t/m<sup>3</sup> Hopper volume : 300-3500 kg/h

Price (approx.) : 400 litres With T-168 dosing screw. Weigh bin is suspended in

3 pcs. stainless Hottinger loadcells.

Weigher is mounted with flexible connection in in- and outlet. Ventilation to cartridge

filter mounted on lid.





#### VDI/EES-700 with 0700 scraper bottom with rubber insertion

 $\begin{array}{lll} \text{Construction} & : 103275 \\ \text{Product} & : \text{Flour} \\ \text{Density} & : 0.7 \text{ t/m}^3 \\ \end{array}$ 

Capacity (max.) : 7 t/h (nominal 4.5 t/h) Hopper volume : approx. 700 litres

Carried out in RAL 1013,

product-affected parts in Hardox.

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#### VDI/EE with 0700 scraper bottom

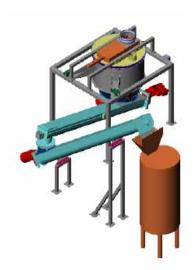
Construction : 102460

Product :

Density :Grinded wheat Capacity : approx. 0.5

Hopper volume : 2000-6000 kg/h at 80 Hz

Weigh bin 01000 mm carried out in 3 mm steel plate, mounted with 0700 scraper bottom and 400 mm high lifting screw, mounted with 2.2 kW gearmotor, with outlet to T-200 dosing screw L2800 mm, mounted with 1.5 kW gearmotor, and optic electronic incremental encoder. Weigh bin is suspended in 3 pcs. stainless Hottinger loadcells type HLC3-550 kg. Incl. flexible transitions in in- and outlet, lid with 0154 connecting branch for deaeration.



#### VDI/EE with 01200 scraper bottom and replaceable screw

Construction : 103430
Product : Fish feeds
Density : 0.5-0.6 kg/m³
Capacity : 1.5-15 t/h
Hopper volume : 1600 litres

Specially developed for dosing of arbitrary products.

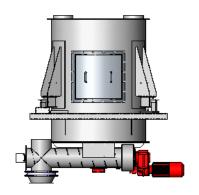
Consists of a weigh bin, 2 ventilation pipes,

T-250 pipe dosing screw, 01200 scraper bottom, a lid and a rack.

Cleaning-friendly construction;

the screw can easily be pulled out.

Cone and scrapers loosened inside the hopper.





#### VDI/EE with T-200 screw

Construction : 101300

Product : White dust for oven

Density : 0,45

Max. Capacity : 5000 kg/t at 80 Hz
Min. Capacity : 500 kg/t at density 0,45.
Hopper volume : approx. 1500 litres

Weigh bin is suspended in 3 psc. stainless Hottinger loads cells type HLC 1100 kg. Mounted on square RHS frame construction, Bin top mounted with flange prepared for Ø300 filter, mounted with Ø150 mm connecting branch. Carried out in stainless scraper bottom ST37.



#### VDI/EE

Construction : 104960

Product : Fish feed

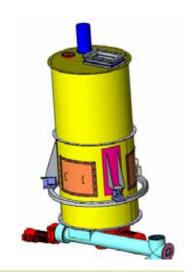
Density : 0,5 kg/m³

Max. Capacity : 16 t/h

Min. Capacity : 2 t/h

Hopper volume : ca. 3500 litres

Carried out i stainless steel. Weigh bin is suspended in 3 psc. Stainless Hottinger load cells mounted on a frame construction.

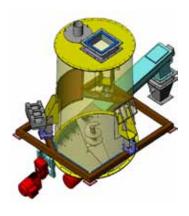


#### VDI/EE with scraper bottom

Construction . 101300
Product : White dust
Density : 0,45 kg/l
Capacity : 100-1000 Kg/t

Hopper volume : 1500 |

Weigh bin is suspended in 3 psc. Stainless Hottinger load cells type HLC 1100 kg. Mounted on square RHS frame construction.



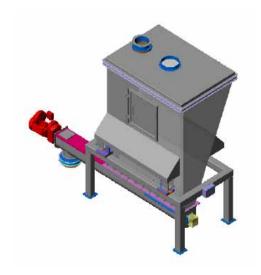


#### VDI/EES-1500 with SU-200 screw

Construction : 100560
Product : Flour
Density : ca. 0,6
Capacity : 25 t/h

Hopper volume : approx. 2400 litres

The bin is suspended in 3 psc. Stainless Hottinger load cells type HLC 1100 kg. Top with ventilating branch mounted with pneumatic butterfly valve.



#### VDI/EE with T-150 screw

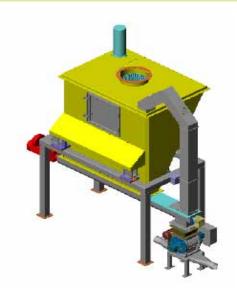
Construction: 103680

Product : Magnesium hydroxide granulate

Density : Approx. 1,4 kg/l Max. Capacity : 4000 kg/h Min. Capacity : Approx 1200 litres

Hopper volume : 1500 kg

Weigh bin is suspended in 3 psc. Stainless Hottinger load cells type HLC-3 1760 kg. Top with 0150mm ventilating branch, and equalizing pipe from dosing screw. Outlet 0200 with flex connection.



#### VDI/EE with T-250 screw

Construction: 191933

Product : Aluminium oxid and crushed bath

Density : 0.9-2.0 kg/l
Max. capacity : 45 t/h v/120 Hz
Min. capacity : 2 t/h v/5 Hz
Hopper volume : approx. 1000 litres

Weigh bin is suspended in 3 pcs. stainless Hottinger loadcells HLC-3 1100 kg.

Lid with flexible connection and 0200mm crankcase breather.





## LOSS-IN-WEIGHT SYSTEMS - APPROVED ACCORDING TO ATEX 9 BAR

The weighers are developed to weigh substances, which can create an atmospheric explosion inside the weigher in shape of inflammable dust. Therefore, special components have been used to make the weigher explosion proof.

#### VDI/EE - for 9 bar

Construction : 101680

Product : Coal dust

Density : 0,5-0,6 t/m³

Capacity : 20-150 kg/h

Hopper volume : Approx. 160 l

Inlet funnel DN 150 with DN80 crankcase breather

(excl. quick closing valve). Refilling speed: approx. 1,5 t/h.

There are 2 potentiometers between inlet funnel and weigh bin

The upper potentiometer is for absorbation of temperature extensions from feeding pipe,

without affecting the weigher.

The lower potentiometer is to secure

flexible connections to the weigher and

to absorb the variations in temperature extensions

between weigher and rack.

With T-60 dosing screw for 9 bar and

PAM sluice type 5/220UL for blowing transport.

Weigh bin is carried out as a pressure tank for 9 bar,

mounted with 0550 mm scraper bottom with 300 mm lifting screw.

#### VDI/EE – for 9 bar

 $\begin{array}{lll} \text{Construction} & : 103900 \\ \text{Product} & : \text{Coal dust} \\ \text{Density} & : 0.6 \text{ t/m}^{33} \\ \end{array}$ 

Dosing capacity : 50-250 kg/h, nominal 1200 kg/h

excl. electronics and lock

Inlet funnel DN150 with DN80 crankcase breather

Refilling speed: approx. 1.5 t/h

There are 2 potentiometers between inlet funnel

and weigh bin, intended for 9 bar.

Weigh bin is carried out as a pressure tank, AISI 304,

mounted with Ø550 mm scraper bottom with 300 mm lifting screw.

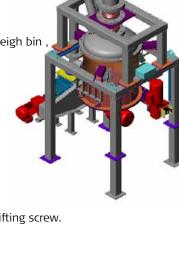
Carried out with T60 dosing screw in AISI 304, for 9 bar, gearmotor approx. 1.1 kW 90 r/min. for 9 bar iin outlet with

flexible connection to inlet funnel to PAM sluice.

Further Ø100 ventilation pipe back to weigh bin.

This flexible connection is carried out

with safety covering in case of an explosion.





#### VDI/EES-150 RF for 9 bar

Construction : 102490/102495
Product : Coal dust
Density : 0.5 t/m³

Dosing capacity : 20-150 kg/h, nominal 80 kg/h

Hopper volume : Approx. 160 litres

Inlet funnel DN150 with DN80 crankcase breather.

Refilling speed: approx. 1.5 t/h.

There are 2 potentiometers between inlet funnel and weigh bin

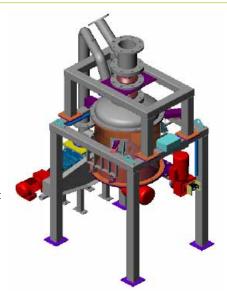
Weigh bin is carried out as a pressure tank for 9 bar,

mounted with 0550mm scraper bottom with 300mm lifting screw.

2 pcs. T6o dosing screws for 9 bar, gearmotor approx. 0.5 kW 6o r/min. for 9 bar in outlet

with flexible connection to inlet funnel to PAM sluice.

This flexible connection is carried out with safety covering in case of an explosion.



#### VDI/EE for Coal dust -for 9 bar

Construction : 101680.

Product : Coal dust

Density : 0,5 t/m³

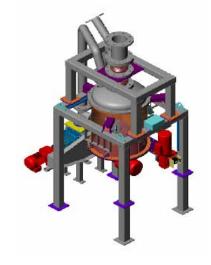
Capacity : 100-500 kg/t

Hopper volume :160 l

Weigh bin is suspended as a pressure tank for 9 bar,

mounted with 0550 mm scraper bottom with 300 mm lifting screw

Gearmotor 1,5 kW 380 volt.



#### VDI/EE explosion-proof to 9 bar

Construction 101055

Product

Density Flesh- and bone meal

Capacity 0.5

Price (approx.) 5 t/h

Weigh bin in 6mm stainless steel. 01200mm scraper bottom in 25mm steel St.37 With pipe dosing screw 0273x10 mm in St.37.

Weigh bin is suspended in 3 pcs. stainless loadcells incl. fittings,

mounted on a frame construction.

Frame construction is suspended in loft, and carried out in St.37.





## LOSS-IN-WEIGHT SYSTEMS -FOR GRAIN- AND FEEDSTUFF

#### Colourpigment system

Construction : 102600

Product : Colourpigment

Dosing capacity : max. 100 kg/h, at 50 Hz

Hopper volume : 8 litres

Dosing speed : approx. 3 kg in 2 min.

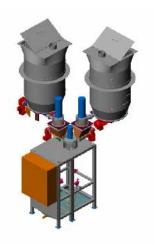
Dosing screw T-45 spiral screw

Weigh bin and screw with flex to inlet flange and

special crankcase breather filter.

Weigher is mounted on a 50 kg single-point loadcell

Dosing chamber with lid.



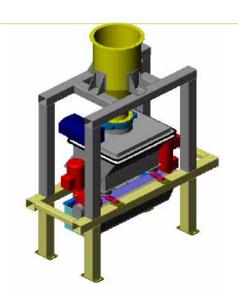


#### POWDER DOSING ROLLER SYSTEM

#### Dosing roller system, width 700 mm

Construction : 102630
Product : Powder
Capacity : 20-200 kg/h
Roller width : 600-700 mm

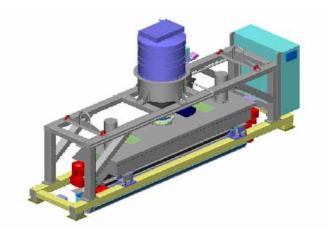
1 pc. stainless weigh bin mounted with special dosing roller in sturdy material, for constant powder doing in roller widt, 600mm. Heating of roller to approx. 40°C. Frame construction for suspension of weigh bin in 3 pcs. loadcells. Prepared for motor-driven roller brush of dosing roller.



#### Dosing roller system as loss-in-weight system, width 1200 mm

Construction : 103011
Product : Powder
Capacity : 100-1200 kg/h
Roller width : 2200-2300 mm

Powder spreading over entire roller width: by measuring each 50mm in width  $\pm$  2%. Weigh bin consists of a stainless roller. Heating of roller to 40°. Weigh bin is mounted with 2 pcs. stainless distributor screws. Weigh bin is suspended in 3 pcs. loadcells. Roller brush for air distribution and for manual cleaning of dosing roller.







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