

Volkmann Weighing and Dosing Systems



Systems and Solutions for the
Hygienic and Safe Handling of Powders
for the Chemical, Food,
Pharmaceutical and Pigment Industries

Weighing and Dosing Systems



Wall Mounted Conweigh

The Conweigh dosing process

- 1 After entry procedure the weighing starts automatically. Scale tares, i.e. takes the start value, display is set to zero. The duration of this process is defined by the material parameter "Settling time."
- 2 Activation of Multijector® Vacuum Pump.
- 3 After reaching the filling target value (*) or the recipe target value the Multijector® Vacuum Pump is deactivated and the net weight is taken and shown (second "Settling time.")
- 4 The discharge valve is opened, the piston vibrator is activated and the vacuum conveying system discharges.

Steps 1 to 4 are repeated until the requested recipe target value is reached.

*The weight accumulation operates with the maximum possible filling target value until one charge before reaching the recipe target value. The residual amount is then conveyed in several charges (if necessary). This way it is ensured that the residual amount is definitely below the maximum possible filling target value.

Conweigh

The Volkmann Conweigh gravimetric weighing system allows users to accurately weigh the amount of product being transferred to (gain-in-weight) or from (loss-in-weight) process points in the conveying system.

Designed to be used in conjunction with Volkmann's VS and PPC series of vacuum conveyors, these systems provide accurate batch weighing for processes such as feeding a mixer with solids according to a specified recipe, initial weighing of delivered raw material, unloading smaller batches from big bags, weighing of the receiving stirrer vessel and measured conveying and weighing to ensure batch quality.

Conweigh's accuracy in weighing is typically at +/- 1%, but often exceeds this. Accuracy is a function of the application, batch size, installation and process. Testing is recommended to verify accuracy.

These systems can greatly improve production outcomes by registering weight within +/-1% or better, allowing adjustments to be made to avoid weight gains or losses during transfer. By utilizing a three-step weighing process, they eliminate errors that can occur due to the build up of material on filters, and other system parts.

Available in three systems:

- Loss-in-weight at the conveyor feed point from Bulk Bag Unloaders, hoppers or bag dump rip and tip stations
- Gain-in-weight at the vacuum receiver prior to discharge into the process
- A controlled release, dosing weight discharge from the receiver via 4" or 6" stainless steel rotary valves using a floor scale or similar device

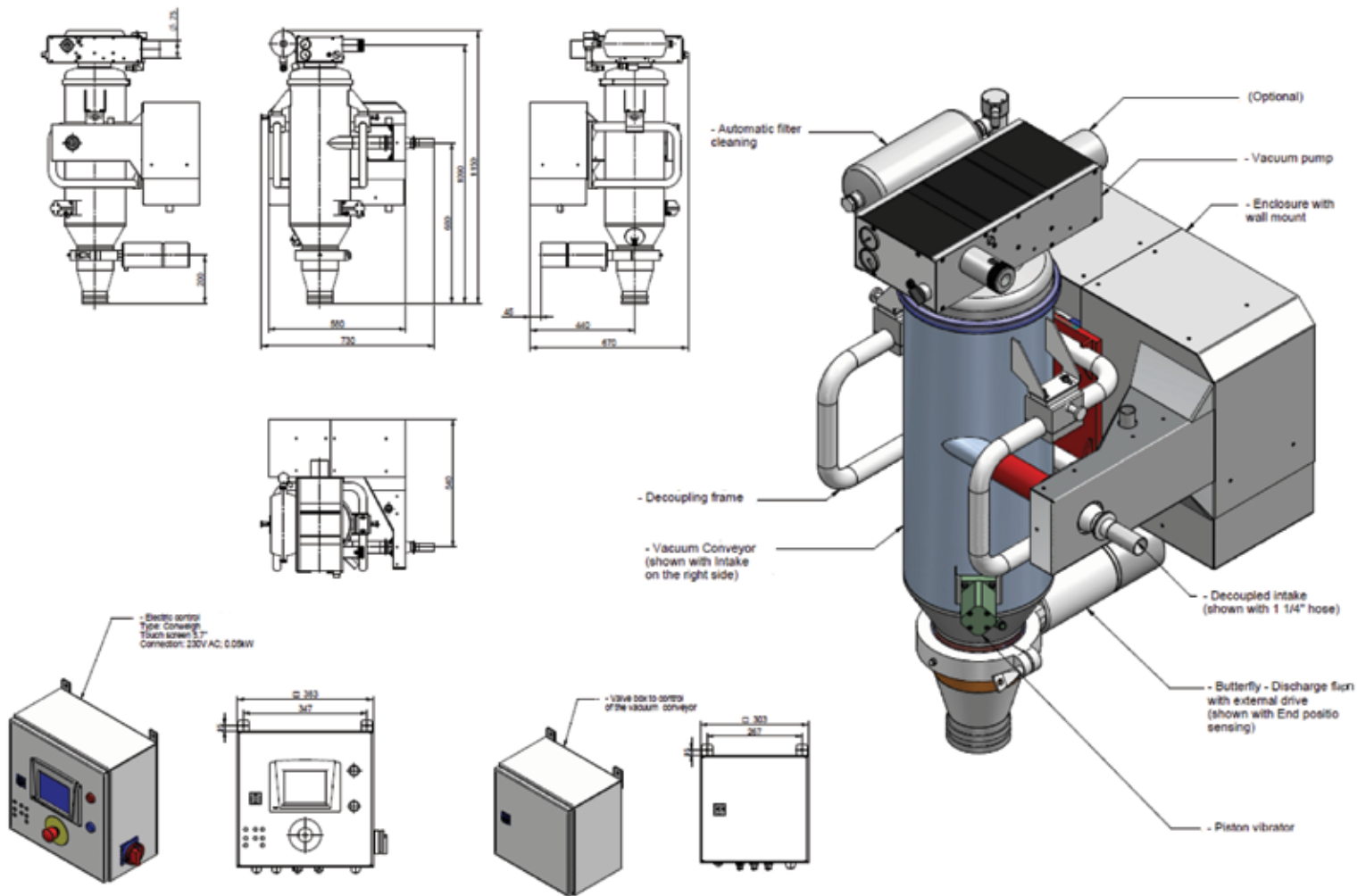
Single, three and four loadcell configurations are available depending upon application with 110v, or 240v options as well as interfaces with SCADA and other data collection systems.



Conweigh Example (Recipe Target Value):

Recipe target value: 22.0 kg
Filling target value: 2.5 kg
This would result in 8 charges with 2.5 kg and 1 charge with 2.0 kg

Weighing and Dosing Systems



Volkmann Vacuum Conveyors



All Volkmann Conweigh Systems function seamlessly with Volkmann Vacuum Conveyors to provide dense phase vacuum conveying without segregation, damage or abrasion. With Volkmann conveyors and unloaders, you can optimize material flow from the supply side to the downstream packaging operation. When used with a level-controlled buffer hopper, Volkmann conveyors can transfer from as little as 10 lbs./hr. to 6 tons/hr. over distances up to 200 feet, all in dust-free, operator-friendly, and healthy conditions providing sanitary, safe, trouble-free conveying. Choose Volkmann for the optimal transport of powders, granules, food particles, pellets, capsules, tablets and other bulk materials.

