AZO Systems

AZO COMPONENTER[®] Step Automatic weighing of minor and micro components

Automatic weighing with gram accuracy

Maximum product safety thanks to tracking & tracing

Consistent, strict adherence to formulation

High throughput rates thanks to full automation

Expand with further modules

SYSTEMS



Preferred applications

Minor components are often weighed in manually, thus entailing risks and potential errors. These increase with the number of components and batches, and with the required weighing and dosing accuracy. This has an adverse effect on product safety and quality overall.

Manual operations require operators and demands a high degree of concentration from them during weighing processes. They are to some extent exposed to relatively high amounts of dust. The solution is called AZO COMPONENTER® Step. The system makes it possible to weigh minor and micro components automatically with gram accuracy, such as pigments, colourings, flavouring agents, additives, active agents etc. Individual products can be weighed as well as complete batches can be prepared. Series production with the same recipe or individualized production with different recipes are possible.

The system improves product

safety while at the same time increasing production efficiency by minimizing manual work steps.

It can be used in the food, pharmaceuticals, chemicals and plastics industries. Especially when it comes to sectors with stringent requirements for hygiene, batch purity and product separation, the AZO COMPONENTER® Step enables adherence to the strict regulations and requirements of specific branches.



Special advantages

- Maximum product safety thanks to tracking & tracing
- Process steps and weighing results are reproducible
- Consistent, strict adherence to formulation
- High levels of accuracy and cycle times
- Rigorous batch separation, resulting in prevention of cross-contamination
- Observance of recipe secrecy
- Expandable with further modules, providing flexibility when changing over products

- High throughput rates thanks to fully automatic filling and transportation within the plant
 Allows effective production
- planningLess outlay for cleaning thanks
- to storage and target containers for specific product groups
- Target containers can be provided with liners if needed
- Compliance with stringent hygiene requirements achieved by:
 - filling the components into containers and
 - minimum exposure to dust through use of aspiration
- Reduction of physical strain and mental stress in staff



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Description of system

The system comprises two levels. The components are held ready in raw material storages on the upper level. Prior to manual filling, the raw materials can be identified using the barcode and allocated to the correct hoppers. This rules out mix-ups of products and ensures that raw materials can be traced back. The raw material storage can be filled from sacks or big bags; pneumatic filling is also feasible. The target containers are positioned below the dosing points using a pneumatic drive. After the product is dosed with the quantity determined in the recipe, the target container is transported one step forward to the next dosing point. There are separate scales provided for each component. Simultaneous weighing of components results in maximum time gain. Dosing screws combined with vibration bottoms underneath the raw material storage ensure accurate dosing of components being handled. A vibrating chute can also be used for dosing.

Once all components are in the target container in accordance with the recipe, it is unloaded at the end of the dosing line and is ready for the next process.

The target containers are tracked using identification technology and are thus monitored throughout the entire weighing and dosing process. This means that the position, the weighed components and also the allocation of the target containers to a particular recipe are documented and are reproducible.





Target containers are placed into the dosing line



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Individual scales enables simultaneous weighing

The design is subject to change due to our continuous improvement program.