

## ManDos for product feeding to mixer containers

### Operator-guided and documented filling of container mixers - including tracking and tracing

**Mixing container documented filling**

**Easy and clean Handling**

**Quick cleaning at product change**

#### The task

Speed, flexibility and safety are of decisive significance in modern production processes. Particular importance is placed on freedom of contamination and ease of cleaning. Containers and other interchangeable containers as well as container mixers are especially suitable for this task. The control of such facilities presents new challenges for the process control system.

The key challenges are:

- Low-dust and ergonomic filling of containers
- Reliable weighing true to recipe
- Documentation of weighing process
- Ensuring effective tracking and tracing

#### Customer benefits and advantages

With the combination of a container mixer system and a PC supported weighing system you gain all advantages of manual weighing whereas the disadvantages are minimised. Guidance of the operating personnel as well as monitoring and documentation of the process are of decisive importance as, despite the flexibility, the final customer demands complete tracking and tracing.

## THE INNOVATION



#### The solution

A special AZO weighing table combined with the ManDos manual weighing system is the optimum solution for weighing ingredients into the mixing container. The AZO weighing table makes it possible to fill the containers with the larger recipe components by simply and ergonomically emptying bagged products into the containers. The product is weighed directly by floor scales, on which

the container is positioned. Micro quantities such as pigments can be weighed on a second set of scales with extremely high resolution in order to achieve the required degree of accuracy. Every weighing operation is monitored and documented by the touch screen PC, thus ensuring automatic tracing. Recipe tolerances are, of course, closely monitored.

Registering raw material batches by barcode reader and labeling the filled containers are a further option. Both the AZO weighing table and the floor scales can be adapted to the various sizes and volumes of the mixing containers, thus taking into account the specific requirements of every customer.

## Integration in an in-company IT system

The ManDos manual weighing system can be operated as a stand-alone solution, providing the full scope of user-guided weighing functions and their documentation. ManDos can, however, also be integrated in a process control system or linked directly to the in-company infrastructure.

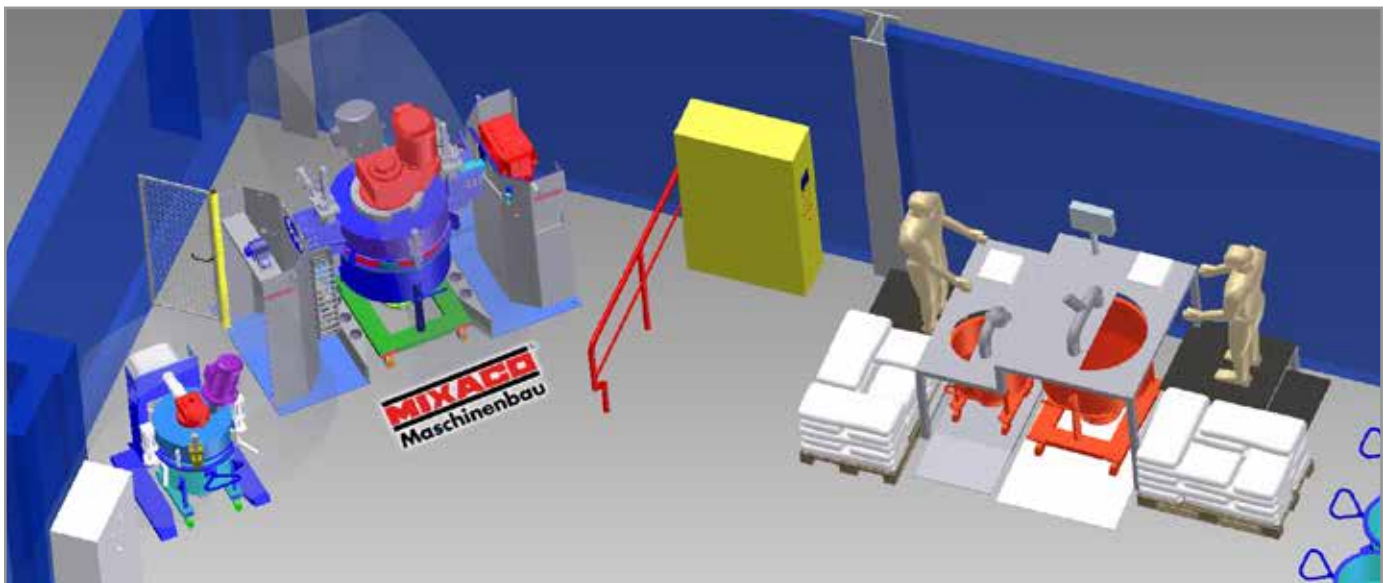
The overall system can thus also be linked to an ERP system such as SAP to make available transparent order and stock data throughout the company. The HostLink interface module is used for this purpose.

Automatic data flow and therefore the avoidance of unnecessary and error-prone manual input guarantees a high level of reliability and efficiency.

Linking ManDos to the KASTOR process control system enables manual weighing operations, monitoring of the mixing process as well as integration in further processing steps such as extrusion.

Such configuration facilitates continuous container management with monitoring of cleaning cycles, avoidance of cross contamination, complete tracking and tracing as well as monitoring of the entire production process.

The result is optimum process control from the weighing operation through to the end product. In addition, the system meets the most stringent requirements in terms of tracking and tracing, thus making it ideal for even the most demanding automatic applications.



## Clean and tidy

An extractor immediately eliminates any traces of dust that may escape from the container while weighing in products via the weighing table.



The dust load for the weighing personnel is therefore reduced to a minimum.

## Ergonomics

The floor scales are designed with a low ride-on height of approx. 40 mm. A ramp is provided for easy access. Alternatively, the scales can, of course, also be flush mounted in the floor to make them even more convenient to use.

To ensure the operator works at the optimum working height, steps can be used for weighing products into larger containers. For this purpose, a lifting table can be used to raise the raw materials to the same level as the table, thus providing optimum workplace..



## Conclusion

Pairing the ManDos manual weighing system with a weighing table for filling containers creates the perfect combination of workplace ergonomics with the advantages of user-guided, documented manual weighing.