



# Speed, preciseness & reliability

AZO, A TRENDSETTER IN AUTOMATIC HANDLING OF RAW MATERIALS AND INGREDIENTS WILL SHOW HACCP-COMPATIBLE SOLUTIONS FOR FOOD PRODUCTION

## AZO at the IBA

Hall B3, stand 338

AZO exhibits at the IBA 2006:

- + Raw material and ingredient automation
  - + HACCP screening
  - + Big bag discharge systems
  - + Intelligent modules
- [www.azo.de](http://www.azo.de) +++



++ figure 1  
Possible arrangement of AZO components

++ figure 2  
DOSINENTER®

++ figure 3  
Batch dosing

For the first time in the world, AZO as a pioneer in the automation sector for ingredients will show at this “world exhibition of baking” an AZO COMPONENTER® in combination with an AZO DOSINENTER® meeting among others the new ATEX guideline with the ShuttleDos® unit. In the AZO COMPONENTER®, the major components (mainly flour) are removed from the silos with a vacuum weighing system with integrated diverter valve. The medium components are provided by big bag discharge stations and the minor components by bag dumping stations. All components are collected according to formula and precisely weighed in into a mixing unit. The first type

of a ShuttleDos® was a moveable floor scale. After the conversion from a floor-standing scale into a hanging version, the ShuttleDos® system now allows a fast batch preparation without ground contact.

The DOSINENTER® consists of several dosing places, all equipped with DosiBox®es. This is the new way of low-cost automation of minor components. Batches can be prepared precisely weighed, according to formula. At the end, the batch containers (kneading hopper) including the precisely weighed components are transferred to the next production process, mainly kneading or mixing. Since it is not possible to show such systems under

practical conditions at an exhibition, the system will be demonstrated by AZO's subsidiary hsh using a simulation program. This simulation shows that with such a system, recipes requiring a high number of cycles that have also to meet all traceability parameters can be processed fully automatically. The complete system is controlled by a -process management system by hsh where a KASTOR program covers all relevant functions for safe control of this system.

### HACCP requirements

AZO, the specialist for cyclone screening technology will also show several concepts to meet the HACCP guidelines in the screening sector. All companies working with bakery products and food have to fulfill many requirements to ensure their due diligence. They are obliged to do their very best to show that distributed food and confectionery goods are safe and correctly labeled.

Up to the nineties it was common to ensure food safety by just checking finished goods samples. The official food control's attention was also geared to the final product. If a sample was rejected, it was difficult to find faults in the production process, because the production took place weeks ago. Therefore, the control of finished products does provide less safety because food products are rarely homogeneous and made from raw materials with consistent quality. On 1st January, 2006, the Regulation (EC) No. 852/2004 on food hygiene became effective. According to this all companies handling food products including confectionery items must have a complete HACCP system.

### Safety screening

It is recommended to have a safety screening process for many of the incoming raw materials like cocoa, milk powder etc. In this case a screener type TW 650 for safety screening

in closed pneumatic conveying systems is the best solution. A typical point for this screening is the pipeline between silo vehicle and storage silo in order to avoid contaminations such as packing residues, agglomerations, etc. before reaching the silo. Other typical points for this type of screening are right behind the product feeding stations such as feeding hoppers so that the following closed pneumatic conveying system remains free from contamination. This screener can be applied to all free-flowing and powdery bulk materials. When handling bags and big bags, safety is improved if a cyclone screener for raw materials is integrated right after the feeding hoppers or big bag discharge stations. Another recommendation is to also have a metal detection and separation device at this point. The cyclone screening technology, developed by AZO, has been a fast seller for safety screening. The special advantage of this type of equipment type is that no dosing device is necessary due to the integrated self dosing unit.

### Big bag handling

For many years now, the big bag has been an inexpensive and practical way for transportation and storage of raw materials. Handling bulk material without big bags is almost unimaginable today. For the discharge of big bags different requirements have to be taken into consideration, e.g. different sizes and designs of big bags, specifications and building situations. No matter whether bags need to be unloaded into storage hoppers or big bags are completely discharged into silos, AZO's modular technology definitely offers the best solution

### Discharge stations

AZO's range of big bag discharge systems is of modular design and can also later be extended depending on customer's ►



++ figure 2



++ figure 3



++ figure 4

++ figure 4  
Safety screening



++ figure 5

++ figure 5  
Discharge of different bags

++ figure 6  
Manual and automatic discharge of bags and big bags

++ figure 7  
Discharge stations

specifications for example if requirements and production processes change. With more than 50 years of experience in bulk material handling with various raw materials, AZO has gained a wealth of experience which ensures that the customers always get the optimum and most economical solution for their specific task.

AZO's product range includes different discharge stations. Depending on the customer's requirements, AZO has the ideal discharge station to suit their needs. As bulk materials vary e.g. in their flowability, there are different devices available to ensure uninterrupted discharge of difficult to handle products.

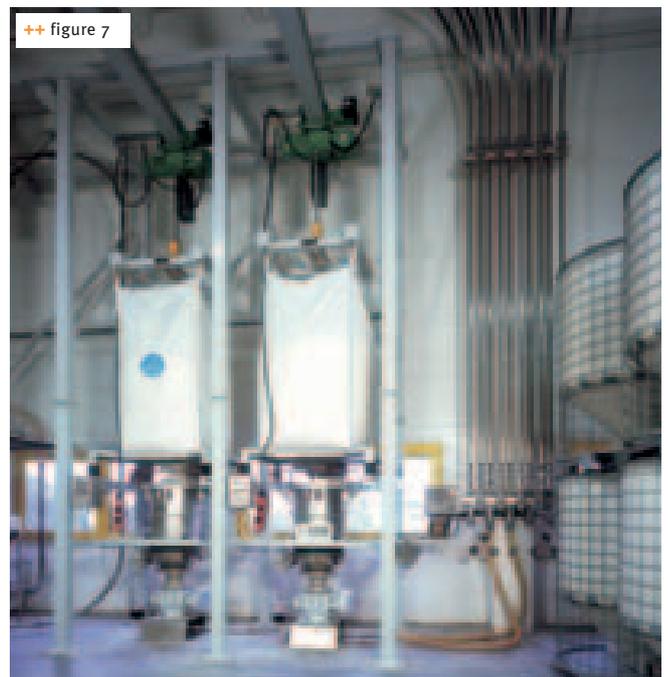
These devices include spring tension or chain hoist fastening devices, lifting devices to lower the big bag as well as a vibrating device to prevent bridging inside the hopper.

For low dust emission discharge, different connection systems are available: double ring connection systems, that are either stationary or can be lifted and lowered, and an inflatable collar. Above mentioned equipment and systems ensure constant feeding quality, reduce personnel costs, enable a transparent and traceable production of bakery products and meet all regulations and legal requirements.

**IBA 2006: Hall B3 – Stand 338 +++**



++ figure 6



++ figure 7

GET YOUR HANDS ON THE PERFECT BAKING SOLUTION

# Will you be at iba too?



**We will  
let you in  
on a secret  
at iba**

Come and visit us:  
Hall A5,  
stand 321/422

2006  
**iba**  
München  
3.10.–9.10.

[www.dfemeincke.com](http://www.dfemeincke.com)

## **Two major product launches out of the ordinary**

At the DFE Meincke stand at iba 2006 we will present two major product launches! In fact all the equipment presented at our stand will be from our new product programme.

It's still a secret what the product launches are. All we can say is that they are out of the ordinary. In all respect we promise that a visit to the DFE Meincke stand will be worth your while.

With the merged company DFE Meincke A/S you now have an even stronger supplier within the baking and confectionery industry. That we would like to celebrate at iba and inspire you with ideas on how we can contribute to the growth of your business.

Doing business is also about trust and sharing good ideas and experience. We would therefore like to invite you to have a meal or a snack with us in our restaurant at our stand.

**DFE MEINCKE**

DFE Meincke A/S Tel: +45 77 42 92 00  
Tonsbakken 10 Fax: +45 77 42 92 01  
DK-2740 Skovlunde mail@dfemeincke.dk  
Denmark www.dfemeincke.com