

# BOHLE INNOVATIV

WE DEVELOP YOUR FUTURE.

## Blending technology from Bohle

Special load bearing capacities offer different blenders to meet individual needs.



The current issue of Bohle Innovativ will show you our range of equipment in one of our core businesses: Blending Technology. Every day, there are more than 2000 Bohle blenders working for the pharmaceutical industry all over the world. As one of the world's leading



manufacturers of blenders, Bohle provides blenders featuring a variety of different load bearing capacities. In this issue of Bohle Innovativ we want to show you all this variations of our blending technology.

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Dear readers,

June 2010

The Bohle Research and Development department achieved very good results with the new KOCO® 50 continuous coater.

A number of clients have tested this newest step in innovation from Bohle. They were amazed with the coater's precision and processing speed. Due to our clients' needs, we developed a further variation of the KOCO® – a continuous-batch coater.

The processes of many pharmaceutical companies specify an increase of weight after coating from only one to two percent. Such a small gain in weight can only be achieved with a very precise coating process. To improve our precision, we increased the number

of spray nozzles. The resulting need for more drying due to the additional spray nozzles is easily provided via the ancillary systems of the coater. A batch can be loaded automatically through a valve in the surge drum within one to two minutes. The well known Bohle mixing baffles move the tablet bed gently and continuously in an axial direction. Emptying the KOCO® takes place at its back. After the coating process is finished, the KOCO® is completely discharged rapidly.

At the moment the KOCO® coating line consists of two models – the KOCO® 50 and the KOCO® 200 with a load capacity of 50 respectively 200 kilograms. The KOCO®'s fully automatic program sequence can be integrated very easily in

an existing production line. This reduces down time and increases process efficiency. The KOCO® 50 is ready for your trials now. Please feel free to test the coater in our Bohle Lab and learn more about its efficiency, precision and speed. Let the KOCO® thrill you!

Best regards



→ Continuation:

## Blending technology from Bohle

### Standard arm connection and clamps

The Bohle blender seeing the most demand in the pharmaceutical industry is still the PM series blenders, featuring the Bohle standard arm connecting to the top of the IBC via clamps. The container is docked with four electrically monitored clamps. This blender permits the use of containers with a load capacity up to 2000 liters. These containers can be docked on the blender on their own chassis frame. Another option of this blending system is to integrate a chopper into the IBC lid. The gear of the chopper is integrated in the lift arm.

The fact that you can also order a blender that is vertically swivelling provides a large number of variations. The blender can be designed exactly to the customer's needs

in every day production. Other advantages of this system are the long lifetime and the extremely low maintenance.

### Round forks on the load arm

Another popular Bohle pharmaceutical blender has two round forks on the lift arm. The container is pushed on the forks and two end caps hold it securely. During the blending process the container is lifted to its blending position and the blending system starts to turn it around until blending is complete.

### Load arm with eccentric clamps

The next type of blender Bohle provides, is a system with eccentric clamps on the load arm. During use, containers are pushed onto the forks, and held safe in place by the eccentric fork movement



in the pick-up pipes. This method is very secure, and it is most suitable for automated processes such as docking the containers from a guide rail or ATV

system. If the containers are equipped with surrounding frames, they can be docked and undocked from an inverted position. This model can also swivel vertically.

#### **Load arm with power clamps**

Another blender variety is equipped with power clamps on the lift arm. The lower frame is clamped with pressure, so it is completely tightened. It's possible to attach the clamps to the container on the frame or via support rail. The load bearing capacity can be done straight or at a 30 degree angle for existing blending processes. The system has been tested and proven in Bohle's Square Bin Blenders for many years.

#### **Load arm with hydraulic clamps**

Last but not least, Bohle can provide a blending system which features a hydraulic clamping mechanism. Containers are fixed hydraulically between a static and a moving part of the lift arm.

A control system operates different sensors, guaranteeing a safe blending procedure. The lift arm can be customized to different container types. This blending system also allows a load bearing capacity at a 30 degree angle. In combination with a lifting gear, this type of blender is extremely flexible and space-saving.

The complete range of Bohle blending systems shows the flexibility of our designs. Bohle blenders can be adjusted and used in any imaginable pharmaceutical production. No matter what kind of container you use, Bohle blenders can handle round and square containers with excellent blending results.



## **A new sieve design for granulation**

### **BTS 300/400 for the use in the compact unit**

You're already familiar with the abbreviation BTS, which stands for "Bohle Turbo Sieve." Now, BTS also means Bohle Tangential Sieve.

The BTS has a nominal sieve diameter of 300 to 400 mm. Gravity can not press material in the transfer tube, and the bottom of the sieve is closed. An impeller rotates at 60 rpm up to 150 rpm above the bottom and pushes the product through the screen, which is

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### A new sieve design for granulation

mounted inside the cylindrical wall. The air system transports the sieved product through the transfer tube to the fluid bed system where drying takes place. The BTS is 12 bar shock-resistant and the design is compact with a small footprint.

Currently, a Bohle granulation system GMA equipped with the BTS compact unit is being used for pharmaceutical granulation and drying. In the next issue of Bohle Innovativ you will get a closer look to this new development.



## International guests in Ennigerloh

On March 16 and 17, the 7th international Bohle Agent's Meeting took place at the L.B. Bohle Service Center in Ennigerloh. More than 30 agents from 24 countries attended this year's event.

During the meeting, the Bohle agents attended presentations and saw trials underway in the service center. They

also visited our manufacturing plant in Sassenberg to learn firsthand about Bohle's new products and developments for pharmaceutical processing and handling. At night, the agents had a Westfalian dinner at a restaurant near Sendenhorst. There, they had the opportunity to talk about pharmaceutical

production and the latest news from their countries with their German colleagues. "This international meeting takes place every three years, and we are very proud that so many of our agents have come to Ennigerloh again," said Thorsten Krimphove, L.B. Bohle's Marketing Manager. "It's a good chance to get the latest information about our range of products, to meet the other agents and to meet face-to-face with Bohle employees that the agents normally only get to speak with on the phone."



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