

Press Release

BEHN + BATES at interpack 2011

Plug 'n Pack design INTEGRA FD especially for the food industry

For years the Plug 'n Pack concept INTEGRA has proven its worth in nearly all industry branches for applying, filling and sealing valve bags. But still the German packaging machine specialist BEHN + BATES decided to exhibit this already well-known technology at interpack 2011. The specialty of the BEHN + BATES INTEGRA FD is its design. Particularly developed to meet the very special requirements of the food industry it has never been shown at an international trade fair before.

Key words such as explosion proofness, GMP and HACCP standards dominate daily business in the modern food industry. Putting these standards into practice means for example that any chemical reactions between material, product and cleaning agents may not occur. Any deposit of liquids, dirt and vermin must be avoided. Scratch-free and non-porous surfaces are to be applied for easy cleaning. These are some of the aspects given special consideration by BEHN + BATES in developing the INTEGRA FD design: The machine profiles are closed. The machine corners are sealed. For easy cleaning all machinery parts are suspended from the top. The even and closed machine bottom is as easily accessible as are the product ways. All supply lines are laid in special cable trays outside the critical dust area. Additionally, a special inflatable sleeve guarantees the extremely low-dust bag filling. It balloons during the filling process thus completely sealing the filling valve. Product dusts neither drop nor deposit in the machine cabinet.

These features clearly distinguishing the INTEGRA FD from commonly offered machine models will be presented by BEHN + BATES at interpack 2011. They can be seen, touched and are demonstrated in live dry-run operation.

The INTEGRA FD model at interpack 2011

The INTEGRA FD concept is a sophisticated machine design for filling valve bags according to the air or impeller filling principle. Besides the applying, filling and sealing technology its most recent version also incorporates the empty bag magazine in the compact, dust-tight cabinet.

The INTEGRA FD exhibited at interpack 2011 will be equipped with the impeller filling system used when it comes to only fill fine powders or fine-grained products such as wheat flour, cocoa powder or corn starch. The product is filled by a product-specifically chosen impeller wheel ensuring a high filling pressure. Thus, only a minimum of air needs to be added for an optimum product flow in order to avoid product blockings. In addition, the high filling pressure helps to create a good product densification. Excessive air may disappear through the bag walls. Compact, stable and easy-to-stack bags are the result.

Thanks to the low air consumption the impeller packer is highly suitable to fill – besides all common bags – hermetically tight and difficult-to-deaerate bags demanded by producers and end users in an increasing number of projects. By this, they can make sure that the filled product does not absorb humidity thus allowing for longer storage periods.

But just the filling unit does not yet reach the requested efficiency. Part of the INTEGRA FD is also the FRONTLINE automatic valve bag applicator taking the empty paper or PE valve bag out of the empty bag magazine and applying it onto the filling spout of the impeller packer in a linear motion. Special attention should be given to the innovative vertical bag magazine: It is integrated into the machine cabinet of the exhibited INTEGRA FD. Thus, the dust deposit areas are reduced once more leading to even more cleanliness in the filling area. Anyhow, the magazine being easily accessible by large-surface doors can be refilled quickly.

The demanding customer expects that the filled valve bags are closed hermetically tight. The INTEGRA FD made by BEHN + BATES closes the bag directly after the filling process by ultrasound energy. The sealing station is integrated above the filling spout meaning that the filled bag just has to be slightly removed from the filling spout

without needing any further interim movement in order to be closed hermetically tight. The tight bag closure guarantees that not only the filling unit stays extremely clean, but also all further plant components such as conveyor belts and palletizers. Wear and tear as well as cost-intensive cleaning and maintenance work are reduced considerably.

Special emphasis is consistently put on the cleanliness

Besides the optimum product protection and the appealing product presentation the hygienic packaging plays a decisive role in the food filling industries. Metal particles found in a filled food bag present a risk that has to be avoided wherever possible. BEHN + BATES will equip the exhibition plant with an additional metal detector integrated in the filling channel of the impeller packer. If metal parts are detected in the filling product, an alarm is emitted and the filling process is stopped for the bag just being packed. Depending on the project, the metal-contaminated bag is discharged either manually or automatically.

The accessories make the difference

To complete the INTEGRA FD demonstration at interpack 2011 BEHN + BATES will also present the possibility of integrating a labeller into the filling machine in order to apply labels with product and fabrication data onto each bag in an individual and clean way.

The requested product-relevant data including barcode is printed onto the labels directly. Alternatively, pre-printed labels can be used. It does not matter for which solution the customer decides: In all cases the label is applied properly and accurately always in the same position of the valve bag bottom before filling. An additional advantage is that possible dust deposits that may occur on the outer layers of the filled bags are bypassed. Dust deposits may have an adverse effect on the stability of the labels.

The conclusion

Although new bag trends are observed on the international packaging markets, Managing Director Ralf Hoevelmann is convinced that the "good old" valve bag is far away from being replaced by other bag types. It has been developed consistently thus being nowadays available in easy-to-open and re-closable versions, too.

With its INTEGRA FD design BEHN + BATES presents the possibilities of a sophisticated machine technology for valve bags that is absolutely up to date with regard to all security-relevant and hygienic standards thus meeting modern requirements of the packaging markets in the coming years, too. The user may largely benefit from filling his products into valve bags. The reasons are obvious: The valve bag is easy to handle in a clean and efficient way. Besides accurate bag weights and compact bag and/or pallet shapes it can be sealed in a secure and more especially in a hermetically tight way. The packing environment remains clean. The cleaning work is reduced. The produced cost savings are considerable. In addition, high machine outputs can be reached by one machine only.

**BEHN + BATES at interpack 2011, Düsseldorf/Germany, 12 – 18 May 2011,
hall 12, stand 12 D08/E07.**

Münster, March 2011

For further information please contact:

BEHN + BATES Maschinenfabrik GmbH & Co. KG
Gabriele Buß
Robert-Bosch-Str. 6
48153 Münster/Germany
Telephone: 0251 9796-243
Telefax: 0251 9796-260
E-mail: g.buss@behn Bates.com