

Spicing things up

Spice blend producer puts its trust in the modern bulk and powder technology of Daxner

"We have the unique flavour." The Austrian Spice blend producer Almi keeps this promise certainly. Daxner ensures the highest quality of its new production plant with modern bulk- and powder technology. This new innovative facility solution is an outstandingly efficient system. Thus, it attains a triplication of capacities and provides the competitive edge.

With the new production location in Oftring, Austria, Almi sets a milestone in the company's history. Within one and a half years one of the most modern spice blend plants emerged on an area of 30.000 square metre "on the green field". The leading producer of high quality spice preparations and special additives spent around 30 million euros in its technological advantage. Due to this investment, Almi is able to extend its expansion path and its readiness for quality and effort.

A long-term partnership

Innovative bulk and powder technology plays an essential part in this complex project. Almi awarded Daxner Bulk Solids Technology, located in Upper Austria, with the engineering, fabrication and installation of the entire production facility. Good and successful cooperation has already been connecting the two companies for years. "We have been working together perfectly since 1995. Since we got the order to construct the new production location, we have been accompanying Almi's development", describes the owner and president of the company, Ing. Johann Daxner.

A matter of trust

"Daxner proved their productive efficiency and reliability throughout the years. They stood out because of innovative solutions and excellent customer support in all stages during project implementation. Due to this attitude, we developed mutual trust, which is a prerequisite for the success of such a big project," state the owners of Almi, Heinz and Alexander Mittermayr.

Daxner bulk and powder technology covers the whole production process: State of the art equipment provides a fully automated production. It reaches from raw material retrieval, its filling, weighing and blending to the bagging of the finished spice blends. This complete solution, which is elaborated in every detail, fulfills highest expectations in quality, capability and flexibility.

Intelligent IBC handling system

An important role in the whole system plays an intelligent IBC handling system: "Overall we use 200 different IBCs on our production lines. Each of them has a specific order and accompanies it from station to station", commented Hartwig Scheidlberger of Daxner, who managed the project.

Depending on the order, each IBC collects the necessary



An IBC handling system with cover manipulator collects the dosed and weighed components

batches and components of 40 raw material silos individually. After they are dosed and weighed, the components get back into the IBC. Then the IBC carries them to the mixing system which is specified in the order. Thereby a crane lifts it over the mixing lines and positions it on the correct mixing line. When the spice blend is finished, an IBC carries it to the packing station. A mobile bag dump station and mobile big bag discharge stations fill the finished products in free selectable bag sizes.

A technical detailed solution: Cover manipulator

The plant solution shows innovative details like the cover manipulator, which facilitates a faster throughput time. At the individual container filling stations, the containers are opened by a cover manipulator, pneumatically docked and closed up again. Every requirement – a short filling time, a dust-free system, no contaminations due to product losses and no material caking – could be served with this newly developed technical refinement," describes Ernst Mair, who supported the project as technical engineer.



Dosing of raw materials with dosing screw and weighing vessel

Multiplicated dosing power

"The IBC handling system has proved itself in full production optimally. It met all expectations", quotes the development engineer of Daxner, who is pleased with its achievements. "Besides, practice shows that this approach attains higher efficiency in comparison to our traditional FTS-systems. The key advantage lies in a higher production flow." The dosing capacity is indeed impressive: An IBC at 1.000 kg each with a finished dosed batch can be provided every five minutes. That meets an hour capacity of twelve tonnes.

Due to this attainment, Almi is best prepared even for output peaks. The first check of such an extreme case, took place at Christmas time. In this period, the demand reaches multiplied

heights. "This year, we had a top load till 80 tonnes per day. Thanks to our new plant solution, we were able to cope with peak values without any difficulty", as director of production of Almi, Robert Leeb, cites.

A production controlling system supports this high reaction rate. It's realised to the state-of-the-art by the Austrian company ESA, which is a long lasting partner of Daxner. ESAweight, a system which is included into the ERP-system, covers all production processes. Because of its comfortable handling, it allows complete traceability and parallel order processing. In addition to the coordination of the whole IBC handling system, ESA weight allows a takeover of manual dosed small and middle components without problems.

A new benchmark of quality

With the constructed plant solution for Almi, Daxner sets new benchmarks of quality. "The IBC handling system allows us an absolutely contamination free production in connection with best economic efficiency. That's very important, especially with this amount of differing customer-oriented recipes and orders. If we had a fix mounted bin, we would have to clean it every single time. But with our solution, the plant is working without interruption, because of the big number of IBCs. Thus, the capacity factor is much higher," clarifies the plant manager the advantages of an IBC handling system. In addition, anti-allergenic production is possible and the mixing process takes place with highest accuracy and inclusion of aroma- and extract additions in the micro-range.

Prevent raw materials from damage

The milling plant, which grinds special spices in order to process them afterwards, utilises a remarkable system. "In order to conserve the aroma of the spices, we treat them exceedingly gentle. Because of treatments with a nitrogen cooled comminution plant, we don't harm our valuable raw materials."

Construction with stainless steel

The high quality design of Daxner plants is another sign of quality. Stainless steel represents the unquestioned top-material with best attributes in this sector. In the last year, Daxner bulk- and powder technology has built a special production line especially for this purpose. This measure constitutes another step towards best machining.

Best quality for sure

In order to ensure the high quality of products, the whole production process includes control mechanisms. Daxner's new developed VIB & PRESS control facility is able to carry out product intake and gentle screening of difficult products, which tend to form lumps. Magnet- and metal detectors ensure security, too. In general, the plant complies with highest standards which are required for the foods industry, such as ISO-9000, HACCP and IFS.

With its new production location in Oftringen, Almi set up a new international standard and laid the foundation for further growth. After the company has entered the Western European countries successfully – Almi is market leader in Russia – the

new aim is set on the Far East and overseas: Unique Almi- quality is planned to increasingly spice meat products in Asia and America.

"We are proud to contribute our know how to one of the most modern and efficient production plants for spice blends. And of course we are glad to accompany Almi on its road to further success", states Ing. Johann Daxner.

The new production system isn't only the best practice when it comes to production efficiency, but also in flexibility. It may produce and deliver customer oriented orders very rapidly. The production also allows to adopt to composition changes or additional orders in a few hours.

For more information visit: www.daxner-international.com



Intake of raw materials with the mobile bag dump station VIB & PRESS with stirring paddles and control screen