EUROPE‘S MOST INNOVATIVE SPICE PRODUCTION

STATE-OF-THE-ART PLANT TECHNOLOGY SETS THE BAR HIGH FOR FUTURE QUALITY STANDARDS

„We are building Europe‘s most innovative factory for herbs and spices“, claims Euroma when talking about its new milestone for the future in Zwolle (Netherlands), who just recently took over Intertaste. As one of the leading producers of high-quality herb and spice mixtures as well as texture solutions, they instructed Daxner from Wels (Austria) with engineering, fabrication and installation of a fully automated plant solution centering around the well-proven Daxner Container Handling System DCS.

Fully automated collection system with Daxner Container System DCS combined with FTS System.

PRESS RELEASE | REFERENCE SOLUTION EUROMA

The showcase plant was taken into operation in 2019. It was built on an area the size of 5 soccer fields, houses a 29 m high bay storage and was awarded the BREEAM Excellent Sustainability Certificate. First and foremost the plant enables Euroma, known as pioneer of gentle herb processing, to increase the production volume and reach a new level of food safety. Euroma aims to unify the entire dries processing of all existing factories at the new production site in Zwolle.

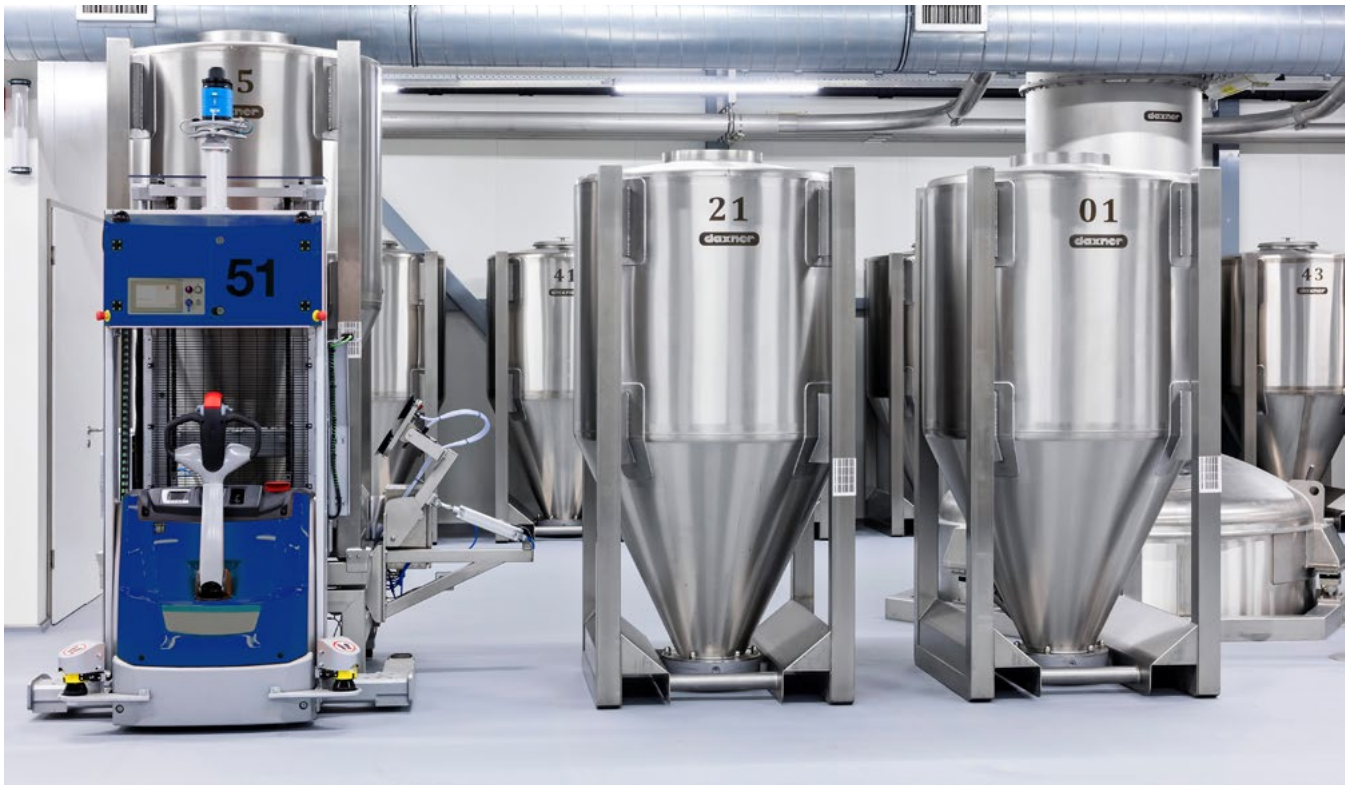
Mr. Teun van Veen, project manager at Euroma, still remembers the start of the project well: „Euroma was preparing its visit of the Powtech. By preparing the visitors list we found the company Daxner delivering a complete concept for a spices and herbs plant. We found a reference article on the website of Daxner. We were enthusiastic about what was written in that article. First contact was made and we filled in our requirements on a questionnaire of Daxner and sent some additional information." An initial meeting at Powtech followed and Euroma placed its first order for a pre-engineering of the plant.

Fully automated Container Handling System DCS

The technically impressive plant design guarantees a high throughput performance and dosing accuracy. The possibility of cross contaminations and dust formation was reduced to a minimum. According to the hygienic design requirements, all components were executed in stainless steel and designed for easy cleaning.

Perfectly in sync with the fully automated Daxner Container Handling System DCS, laser operated Automatic Guided Vehicles AGV make their way through the production facility to collect the valuable dry components.

The raw components are divided into large, middle and small components. Large components, like wheat flour or potato and corn starch, are delivered in tanker trucks and stored in 12 large outdoor silos. A pneumatic vacuum conveying system transports them to the day bins within the plant.



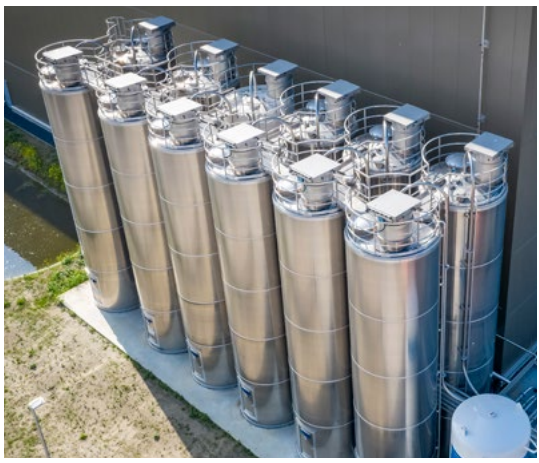
The containers move through the plant with the help of Automatic Guided Vehicles.

Mobile bag and big bag intake stations
The filling of large and middle components into day bins happens with mobile bag and big bag intake stations. Below the day bins, highly precise scales were installed. Depending on the product's qualities, separate day bins as well as weighing systems are assigned accordingly. This exact allocation avoids cross mixing with any allergenic raw materials.

Once all of the separate raw materials are dosed into the weighing bins, the collection process with the Daxner Container Handling System DCS combined with the Automatic Guided Vehicles AGV commences. One AGV, loaded with a 1,500 liters container, drives from weighing bin to weighing bin and fills itself with the pre weighed raw materials. This concept saves time: As soon as one raw material component is picked up, the weighing bin can dose the batch for the next container immediately.

Supplying the small and minor components
The manual feeding of the containers for small and minor components happens on the ground floor.

According to the goods-to-man-concept, all ingredients are brought to the operator: the containers with the AGV, the small components in bags on pallets and the pre-commissioned minor components in crates from the minor components storage (MCS). Therefore, the system achieves a time optimized supply of all components without unnecessary ways for the operator.
Once all components are fed into the container, it continues its fully automated path to the assigned mixing line. The container is transported to the container elevator with the help of an AGV and lifted onto the floor above the blender. From there, another AGV picks it up and sets the container precisely above the respective blender. Not only the opening of the latch but also the emptying of the blender happens without the help of an operator.



Visible from afar: the 12 outdoor silos for storage of the main components.

After the blending process of herbs, spices and other ingredients, a quality control of all products is conducted.

The finished mixes are weighed and filled into mounted big bags and fed into the according packaging lines.

10.000 l weighing bins above the high performance mixing lines.

Great flexibility with various blender types

Blenders with a capacity of 1,500 up to 10,000 liters are used. There are multiple ways of filling the blenders: directly from the outdoor silos, with containers or through liquid dosing. After blending, the product is emptied directly into one of the downstream containers.

Blender and container sizes are an optimal match and offer immense flexibility when it comes to possible batch sizes. This freedom in design emphasizes another highlight of this plant: a container blender with a volume of 1,500 liters where the mixing happens directly in the container. The advantage for the user: one saves a whole process step because the filling process into the blender is cut out completely.

Packaging of the finished mixes

After the blending process, an Automated Guided Vehicle collects the containers with the finished mixes and transports them without manual help to the discharge station which is located next to the bag filling station.

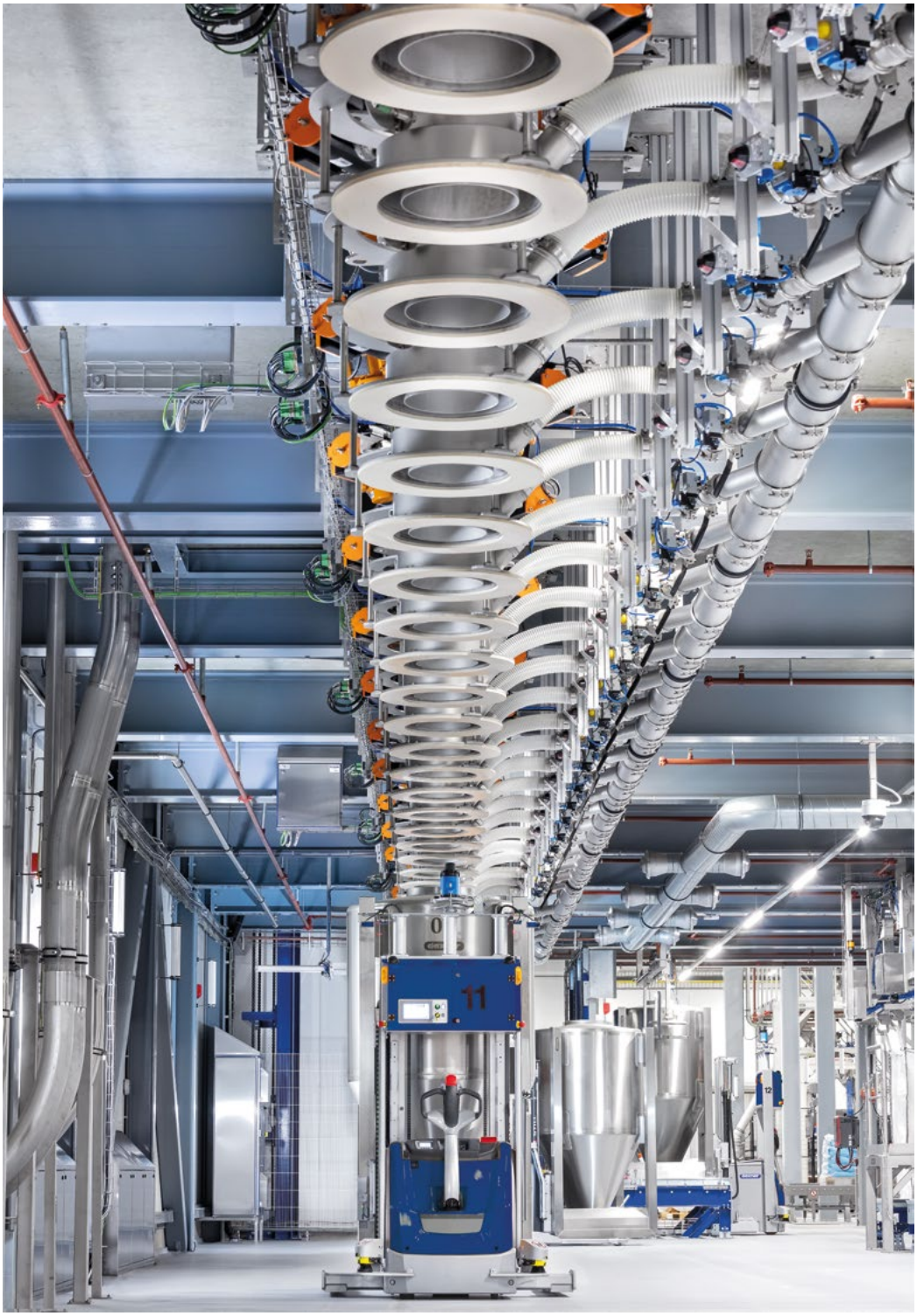
The gravimetrical bag filling and weighing system DAX-PVS (Pinch Valve System) fills the finished mixes into sales packaging. The core components of the DAX-PVS systems are the pneumatically operated pinch valves which guarantee the exact dosing of the products.

Fulfills HACCP and IFS

The complete blending and packaging line is equipped with an aspiration system which reduces dust formation to a minimum. The central dedusting system guarantees easy and comfortable cleaning of the whole facility. Furthermore, the system fulfills the requirements for IFS and HACCP.

„From the beginning on, Euroma had a good feeling about the Daxner concept. We were convinced from the first moment that Daxner was the company to work with." states Teun van Veen „None of the competitors could deliver the same complete concept", Mr. Van Veen emphasizes the project's success further.

Contamination free filling of the day bins with big bags. On the right: vertical mixer in hygienic design.



Fully automated collection system with Daxner Container Systems DCS in connection with the Automated Guided Vehicle system AGV.

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BULK SOLIDS TECHNOLOGY

QUESTIONNAIRE | PROJECT EUROMA

Statement by Mr. Teun van Veen, Technical Project Coordinator KONINKLIJKE EUROMA B.V.

Which requirements and expectations had Euroma at the beginning of the tendering phase?

This needs a little story. In 2016 Euroma was preparing the visit of the Powtech. By preparing the visitors list we found the company Daxner delivering a complete concept for a spices and herbs plant. Then we found the article of AVO on the website of Daxner. A couple of people were enthusiastic about what was written in that article. The first contact was made and we filled in our requirements on a questionnaire of Daxner and sent some additional information. On the Powtech we first met the people of Daxner. Then the first quotation was sent and after visiting the Powtech, we made an agreement together for the pre-engineering. Before the final agreement was made we did the engineering together with Daxner and the contractor for the building.

How did Daxner convince Euroma to make the decision to work together with Daxner?

From the beginning on Euroma had a good feeling about the Daxner concept. We were already convinced from the first moment that Daxner was a good company to work with. None of the competitors could deliver the same complete concept. So we thought this is the way we want to go.

What was the business objective of Euroma?

Building a plant with a high efficiency, good working circumstances and to lower the cost for man hours.

How did you experience the collaboration with the Daxner team?

Super. From the beginning on, there was a perfect collaboration between Daxner people and us.
Between Daxner and us it was clear, polite and a perfect ambiance.

What are the key solutions in the Daxner concept in order to meet the required performance?
Which solutions and thoughts of Daxner are unique in your eyes?

Bulk silos, day silos, the concept, AGV's, the goods-to-man concept for the IBC containers and the ESA system.

Which product range does Euroma cover with the Daxner plant?

The whole product range of our mixed products is covered by the Daxner concept.

What are the special features of the Daxner concept for Euroma?

Highly automated plant, constant quality, better working conditions for our people and lowering the cost of man hours.

KONINKLIJKE EUROMA B.V.

QUESTIONNAIRE | PROJECT EUROMA

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How does the Daxner´s innovative Container Transport System with FTS increase the efficiency of the plant? What advantages does this system offer for Euroma?

In the design phase when we were just Euroma (now we have also bought Intertaste) the production of Wapenveld was done in a four shift operation. With the Daxner concept we could make the volume of Wapenveld in a two shift operation.

What innovative details does the system have?

What makes it innovative is that it is a complete concept. The mentioned key solutions make it unique.

How important was sustainability and energy efficiency for Euroma?

This is a key issue. Emissions and energy efficiency are hot topics and we as Euroma have to contribute to these challenges as much as we can.

Thank you Mr. Van Veen.

OUR KNOW HOW. YOUR STEP AHEAD

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