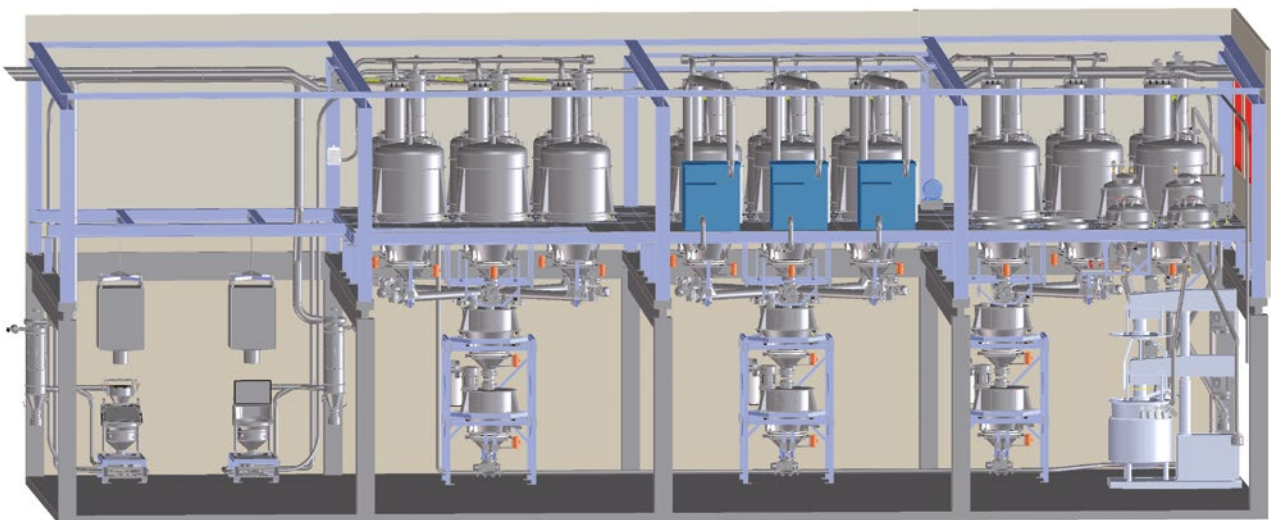


Thrilling filling!

THE MANNER CONFECTIONERY RELIES ON A DAXNER MATERIAL PREPARATION SYSTEM FOR MAKING WAFER FILLINGS

Four layers of delicious filling between five layers of crispy wafer. That is the secret behind the cult of Manner wafer biscuits in the pink wrapper. First documented in 1898, they have been the basis for the incomparable success of today's Manner AG. As always, wafer products are their most important business, and this exemplary Austrian company has concentrated their production at a facility in Perg. In addition to the world's biggest wafer oven, well-thought-out technology from the bulk solids experts at Daxner help bring out the flavour: A system solution tailor made for Manner produces a thrilling filling.



3D-Visualization of the processing plant for filled sweets with wafer shell

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They have to taste like they were made by hand and at the same time be produced with above-average efficiency: The need to produce a fine taste with cost-efficient mass production is a real balancing act for industrial confectioners. It can be mastered only with premium production systems that result in high-quality products at low unit cost.

An exemplary system solution

To achieve this best at its Perg facility, Austrian food conglomerate Manner AG relied on a proven partner for its production equipment. For planning, delivering and installing the processing system for wafer filling, the company went with Daxner Bulk Solids Technology in Wels, Austria. Manner has worked with them for 20 years. In 2005, a trailblazing system solution arose on a 400-cubic-metre surface. It occupied two storeys of a specially designated wing of the building. The system has proven itself for a year to the complete satisfaction of the customer.

Everybody likes Manner!

Besides their legendary "Schnitte" wafer biscuits, Manner AG, based in

Vienna, is known in the German-speaking world for other popular products. These include Casali rum-coconut balls, Ildefonso nougat cubes and Napoli Dragee Keksi, a chocolate-covered biscuit. Although these are now sold around the world, they are produced in three Austrian facilities at Vienna, Wolkersdorf and Perg. The tradition-rich company grew thanks to the "Original Manner Neapolitan Schnitte" biscuits, which gained great popularity through its pink packaging and the slogan "Everybody likes Manner".

Expansion of the Perg facility

Wafer products remain highly important to the company. They are made in the Perg facility in upper Austria. Between 2004 and 2006, about €15 million were invested in the plant's expansion. The first step was to construct the world's largest wafer oven, which can bake 8,000 tons of wafers per year. To meet the increased demand for filling, Manner decided on a new filling production system, which reflects the systems expertise of Daxner Bulk Solids Technology.



Exact dosing of the component batch sizes through dosing screws into the weighing bins. Pneumatic feeding into the dissolver-blender.

A coherent system design

The system covers every production step, from storage to conveying, from dispensing and weighing to mixing the

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final filling. It is a coordinated system solution. High efficiency, easy operation, simple cleaning and an outstanding cost/benefit ratio are among its many advantages.

Efficient, affordable technology

“For us, technology isn’t an end in itself, but the means to a goal,” says company owner Johann Daxner. His point is

significant. “Instead of technical overkill that makes a system needlessly expensive, we rely on intelligent technology that solves problems without ballooning purchase and production costs. Our strength is our ability to use process expertise to develop system solutions with above-average efficiency and affordability. This was how we approached planning the filler production system for Manner.”

can hold four cubic metres. “The trick here is that the conveying air is itself conditioned. It is dried and cooled. In this way, the air humidity and temperature are precisely tuned to the material characteristics. This makes the components behave stably. For example, the milk powder doesn’t melt, and the sugar doesn’t start to stick,” says CEO, Christian Daxner while showing a small but highly effective engineering detail.



Loading station, where the product is fed out of bags and big bags; pneumatical conveying into the related day bin.

Varying material characteristics

The solution of Daxner was tailored to meet many different liquid and solid ingredients, such as milk powder, sugar, vegetable oils and flavourings, and achieved an extremely efficient production process of the delicious fillings. Naturally, this means putting together components with quite different characteristics, such as their flow profile, stickiness and shape. Their handling represented a great challenge for the bulk solids technology to be used.

Twice performance through weighing postbins

From the day silos, dosing screw conveyors precisely move the batch components into three weighing bins, from which they go to the respective weighing postbin. “These optimize the dosing capacity,” he remarks about the next bit of process technology. “As the complete batch is being emptied at once, the weighing bins are immediately available for the next weighing process. That means that dosing efficiency is doubled.”

Dried, cooled conveying air

For processing solids, there are two combined intake stations that can be loaded with big-bags or bags. A built-in control screen keeps unwanted foreign objects out of production. Pneumatic pressure transfer systems take each component into one of 12 day silos that

Solid and liquid components become finished filling

Once finished and weighed, the batches are moved pneumatically to the dissolver mixer. However, before the mixing process gets under way, the remaining liquid components and flavourings are added. These are brought from external

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silos, IBCs and barrels through heatable pipes and pump bodies to several fluid dispensing devices, from which they go directly into the dissolver mixer. For components that are only added in tiny quantities, there are micro-dosing devices that can measure them out precisely to the gram. Once the batch is complete, the solid and liquid components become a pasty, pumpable mass that is stored in 15-cubic-meter storage tanks and from there is routed to production.

High flexibility for pure taste

The Daxner filling production system can make up to 4,500 kg of wafer filling per hour. Besides its efficiency, the system is impressive for its first-class flexibility: It daily produces fillings of a wide array of types and recipes, but due to the high quality standards, flavours must be completely prevented from spreading from one to the other. Whether it's hazelnut, strawberry, lemon or vanilla: All fillings must win people over with their complete purity of taste, which means the most stringent requirements for hygiene and ease of cleaning must be met. For that reason, the day silos are designed to be round, and the air is dried and cooled, so that

no residues remain. Moreover, the whole system is made of stainless steel.



Day bins used as buffer tanks for components like milk powder, cocoa powder, sugar etc. The bins are fed pneumatically, using cooled and dried conveying air.

Seamless traceability

The system — including the dispensing and weighing — is guided by a programmable-logic-controller (PLC) and visualization. This ensures seamless traceability of all components, which is important for confections like Manner Schnitte. The filling system itself meets the HACCP and IFS standards and is designed in compliance with ATEX / VEXAT.

Best proven in practice

In full operation for a little more than a year, the filling production system has proven itself not only on the drawing board or design program, but also in practice. "This project was strategically important to us. We chose Daxner Bulk Solids Technology because years of good collaboration had proven that we could trust them to deliver a top-quality system with outstanding performance at an excellent price-performance ratio. We were confirmed by the scale and professionalism of the system solutions that Daxner had created for Backaldrin and Almi. Our expectations have been met completely. Our assessment after a year of operation is that Daxner has successfully completed the assignment with aplomb and first-class technical competence. We're totally satisfied with our filling production system," says Reinhard Gassner, manager of Manner's Perg facility.