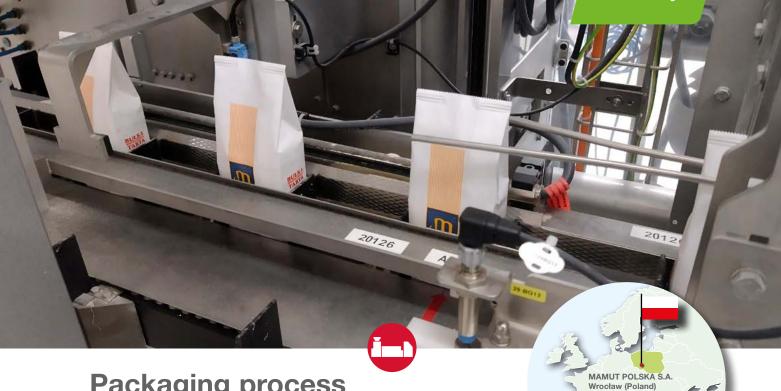
Case Study MAMUT POLSKA S.A.

Breadcrumbs packaged efficiently and sustainably.



Packaging process significantly improved.

MAMUT POLSKA S.A. has been in existence for over 150 years. Today it is one of the largest Polish bakeries and specializes in the production of long-life bakery and confectionery products. MAMUT POLSKA S.A. is the market leader in breadcrumbs, rusks and croutons and sells through three strategic channels: retail, B2B and HoReCa (hotel, restaurant and catering).

The wide range and excellent taste of the products have won the recognition and sympathy of consumers at home and abroad. The company's priority has always been constant development based on global food trends and the implementation of the idea that high-quality products are not a luxury, but a standard.

Over the years, this approach has led to numerous awards and successes, including the Q quality mark for Wrocławska bread crumbs and the Meet Good Food awards for Wrocławskie sponge cookies and rusks.







Innovative packaging technology for highest quality

The market glamour and wide recognition of MAMUT brand would not be possible without full transparency and safety of production processes, confirmed by ISO:9001 and FSSC 22000 certificates, and supported by wise choices of processing and packaging equipment.



The machinery at the bakery in Wrocław was recently expanded to include a new, modern ROVEMA SBS 250 packaging

The new process offers perfect bag tightness and quality and – thanks to advanced sealing technology – allows a virtually unlimited choice of packaging materials.

machine, which is designed for forming and filling high-quality block bottom bags and is equipped with a high-precision auger dosing system. The

packs are made from heat-sealable, compostable FSC paper from the flat film web and convince with their excellent sealed seam quality.

The packaging project carried out by ROVEMA and MAMUT was a major challenge for both parties. The general

The compact block bottom bags made of paper are sealed dust-tight and offer protection against insects.

aim was to improve logistics and ensure the full safety of one of the leading products – breadcrumbs. Before the cooperation, the product was packed in traditional prefabricated paper bags, which were sealed with adhesive after filling.

Such pre-made bags are very popular with bakeries and flour manufacturers all over the world. They are proven and safe, but the introduction of the new ROVEMA technology has significantly improved the packaging process for breadcrumbs.

5 ROVEMA 🧰

7 convincing reasons

to switch from pre-made bags to bags from the flat film web:

- 1. **Improved machine availability** due to reduced susceptibility to process faults (more uptime).
- 2. **More compact machine** with smaller footprint compared to machines for pre-made bags.
- 3. Low-dust packaging process with less product loss.
- 4. Possibility to use thinner packaging materials.
- 5. Lower packaging material costs.
- 6. Easy storage and handling of packaging materials.
- 7. **Clean printing** of the pouches, e.g. with best-before date, is easily possible.



Vertical bag production with subsequent head forming in the ROVEMA SBS – for compact, low-air bags with a uniform filling level.

Shelf presentation and transport packaging

Like flours, breadcrumbs are staple foods. They are usually presented at the POS in common and proven packaging forms such as block bottom bags. For transportation, the bags are often placed on simple cardboard trays, wrapped in shrink film and stacked on pallets. It is important that all packaging has the same height and can be stacked stably. An important success factor of the packaging project was to achieve a uniform filling level of the bags and a maximum reduction of air inside the block bottom bags.

ROVEMA expert know-how

With over 65 years of experience in the packaging industry and a strong team of packaging experts, ROVEMA knows how to deal with such requirements and lead projects to success. Good teamwork, high-performance and reliable packaging machines and services and a safe, modern working environment form the basis for the company's success. Added to this is the clear focus on strong, long-term partnerships with customers and suppliers such as packaging manufacturers.

ROVEMA auger dosing system SDH:

For the highest hygienic standards.

Processes almost all powdery and fine-grained products such as milk powder, coffee, spices, sugar and chemicals.

The SDH auger dosing system guarantees the highest hygienic standards in an economically efficient manner. Thanks to precise dosing, even with challenging products, it meets the economic requirements of users within legal specifications.

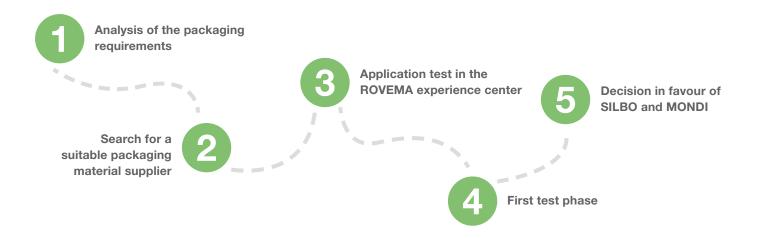








Five steps to perfect packaging



1. Thorough analysis

The MAMUT breadcrumbs project began with an in-depth analysis of the packaging task between the manufacturer and ROVEMA. MAMUT supplied the original breadcrumbs in order to assess all the important project parameters such as dosing accuracy, the shape and size of the bags, their air content and, above all, the tightness of the sealing seams. Once all the specifications and objectives had been defined, the next step in the project planning was taken.

2. Packaging material suppliers

After analyzing and defining the requirements, it was checked which reliable partner could supply suitable packaging material. The material was to be a recyclable, com-

ROVEMA experience center

Every year, more than 100 packaging material, performance and application tests are carried out in the company's own technical center. Over the past decades, an immense knowledge of packaging materials, pouch shapes and packaged goods has been built up, from which ROVEMA customers benefit in the long term.

All application tests at a glance:



postable and heat-sealable FSC paper, supplied in the form of a film roll for vertical processing on the VFFS machine. Three suppliers were able to meet the requirements, and the next step was to test the material.

3. Application tests

In total, paper packaging materials from three suppliers were sent to the company headquarters in Fernwald, Germany, for comprehensive testing in the application test. All important project parameters were taken into account in the application tests:

- dosing accuracy
- the uniformity of the bags (shape and size)
- the air content in the pouches
- the quality and tightness of the sealing seams, particularly in the top area of the bag.

4. First test phase

This first test phase was absolutely crucial for choosing the right paper supplier and for selecting the optimum packaging material. This is because heat-sealable papers – despite having similar specifications – can have very different properties and behave differently on the filling tube and between the sealing jaws of the packaging machine. Some papers ran easily over the forming shoulder, others generated too much friction and tore. The tightness and strength of the sealing seams was also not the same everywhere. Another surprise was a water-based print, which sometimes caused tears



on the packaging material during heat sealing. Fortunately, the paper supplier was able to solve this problem within a few days so that the project schedule could be met without any major delays.

5. The decision

After this in-depth review of paper packaging materials and their manufacturers, it was clear that the final partners for the project would be the two companies MONDI and SILBO, whose proactive approach throughout the process contributed significantly to the project's success. The global paper and packaging manufacturer MONDI supplied the paper, while Polish partner SILBO used advanced printing and coating technology to transform the MONDI base paper into the final packaging material, which is vertically converted on the ROVEMA machine and looks great on the shelf.

ROVEMA SBS – Outstanding flexibility, diverse bag shapes

The SBS block packaging machine itself is a combination of a VFFS machine with downstream stations for bag top forming and closing in a modular design. It is equipped with a filling tube for forming, filling and closing the bags and forms the bag top in downstream stations. In this case into a folded fin.

In addition to breadcrumbs, the packaging system is also suitable for packaging other products from the food and non-food sectors – e.g. cereals, pasta, spices or baked goods. ROVEMA has already launched more than 550 SBS systems worldwide, including many applications for pasta and sugar in Poland. The MAMUT machine is the first application for paper-packed breadcrumbs that breaks the traditional dominance of pre-made bag systems and uses a new process to improve product safety and quality.



ROVEMA SBS brick pack machine

The ROVEMA SBS can produce both paper and plastic bags in sizes from less than 100 grams up to 2.5 kilograms, whereby the leading standard at MAMUT is the 450 gram paper block bottom bag with double-folded fin.

Selection of possible bag top shapes:















Adhesive tape

as reclosure





Hot glue



SBS basic forms



CLIP, also with pendant



TIN-TIE with fold and press



Label as reclosure

Can r

Cap made from cardboard







e from Special top shapes

Carry handle

A strong team for sustainable packaging solutions.



MAMUT POLSKA S.A.

MAMUT POLSKA S.A. is a reliable manufacturer that takes responsibility for the environment. Considering consumer demands, the brand's top product – Bułka Tarta Wrocławska – is now being presented in stores in a new, ecological packaging. The paper bags are produced on ROVEMA machines.

"For us, quality is a standard, not a luxury, which is why conscious actions accompany us at every stage of production. It is no coincidence that the supplier of the packaging machine is Rovema. We know that the key factor influencing purchasing decisions is packaging. As a leader in the breadcrumb category, we not only set standards for finished products, but also create trends

and popularize technical solutions. The viability of each investment is assessed in terms of production efficiency. The ROVEMA SBS packaging machine has increased our packaging capacity, allowing us to meet market needs. Additionally, it allowed us to introduce different packaging weights, in line with customer expectations" - adds Robert Krawiec

"The highest quality of products is in the DNA of our company" – says Robert Krawiec, President of the Management Board of MAMUT POLSKA S.A.

ZITRO





SILBC

SILBO is a Polish manufacturer of ecological flexible packaging, which is an alternative to conventional plastics. Author of the Mr Paper packaging line with the "zero plastic" status, which was successfully introduced in 2022 in the largest French food supermarket chains. The company supports producers in the transition from plastic packaging to ecological alternatives. Known in the market for almost 25 years, with unique know-how, innovative technology and a global distribution network. The quality of SILBO is confirmed by international certificates, patented solutions and recognised customers.

Marcin Śpiewok, CEO of SILBO: "We were very focused on this packaging design. Every detail was important here – from technical aspects to ecological: certified recyclable paper, spot water lamination and high-quality printing with water-based inks. We are proud to see a new packaging of breadcrumbs "Wrocławska" by MAMUT in stores. This is an illustration of our mission and SILBO specialization."

MONDI

Mondi is a global leader in packaging and paper, contributing to a better world by making innovative solutions that are sustainable by design. Our business is integrated across the value chain – from managing forests and producing pulp, paper and films, to developing and manufacturing sustainable consumer and industrial packaging solutions using paper where possible, plastic when useful. Sustainability is at the centre of our strategy, with our ambitious commit-

ments to 2030 focused on circular driven solutions, created by empowered people, taking action on climate.

In 2022, Mondi had revenues of €8.9 billion and underlying EBITDA of €1.8 billion from continuing operations, and employed 22,000 people worldwide. Mondi has a premium listing on the London Stock Exchange (MNDI), where the Group is a FTSE100 constituent, and also has a secondary listing on the JSE Limited (MNP).







ROVEMA

We have a passion for developing and building packaging machines and systems that suit the complex demands of a modern circular economy. We THINK holistically and take into account the environment, the market, the product and the packaging. This allows us to build efficient and future-proof packaging machines with high availability. A sustainable solution that fits the characteristics of the product to be packed and its demands in logistics, packaging material, shelf life and energy efficiency is our first priority.

We actively search for possibilities to save packaging materials and have prepared our machines to process very thin packaging materials. At the same time together with our clients, we continuously test new packaging materials from regrowing or recyclable materials to ensure process ability at the highest possible output rate. With profound application expertise, innovative approaches and new technologies we find the optimum packaging solutions for our clients – custom-fit and individual – thus securing competitive advantages.





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