Produce recyclable spouted pouches economically.

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In a new packaging development partnership, SN Maschinenbau and Südpack have developed an overall concept for the in-house production of stand-up pouches with spouts, which is designed for the packaging of paste and liquid products. The concept is aimed at food manufacturers and bottlers who previously use pre-made spout bags and will be presented at Anuga FoodTec 2024.

With their innovative solution for the in-house production of stand-up pouches with spouts, the two cooperation partners are breaking new ground and offering manufacturers and bottlers of thick and thin liquid products such as fruit purees, smoothies, yogurt, or other liquids a sustainable and economical alternative to the use of prefabricated pouches.

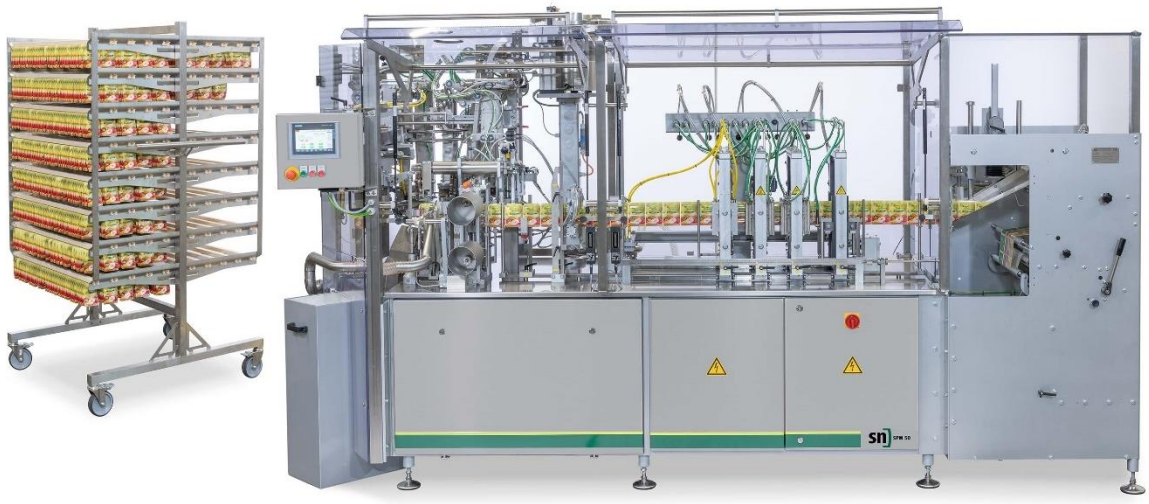
The overall concept relies on high-performance packaging technology and high-performance and recyclable packaging components made of polypropylene, which are perfectly coordinated and offer users not only easy handling but also maximum process and packaging safety. The concept is also groundbreaking in terms of quality, cost-effectiveness, and flexibility thanks to the use of recyclable mono-materials which also impresses with its added sustainability.

“With the overall concept, we offer our customers an attractive alternative to using high-priced ready-made pouches, the processing and filling of which often involves a lot of logistical effort. Our solution allows manufacturers and fillers of pasty and liquid food products to produce spout bags in-house, which are then filled and sealed in the usual way on existing filling machines. Our concept is based on an easy-to-use pouch making machine, combined with safe-to-process films and spouts. Film can be processed from the roll, which leads to a variety of advantages in terms of efficiency and cost-effectiveness without having to compromise on quality.”

Lutz Neugebauer, product manager at Südpack

Recyclability and sustainability, always in focus
The PP-based Pure-Line films used in this packaging concept are classified as recyclable due to their mono structure. By combining it with PP spouts available on the market, a fully recyclable spouted pouch is created. Due to its heat resistance, the bag can also be used for hot filling and pasteurization. In addition, the films can be equipped with different barrier functions depending on the products to be packaged. The development of the film material was based on Südpack's many years of expertise, particularly around producing innovative sealing layers.

On the horizontal pouch making machine SPM 50 from SN Maschinenbau, the spout pouches are produced horizontally from the film roll and the spout is sealed. They are then automatically inserted into standard rail systems and stored on a transport trolley. Each rail can then be easily and ergonomically inserted into the existing pouch filling machines and the empty spout pouches can be filled. Compared to pre-made pouches, this makes handling much easier and allows staff to process a larger number of pouches more efficiently, for example because there is no need for time-consuming separation of the rails. The low-maintenance machine works highly efficiently and, thanks to its compact design, can also be used in production environments with limited available floorspace. This means it can be set up flexibly either directly on the filling machine or independently in a separate area.



SN SPM50

Insourcing pouch making is effortless as the machine is extremely user-friendly. It can usually be operated with existing staff. Among other things, changing rolls requires minimal setup effort and must be carried out a maximum of once per shift. The SPM 50 from SN Maschinenbau produces up to 4,200 pouches per hour and achieves a continuous production of over 30,000

spouted pouches per 8-hour shift with just one roll of film. This corresponds to an annual production volume of 7 million spouted pouches in one shift, and up to 21 million in three shifts.

“The factors mentioned above mean that the investment in this pouch concept is economically very viable and attractive. In conjunction with significantly improved ergonomics of spout and rail handling as well as high flexibility in terms of different pouches and spout shapes, the SPM 50 is an excellent investment, also for increasing your own added value.”

Thomas Fuest, Director Global Sales at SN Maschinenbau

Reduction of logistics and handling costs
By producing pouches on site, there is no need for complex handling and the associated logistics effort for the finished pouches, which are usually delivered on rails in cardboard packaging. The space required by the rolled goods corresponds to about a third of the space required by prefabricated spouted pouches. In addition to lower transport costs, this also leads to easier storage. In addition, the cardboard packaging for the pre-made pouches also becomes obsolete.

The concept for in-house production of spouted pouches also offers significant advantages in terms of flexibility. This means the machine can be flexibly converted to produce pouches in different sizes and shapes as well as to process different materials . This allows producers to quickly adapt to changes in demand, and delivery times and time-to-market are also shortened. This concept can offer added value, not least in terms of resilience to disruptions in the supply chain.

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