

Text and photos
by Alexander Farnsworth

A Crisp Success

Whether you call it crisp bread, hard bread or crackers, packing Wasabröd's product efficiently and economically takes the right kind of robot with a delicate touch.

> At Wasabröd's factory in the small hamlet of Filipstad, Sweden, handling fragile crisp bread is no easy task for a company that works hard to retain its dominant position in the industry.

"Our goal is to be the leading and most efficient crisp bread bakery in the world," says Johan Hyensjö, Wasabröd's Plant Manager in Filipstad.

Wasabröd's factory in Filipstad is also the biggest crisp bread factory in the world with a yearly production of over 34,000 metric tons. Another factory outside Hanover, Germany produces about 25,000 metric tons. Taking into account that crisp bread is very light, that corresponds to about 6,000 trailers leaving

Wasabröd's factories every year for world markets, or about 24 per day

Swedish crisp bread, hard bread, or simply cracker, has become a delicacy. Because it is made from whole grain rye, water, yeast and salt, with no extra additives, crisp bread has become a favorite for people interested in healthy eating, and or convenience foods. It is a tasty replacement to sugar-rich breads.

And it didn't hurt when Oprah Winfrey made a sandwich on u.s. national tv in March 2007 with Wasa's crisp bread claiming it was delicious. Sales of Wasa's crisp bread increased in the u.s. by 25 percent in just a couple of days.

>FACTS

Better with robots

By using eight IRB 340 FlexPicker robots on its packaging lines, Wasabröd has:

- Reduced waste on its sandwich line by 50 percent, with robots able to easily handle the delicate product
- Increased productivity by ten percent in the sandwich line – packing 30 sandwiches per minute as opposed to 15
- Reduced downtime with the robot available 99.5 percent of the time.
- Achieved new flexibility, with robots handling new products such as the Solruta Quinoa crisp bread

Crisp facts, Wasabröd

- Production: Filipstad, Sweden and Hanover, Germany.
- Total production: 60,000 metric tons per year
- Established: 1919 by Karl Edvard Lundström in Skellefteå, who acquired the Filipstad operations in 1931
- Turnover: circa EUR 200 million, or SEK 2 billion
- 15 percent sales increase in 2007
- Total employees: 950, of which 400 are in Filipstad
- Headquarters: Parma, Italy
- Acquired by the Italian Barilla Group in 1999
- Wasabröd is Sweden's second biggest food exporter after Absolut Vodka
- Wasabröd's biggest markets besides Sweden include Norway, Denmark, Poland, France, Holland, Germany and the U.S.
- www.wasabrod.se



Wasabröd is an icon on Swedish supermarket shelves. But its fortunes have not always been so bright having seen sales plummet by several percentage points per year in the late 80s and early 90s.

Like so many other companies, the key to Wasabröd's turnaround, besides the trend in healthy living, was to find efficiencies in production and develop new higher added-value products. Today, crisp bread is produced 24 hours a day, seven days a week.

And this is where the robots come in.

A new product is the Solruta Quinoa crisp bread, which are stacked and packed ten-by-ten by a bank of seven ABB FlexPicker IRB 340 robots. The solution for the new crisp bread was developed for the Barilla Group in Italy and delivered by the Italian integrator Tecnopack. The robotic arms' vacuum pads guarantee less waste when stacking compared to other methods.

It's not just new products that get the robotic treatment. Wasabröd uses one IRB 340 Flexpicker robot on the packaging side of its existing sandwich line, delivered by integrator FlexPack Robotics. (A Wasa sandwich includes two pieces of crisp bread with a flavored cream cheese filling). While this product has been around since 1965, it was recently redesigned with new packaging and a new filling.

Another improvement: Before being packaged, the bank bill-sized sandwich gets cut lengthwise to make it easier and less messy to eat, something that became evident through consumer research. On the conveyor system, the FlexPicker robot stacks 90 of these per minute into three-pack stacks.

"With the FlexPicker robot, which has an availability of 99.5 percent, we've reduced waste by 50 percent, from 30 sandwiches per minute to 15, and at the

"We've reduced waste by 50 percent... at the same time increasing productivity..."

Per-Inge Eriksson, Wasabröd

same time we have increased productivity by ten percent in our existing sandwich line. This is important considering that with only 5-8 percent water content, crisp bread is a very brittle and fragile product," says Per-Inge Eriksson, head of production at Wasabröd.

According to Eriksson, production of sandwiches was seven metric tons per week two years ago. Today, with the improvements in the product and the trend of convenience food, close to 35 metric tons are produced per week. ☺



Tecnopack at a glance

- Based in Schio, close to Vicenza, Italy
- Specialty: packaging machines and systems for breaded goods
- Employees: 45
- Founded in: early 1980s
- Key customers: Barilla, Bauti, Vivartia, GrissiniBon
- Installed seven FlexPicker IRB 340 robots in one complete line at Wasabröd in the summer of 2007 for packaging crisp bread
- www.tecnopack.it

FlexPack Robotics at a glance

- Based in Västerås and Gothenburg, Sweden
- Specialty: FlexPack Robotics is a production developer, analyst and system integrator within the food, pharmaceutical, chemical, logistics and material handling industries
- Employees: 20
- Established: 2003
- Key customers: Wasabröd (crisp bread), ICA (supermarkets), Kraft Foods (confectionary), Löfbergs Lilla (coffee), Arla Foods (dairy) and Astra Zeneca (pharmaceuticals)
- Installed the FlexPicker IRB 340 on Wasabröd's existing sandwich line in the summer of 2007
- www.flexpack.se

