

Leading French potato producer Parmentine has equipped its new line in Samazan with two optical sorters from TOMRA Food - one the TOMRA 5A, the other the Sentinel II.

SA Parmentine processes 180,000 tons of potatoes per year, selling three-quarters of these in France and the remainder in other European nations. By operating an integrated upstream-downstream business model, Parmentine contracts supply from farmers who are mostly shareholders in the business.

Parmentine brings together more than 400 producers who grow potatoes on 3,835 hectares of land. This enterprise has 240 shareholders, employs more than 200 people, typically packs 1,150 tons of potatoes per day, and has storage facilities for 150,000 tons.

The group runs storage and packing sites in the heart of five different production areas in France: Champagne in Fère-Champenoise, Voves in Eure-et-Loir, Saint-Méen-le-Grand in Brittany, Cavaillon in Provence, and Samazan in Lot-et-Garonne.

Growers in these regions provide Parmentine with a number of different potato varieties, enabling the business to adapt to changing customer demands. The business's commitment to environmental responsibility includes the production of zero-pesticide organic crops and the use of biodegradable packaging.

#### **Pilot project on the Voves packaging site**

Parmentine was established in Voves, in the Loire Valley, in 1997. After this site suffered a fire in 2013, it was completely redesigned and re-equipped with new equipment in an 11 million Euro investment. Today these premises are home to the largest of all Parmentine storage units, with capacity for 80,000 tons of potatoes, including 55,000 tons refrigerated. This plant packages 350 tons per day.

The 8,000 square-meter packaging center in Voves prepares and dispatches a wide variety of types and grades of potatoes. Employing 80 people, it is designed and equipped to achieve top product quality by using the most modern sorting and grading technologies. It is the only center in France equipped to wash the potatoes in heated water when they are delivered from the field.

In other respects, this plant's configuration is typical of Parmentine other factories, which all enjoy close working relationships with TOMRA and employ Titan II, TOMRA 5A, Sentinel multi-track sorters and Compac\* Sizer MLS InVision 9000CIR.

"In 2014, Parmentine invested in two new fresh potato processing lines on two sites, in

Voves and Fere Champenoise. They chose Odenberg and Compac machines: a Compac Sizer 6-line InVision MLS 9000CIR at the Voves site and a Compac Sizer 8-line MLS Invision 9000CIR at the Fere Champenoise facility,” explains Roberto Ricci, Regional Director EMENA at TOMRA Food.

“Odenberg\* and Compac have been selected for their technological excellence in their respective specialties. These two brands have now come together in the TOMRA Food group - proof that, in its long-term growth strategy, TOMRA Food acquires the best companies and technologies.”

At Voves, two FPS (Field Potato Sorters) are installed at the entrance to the plant to receive unwashed tubers arriving directly from the fields. This first step eliminates foreign materials (such as stones and clods of earth) and other defects which could otherwise accelerate mechanical wear-and-tear and disrupt production flow on the lines, and could even cause machine breakages and stoppages.

After this, the tubers pass down two lines equipped with Titan II optical sorters. These eliminate all products with defects - any potatoes that are green, cut, or rotten. All potatoes are examined individually, refining the quality of the product flow.

The potatoes move at high speed along the belts and through the sorting machines, but the machines are designed to ensure this is done smoothly without any bruising to the product, preserving the potatoes’ appearance and shelf-life.

Next, a final passage is made on another multi-track sorting machine. This detects the smallest defects and directs the potatoes, according to their size, to the packaging line or into palloxe in the storage area. This last step ensures the consistent product quality and grading demanded by retailers and consumers.

The Compac technology allows not only blemish sorting (external quality) of the products but also grading of the tubers according to different parameters (such as size, shape, volume, length, color). This enables the operator to select tubers according to different criteria and direct them to different treatments before storage and packaging

Thierry Lamblin, Parmentine Group’s Marketing and Development Director explains: “This sorting and grading system is very sophisticated. The high-resolution cameras, which take 40 images of each potato, allow ultra-precise grading and homogeneous batches for packaging. This assures quality and customer satisfaction. The packaging is smaller than it used to be and we also pack into microwaveable pouches. This means, more than ever, that

a high degree of consistency is necessary, and allows consumers to follow recipe suggestions.”

#### **New investments in the South of France**

Parmentine also made a major investment, recently, to re-engineer and expand its 6,000 square-meter site in Samazan. This facility has been running in updated and upgraded format, using the TOMRA 5A and Sentinel II sorters, since November 2020.

The TOMRA 5A sorting machine ensures superior foreign material removal, quality control, and peeling inspection. This machine also makes it possible, by providing easy access to a library of 20 to 30 different programs, to adjust sorting settings to potato type (red or white) and to fine-tune sorting parameters. All operators have found the machine’s control station easy to learn and use.

The Sentinel II is located upstream to remove a wide variety of defects, such as discoloration, damage, and out-of-grade products, as well as removing foreign materials. Using the latest in illumination and detection technology, this machine outshines competitors in technical specification, sorting efficiency, and durability. It also has the highest throughput-to-machine-width ratio in the industry.

Olivier Goussard, Technical Director of Parmentine Group, commented: “TOMRA’s people really understand the importance of customer service, listening, dialogue, and responsiveness. They share our challenges, understand them, and do what it takes.”

\*Compac and Odenberg are now part of the TOMRA Food family.