A Bühler Case study
Blåtand AB

- Separation of difficult-to-detect colour defects and removal of challenging FM
- Safeguarding quality while delivering product consistency in shape, flavour and colour
- Delivering efficiency to increase yield of premium wild berries

The challenge

World-class Swedish organic processor, Blåtand AB, supplies high quality frozen berries, jams and fruit preparations to caterers, restaurants, wholesalers and retailers in the food industry. It prides itself on its environmentally-friendly, ethical production that meets the highest of standards across the entire food chain, from forest to consumer. The company’s hand-picked bilberries and lingonberries are increasingly in demand around the world for their health-boosting properties.

Prior to sale and ultimately consumption, these delicate super berries must undergo a careful sorting and cleaning process to meet exacting customer quality and industry food safety standards. Products with colour defects, such as brown berries, need to be separated, while foreign material (FM) such as stones, sticks, leaves, pine needles and mud balls must be removed.

To achieve this, technology is required which is specifically designed to handle delicate fruits – without breakage – thus avoiding wastage, increasing yield and ultimately enabling the business to grow.

The solution

Bühler was appointed to help Blåtand deliver the cleanest possible berries, ensure consistency in the shape, colour and flavour of its products and drive efficient processing. The company selected the PolarVision™ technology, combining two dedicated FM detection cameras – the SORTEX PolarCam™ and high definition InGaAsHD, which ensure difficult-to-detect defects and challenging FM, such as plastic, pieces of wet wood and small stones, do not contaminate the final product.

Importantly for Blåtand, the SORTEX PolarVision™ technology is featured on the new high capacity SORTEX F optical sorter, which is hygienically-designed with zero-tolerance for product build-up, meaning there’s a much lower risk of product contamination from bacteria. It also consumes less energy, in-line with Blåtand’s environmental commitment.
Benefits

- Accurately separates difficult-to-detect colour defects such as brown berries and removes challenging foreign material
- Delivers product consistency in terms of shape, flavour and colour
- Designed to hygienically handle delicate products without breakage, minimising wastage and increasing yield
- Easy to clean sorter with zero tolerance for product build up, reducing the risk of bacterial contamination
- Improved processing efficiency has enabled Blåtand to increase processing capacity while upholding unrivalled reputation for product quality and safety

Feedback

“Our goal was to create the best berry cleaning process on the market, making it possible to produce a high-quality, class 1 product that is free from foreign material. By combining the SORTEX F PolarVision™ optical sorter with our other cleaning equipment, we have achieved our goal and can now fulfil the requirements of the most demanding customers by supplying them with the highest quality frozen, cleaned berries.”

Ulf Hagner, Managing Director at Blåtand AB

Technology highlight

**SORTEX F** – advanced optical sorter featuring a hygienic design for reduced product contamination and improved safety; low energy consumption; high capacity

**PolarVision™** – incorporates two FM detection cameras for revolutionary foreign material and defect detection:

- **SORTEX PolarCam™** – targets the spectral and spatial differences between good product and foreign material in the near-invisible infrared spectrum
- **High definition InGaAs** – detects the smallest and most challenging pieces of FM that cannot be seen in the visible spectrum