

Piotr Potocki, Applications Specialist and Stephen Jacobs, Head of Fruit and Vegetable segment at Bühler, delve into the purpose and benefits of a feeding system in optical sorting, as well as the flexible portfolio Bühler has to offer.

What impact does the feeding system have on the optical sorter?

Piotr: The feeding system is crucial for delivering product into the optical area. Processors need good feeding in order to achieve optimal performance of their machine; the machine will not perform well if the feeding is poor. The two parts go hand in hand. It's a critical component.

What are the benefits of having a good feeding system?

Piotr: The main benefit of a good feeding system is that it provides better defect exposure to the optical system. Machine performance in general is a huge benefit; processors can stand to gain a higher yield and better accept quality and reject ratio.

Stephen: The correct feeding system teamed with the correct cameras will deliver increased yield because the sorting system will be able to see ALL defects, however with poor feeding, not only is there the risk that defects are invisible to the cameras but there's more spillage around the machine too. This results in wastage due to the product bouncing e.g., peas landing on the ejector bank of the machine or on the floor due to an overly strong vibrator. A correct feeding system allows for better control of the feeding onto the chute – meaning greater output for the customer.

Which types of feeding systems does Bühler currently offer for fruit and vegetable applications?

Piotr: We currently have a Teflon UHMW flat chute for frozen F&V and an anodized flat aluminium or curved stainless-steel chute for dried F&V products.

Recently, we developed new enhancements for long commodities such as green beans and French fries with our latest curved chute.

Stephen: The relevant chute can be selected by the customer based on application. We can offer different feed systems depending on which commodity is being sorted. We don't believe that 'one size fits all', we offer tailored feed systems which cover all F&V commodities, so processors can be sure that we will have a solution for them.

Why is it so important for Bühler to develop new feeding systems?

Stephen: It's about continuous improvement for us, it's a never-ending developmental story because there is always room for improvement. We always want to be getting better and striving for the best performance for our customers.

Bühler UK Ltd

