

Pure Pacific Organics Relies on Optyx® with FluoRaptor™ to Assure Product Quality and Food Safety



Pure Pacific Organics, a leading processor of organic fresh-cut products such as baby spinach and spring mix, was the first in the world to install [Optyx® with FluoRaptor™](#), the new fluorescence-sensing laser sorter from Key Technology. Using a combination of color cameras and laser technology, Optyx with FluoRaptor detects and removes defects, extraneous vegetable matter (EVM), and foreign material (FM) based on differing levels of chlorophyll as well as color, size, and shape.

“At Pure Pacific, we do everything we can to be sure our product is safe,” said Tom Russell, President and CEO of Pure Pacific Organics. “When we went looking for an automated inspection system, removing foreign material was our number one goal. Removing defects was also important. When we saw what FluoRaptor could do - it found things we couldn’t even see - we were so impressed. Then Key’s service and support sealed the deal.”

Optyx with FluoRaptor identifies differences in the fluorescent properties of objects to remove insects, animal parts, rocks, sticks, cardboard, glass, plastic, and metal, even if the objects are the same color as the product. The sorter can also detect and remove leaves from trees, even when the color, texture, and shape are similar to the good product.

“We considered sorters from a number of different manufacturers,” noted David Black, Chief Operations Officer at Pure Pacific Organics. “FluoRaptor goes after foreign material better than anything else we found. We also liked its on-belt inspection more than the free-fall systems because gentle handling reduces mechanical damage to the tender leaf, which is critical to our final product quality.”



Pure Pacific selected Key’s [Optyx 6786 with FluoRaptor](#), which features a 48-inch (1220-mm) wide scan area that enables it to sort up to 6500 pounds (3 metric tons) of product per hour. One top-mounted laser, two top-mounted [Vis/IR cameras](#) and two bottom-mounted Vis/IR cameras view the product both top and bottom.

“Removing foreign material is our primary objective but FluoRaptor finds a lot of defects too, like decayed leaves that a tractor ran over or product with windburn, dead spots, or holes from a bug bite,” said Russell. “This sorter finds things that people miss. Removing these defects improves the shelf life and the quality of our finished product.”



Pure Pacific sorts 24 different blends and component products, each with its own preprogrammed setting, which can be recalled in seconds via the touchscreen control panel. The icon-based user interface is available in multiple languages so it's easy to learn and use, reducing operator training and simplifying optimum operation. The user interface can reside locally on the sorter and can be accessed

Key can configure Optyx with FluoRaptor to sort fresh-cut products as well as a variety of fresh and frozen vegetables and potato products. The system at Pure Pacific Organics is designed specifically for tender leaf products with unique product handling and sanitation features that keep the system free of product build-up during operation to maximize defect and foreign material removal while minimizing yield loss and easing sanitation.

"It's up to every processor to determine their ideal balance between product quality and yield because in general, the more foreign material and defects you remove, the more good product you lose with it," explained Black. "With FluoRaptor, our yield loss has been minimal because the sorter accurately fires its ejectors at foreign material without removing much good product. Our goal is to remove 100 percent of the foreign material and FluoRaptor helps us achieve that without much product loss. We are very happy with the results we're achieving."

remotely via network or Internet, enhancing the flexibility in the operating environment and easing access for remote factory troubleshooting and application assistance.

"Our cold, wet environment can be challenging but FluoRaptor handles it well," concluded Black. "We're experiencing virtually 100 percent product efficiency with the sorter. We've reduced our labor costs and maintained our throughput. But most importantly, we've improved our product quality and food safety."



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