Mariani Relies on Optyx® with Raptor to Assure Final Product Quality
Mariani Packing Company, the largest independent processor of dried fruit in the U.S., relies on innovative technology to improve operations. To help assure that customers always receive the highest quality product, Mariani installed Key Technology’s Optyx® 6000 Series Sorters with Raptor Laser Technology to identify and remove defects and foreign material from the product stream at full production speeds.

“We get the most consistent product quality because Optyx with Raptor marries two superior processes – color cameras and laser technology – in one sorter,” explained Mark Krause, Plant Operations Manager at Mariani’s Marysville, California facility. “The laser is ideal for removing foreign material like sticks, rocks, and leaves. The cameras are ideal for removing defects like growth cracks, skin blemishes, and mold based on the object’s size, shape, and color.”

Featuring a 48-inch wide scan area, one Optyx 6000 with Raptor inspects up to 20,000 pounds (nine metric tons) of Mariani’s dried plums per hour. State-of-the-art electronics deliver the same ultra-high resolution as Key’s 24-inch wide Optyx 3000 with Raptor to detect the smallest defects and foreign material.

“We measure the success of Raptor on the foreign material removed. With our old sorter, we removed 60 to 70 percent of the foreign material before hand sorters removed the rest. With Raptor, we’re achieving 90 percent foreign material removal and that’s enabled us to reduce the number of people hand sorting. Raptor’s performance on the dried plum line has been so good, we decided to install another Raptor sorter on our raisin line.”

Optyx with Raptor is a versatile platform that can be configured for either single-side or top-and-bottom scanning by multiple sensors including color, Vis/IR (visible infrared), and monochromatic cameras as well as Raptor Laser Technology and Key’s newest FluoRaptor™ fluorescence-sensing laser technology. To
effectively sort Mariani’s product, their sorter features a top-mounted color camera, a bottom-mounted color camera, and a top-mounted Raptor laser.

“Before we selected Raptor, we looked at other technology. We choose Raptor because the marriage of the laser with the cameras was superior to anything else we saw. Key’s customer service was also a main selling point. We’ve worked with the same person at Key for 12 years. They understand the issues we face. There was a faster learning curve for Key than other suppliers. Also, Raptor was much easier to use than other sorters we considered.”

For four generations, the Mariani family has grown, dried, processed, and packaged the finest and freshest dried fruit from prime growing regions around the world. Today, with operations in California and Thailand, Mariani processes over 125 million pounds (5670 metric tons) of dried fruit each year.

“Quality is the number one reason we selected Raptor. Foreign material removal is extremely important to food safety. The Mariani family name is on the product so we want the customer to open the package and be delighted. When you’re focused on producing the highest quality product, you need to have the highest quality technology,” Krause concluded.