KEY® TECHNOLOGY
A DURAVANT COMPANY

Poindexter Nut Company Selects Cayman® BioPrint® and Optyx® Digital Sorters

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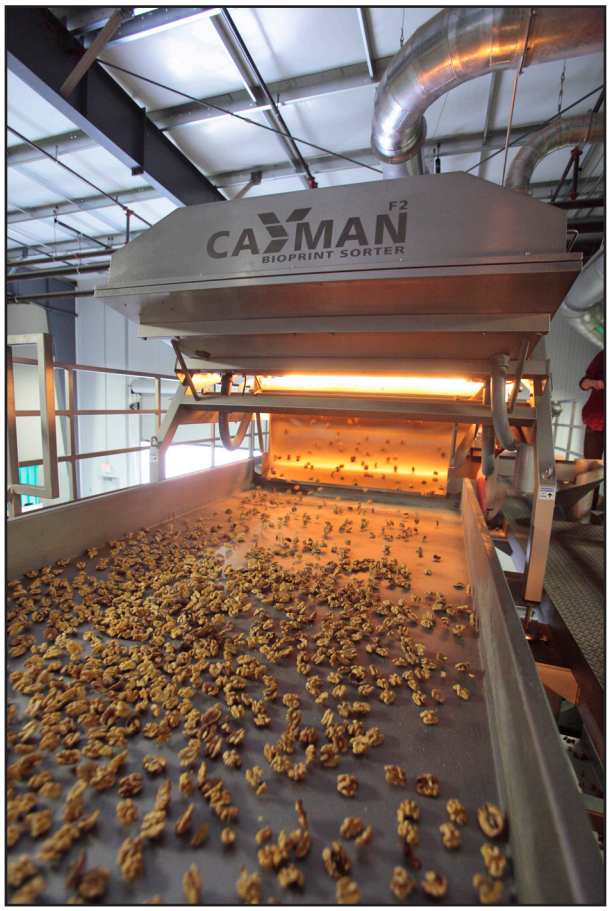
As one of the five largest walnut processors in the world, Poindexter Nut Company is an innovative industry leader. When designing their new production facility in Fowler, California USA, they searched for the technologies that would maximize their competitive edge. They selected a cascading line of three digital sorters from Key Technology that includes two Cayman® BioPrint® hyperspectral sorters and an Optyx® camera/laser sorter with three-way sorting. This new sorting line improves product quality and increases production efficiency at Poindexter.

"Lasers and cameras and hyperspectral imaging are different tools. Each one has its strengths," said Mike Poindexter, CEO of Poindexter Nut Company. "Cayman BioPrint removes shells better than any sorter I've seen, and the good-to-bad ratio is fantastic. Optyx removes shells too, but its unique strengths are color and shape sorting and its three-way capability. With these sorters, we've increased production capacity, improved product quality, and decreased costs."



Poindexter's sorting line removes shells, membranes, and foreign material (FM) while separating good, clean walnut halves and pieces from clean but off-color product at a rate of up to 10,000 lbs. (4.5 metric tons) per hour.

Cayman is Key's chute-fed sorter that features their proprietary BioPrint hyperspectral imaging solution rather than traditional cameras and lasers. Combined with intelligent software and algorithms, this powerful broad-spectrum hyperspectral technology recognizes the unique biological characteristics of objects. With BioPrint, Cayman detects and removes shells effortlessly, achieving up to 99.5 percent sorting efficiency with very low false reject rates. This innovative sorter can easily handle high defect loads, including spikes of more than 50 percent, which makes it ideal for use after the cracker to separate shells from kernels.

"Our number one goal on the sorting line is to get shells out. We adjust the first Cayman to pull out a majority of the shell and lighten the load on the downstream sorters, which improves those sorters' performance. The second Cayman runs a more aggressive setting to get almost all the remaining shells out while still maintaining a very low false reject rate. This approach, using two Cayman sorters, feeds the Optyx a much cleaner product stream that maximizes its ability to achieve an accurate three-way sort."

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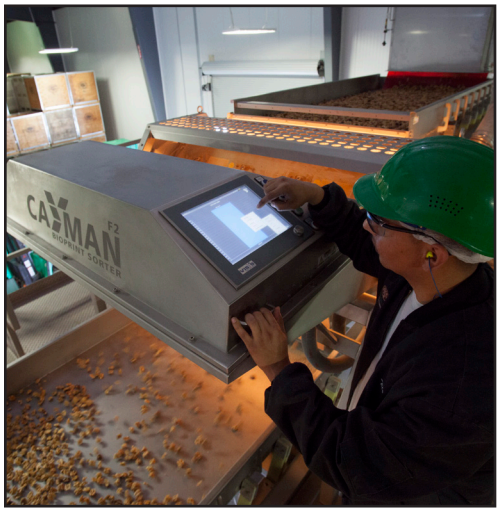
Compared to Cayman BioPrint, which is a specialized sorter that removes shells with unparalleled success, Optyx is a versatile, multipurpose sorter that can be equipped with a combination of top- and bottom-mounted cameras and lasers on a two-way or three-way sorting platform.

At Poindexter, Optyx's cameras identify millions of subtle color differences to separate dark-colored nuts from light-colored nuts. The lasers recognize the structural properties of each object to remove shells and membranes in addition to foreign material (FM) like plastic, glass, stones, and sticks, even when it's the same color as the walnuts.

"We chose Optyx for the last step of this sorting line for its top and bottom inspection and three-way sorting capability. One stream is used to reject membranes and any remaining shells. Another stream collects color rejects that are free of shells and don't need to be reworked. Good product is directed to the third stream."

"This cascading line of three sorters is much more efficient than running three passes on one sorter. It's also much gentler. What hurts walnuts isn't flying through the air, it's accelerating and decelerating. Dropping into a bin or out of bin is what damages walnuts."

The digital sorters at Poindexter are surrounded by vibratory conveyors from Key that contribute to the success of the sorting system. At the infeed of Optyx, a meal-sifting Iso-Flo® shaker gently spreads, singulates, and stabilizes the product while removing meal to present a consistent monolayer of product to the sorter's vision system, which helps maximize the sorter's performance. At Optyx's discharge, another Iso-Flo shaker gently conveys good, clean walnuts to collection bins. Additional Iso-Flo and Impulse® shakers convey the reject streams from the three sorters to separate collection bins.



"The vibratory shakers from Key work well here and are extremely reliable. Unlike belt conveyors, they don't get gummed up with meal. The stainless steel, flat-beds are very clean. This superior sanitation is a major benefit that contributes to food safety."

"We want to have the best equipment, and we'll go to multiple suppliers to get it. It's the performance that matters most. It's great that Cayman BioPrint and Optyx and these vibratory conveyors are all under one roof at Key. We receive great service from them."

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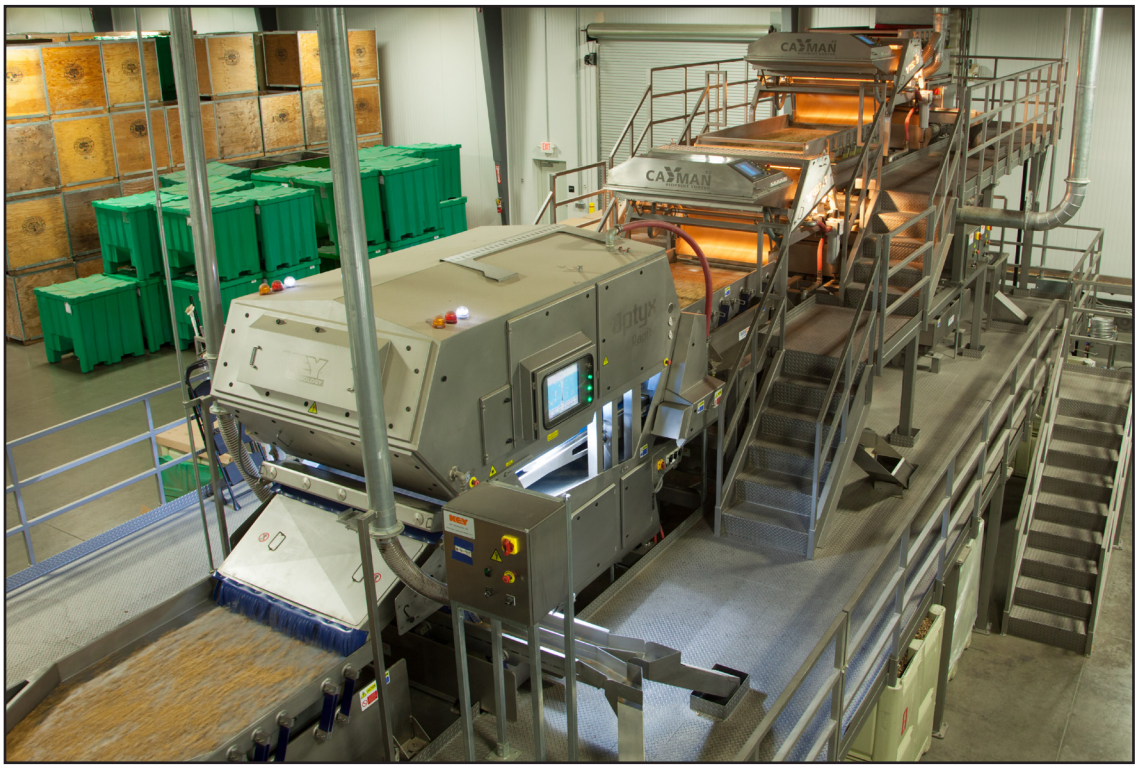
"This cascading line of sorters is something we've been working on for several years. What we have achieved is a highly effective sorting system. With Cayman, our shell removal rates are vastly improved. With Optyx, we're doing the work of two sorters thanks to its three-way capability," concluded Poindexter. "Thanks to Key, we have a sorting system that raises the bar on quality and efficiency and gives us room to grow. We have this new machinery to raise the standards."

For more information on Key's Cayman BioPrint sorter, visit www.key.net/products/visys/cayman. For more information on Key's Optyx sorter, visit www.key.net/products/optyx.



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