



Pasta Montana Turns to Key Technology and Selects an Optyx[®] Digital Sorter

Pasta Montana

At Pasta Montana, the focus on quality permeates every activity at every step of the process. One shining example of this dedication is their recent decision to be the first pasta manufacturer in the U.S. to install a digital sorter that ejects foreign material (FM) and defects from the product stream. After thoroughly analyzing their options, they chose to work with Key Technology and selected Optyx®, which was installed in July 2013 on the line that produces short pastas like penne, shells, and elbows.

“As a pasta manufacturer for Japanese customers that accept zero defects, we need to ensure the quality of our product. Of course, our domestic customers appreciate this too,” said Claude Smith, Plant Manager at Pasta Montana. “We wanted to add a quality control step that was as close to certain as we could get. We were looking for a way to guarantee perfect pasta. That’s what drove this project.”

“We looked at multiple suppliers and compared their after sales service and spare parts availability as well as their willingness to customize the technology for our application,” said Smith. “Key was head-and-shoulders above when it came to service. They also had better technology. As we got deeper into it and Key continued to modify things for us, we ended up with an integrated system that is steps ahead of what the others offered.”

Digital sorters are most often used to process harvested foods like fruits, vegetables, potato products, nuts, and more. To adapt this technology for pasta, Key customized the sorter and developed the intelligent software and algorithms for this new application.

“Prior to Optyx, we relied on mechanical screening and metal detection as well as QC checks. When we ran products for some of our Japanese customers, we’d slow the line down to half-speed and add four people assigned to watch the product and achieve 100 percent inspection,” said Adam Hatch, Maintenance Tech Class A at Pasta Montana. “Now, with Optyx, we can run at full-speed and we’ve eliminated the human error that comes with manual inspection. We’ve increased productivity by 20 percent on that line and we’re better able to ensure the quality of our product.”



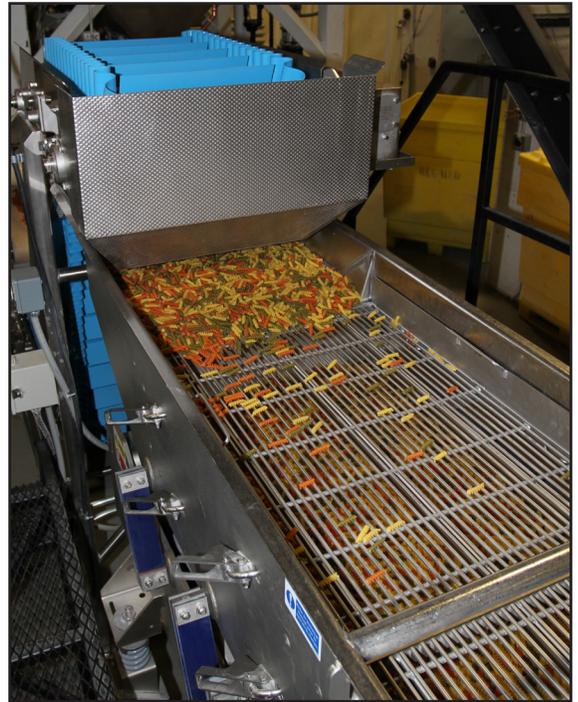
Pasta Montana



The Optyx 3785 at Pasta Montana features color cameras and a laser, sorting on a 24-inch (610-mm) wide belt to inspect as much as 4.5 tons (4 metric tons) of pasta per hour. With Key's intelligent algorithms, the cameras recognize color, size, and shape to detect product defects and co-mingled product. The laser recognizes differences in structural properties to detect foreign material (FM), even when it is the same color as good product, which is especially important when Pasta Montana is running tri-colored pasta. When FM, defects, and co-mingled product are identified, Optyx activates its ejection system to remove these objects from the product stream.

In addition to the Optyx sorter, Key supplied Pasta Montana with an Iso-Flo® scalping shaker that removes fines as well as under- and over-size objects and an Iso-Flo shaker with a unique air flow system that removes lightweight material. A third Iso-Flo conveyor, configured as a scale feed shaker, was installed above the combination weigher to maximize the efficiency of the bagger. This integrated system is found on Line Two at Pasta Montana, which produces a wide variety of small pastas.

"We want to identify and remove everything that doesn't belong, including co-mingled product from another run, off-color product, misshapen product and of course, any foreign material," said Amanda Carpenter, Floating Operator at Pasta Montana. "We use shape sorting for every product we run so we can catch an elbow pasta if we're running penne, and double our protection. The scalper upstream of the sorter does a great job giving the sorter clean product. Compared to our old scalper, this is so much better. For one thing, it's easier to change screens, which we typically do for each product run. It used to take four people 15 to 20 minutes to change the screens. Now, it takes two people 5 to 7 minutes."



Pasta Montana

Gentle handling is an important consideration at Pasta Montana where some short pasta shapes are more fragile than others. "This entire project was geared to producing perfect pasta, and gentle handling was an important part of that. We eliminated breakage points and lowered elevation drops. The discharge of the sorter was a concern, so Key worked to decelerate the product there," said Smith. Carpenter added, "Now, we have much less breakage than before and less waste. Further down the line, with the less breakage, the bagging operation becomes much more efficient."

"Since we installed Optyx, we've not had a single customer complaint," concluded Smith. "And we've made it easier for our people to package the best pasta."

For more information on Optyx, visit www.key.net/products/optyx.



Published by:

Key Technology, Inc.
150 Avery Street
Walla Walla, WA 99362

☎ 509.529.2161
✉ product.info@key.net
www.key.net