Key Technology Works with Aviko to Bring Efficiencies to Potato Processing

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– Joop van Drunen, Deputy Managing Director, Aviko-Group

When it comes to achieving efficiencies in potato processing, Mr. Joop van Drunen, Deputy Managing Director of the whole Aviko-Group and CEO for Aviko Deutschland's facility is an expert. He has spent most of his 34 years in the food processing industry building new factories and putting older, established factories back on track.

His latest project involved upgrading Aviko Deutschland's old plant and eventually building a new 80,000 meter squared facility. Experience has taught him that close relationships with suppliers like Key Technology are critical to a project's success.

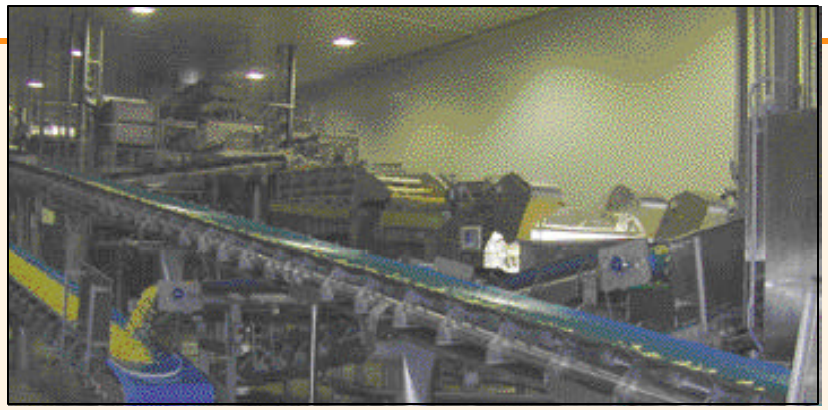
"The excitement of the job is to get (vendors) and use them the right way in a short time," Mr. van Drunen explains. "That's when you are successful. The schedule is important and you have to have the right suppliers to deliver the services and equipment. My philosophy is that I only want the best equipment. This is the eighth factory that I have built so I know what there is in the world of this industry. I get my . . . sorters from Key in the USA (and my) vibratory conveyors from Key BV in Holland. I worked with good people and suppliers who I can trust."

Aviko B.V., The Netherlands, has been processing potatoes since 1962. With seven potato processing facilities, 14 sales offices and two trading companies worldwide, Aviko supplies domestic and international customers with a reliable source of fries and specialty potato products. Mr. van Drunen has been with the company since 1990.

In 1992 Aviko sent him to assess the operations at their plant in Germany. At the time, it was operating at a loss. Mr. van Drunen recommended either closing the factory or investing in upgrades to improve performance.

Although the decision was made to ultimately build a new factory, the Germany plant came in second behind building a new plant in Jamestown, North Dakota, USA on Aviko's project list. So van Drunen focused on bringing the existing factory up to speed for the interim and traveled to the United States to complete the Jamestown project.

Upgrades included replacing the plant's sorters with Tegra® Optical Inspection Systems from Key Technology, a decision based on Aviko's past experience with the equipment.



"We had experience with the (Tegra in our Jamestown plant) and we believed it was the best we could buy," recalls van Drunen. Aviko opted for the monochromatic versus color inspection and was satisfied with the results.

Construction of the new Aviko Deutshland plant began in 1999. In the planning stage, van Drunen had to consider issues like the high cost of labor in Germany and increasing energy costs. To be competitive, he knew the factory would have to operate with fewer personnel and had to be automated as much as possible.

When the doors opened, the Aviko Deutshland plant was filled with Key equipment. The plant had two Tegras, one ADR® III, several Iso-Flo® Belts and Vibratory Conveyors for scale feed, defatting, alignment and packaging.

For automated defect removal, van Drunen says he wouldn't buy anything else but an ADR system from Key Technology. "A processor can't buy anything in the market that can compare with an ADR from Key. A bean cutter has nothing to do with potatoes. Forget that. It must be an ADR."

Key's ADR systems revolutionized the french-fry industry with the first generation ADR® I in 1983 and now process over 95 percent of the world's frozen french fries. Aviko Deutschland has an ADR®III that nearly eliminates manual trimming and inspection of potatoes, improving recovery at the same time.

The ADR®4 is Key's latest addition to the ADR family and was released to the idustry shortly after the Aviko Deutschland facility was completed. The new ADR4 combines high-resolution Vis/IR cameras, a patented belt conveyor, a patented rotary cutter, and Iso-Flo® high-speed vibratory conveyors to align, singulate,

scan, and trim with unparalleled speed and precision. It eliminates manual trimming and inspection, improves cutting accuracy and provides good productrecovery.

The plant utilizes Key Length Sizers in the packaging area. "This factory is built for every potato product from fast-food French fries to oven products. Some factories can handle only one or two products. It is because you need flexibility for length and cutting and also frying time – every product is different. We have eight packaging machines because we needed more flexibility because of different products and the different weights. But in the end, we make a product consistent to our customers' demands."

The automation has paid off in increased production, van Drunen reports. "We have few people on the production floor and we have processed 10,000 metric tons more in our first year than was planned for a start up year. Now I'm running 17 metric tons an hour high quality fries from one French fry line. Shorts and slivers are going to a 500 kg/h potato-flake line."

When it comes to labor costs, the Deutschland plant has saved significant dollars. Mr. van Drunen reports that there are only two people in the entire processing area. One person is at the trimming table to look for any defect that got through. The other person is in the wet area to check and clean equipment.

In the control room there is one person overlooking the entire system. The rest of the plant's 80 total people are in the office, engineering/maintenance, wastewater and waste removal, packaging room and shipping departments. Shifts run from Sunday at 10 p.m. until Friday at 10 p.m. Engineers and cleaning people come in to make any adjustments and clean everything for the next week's production during the weekend. On-site there is also an aerobic and anaerobic waste water treatment plant, a fully automated coldstore with a capacity of 18,000 pallets. Aviko Deutschland's factory also has its own power plant and potato-storage for about 12,000 tons.

Mr. van Drunen plans to continue using his plan for successful plant upgrades and new facilities. "In my experience you don't take risks. You go only with the best and that is what I did. I want specialists who understand the process. In my opinion, Key is the best for vibratory systems. It is all experience. For ADR, there is no other alternative. Period."