The key to the plant

Continuing our series on ideas in action, in this article **Alwyn Brice** took a trip to the US to see how one plant has benefited from the knowledge of a local engineering company.

Onion country: that's how you could describe the area around Walla Walla, Washington. But despite the predilection for the local sweet onion and the ideal growing conditions, there are other signs of vegetable life – and indeed, processing.

The object of my journey was to take a look at the **Logan International** processing plant which is located in Boardman, Oregon. It's located in an area of vast fields and seemingly endless sky and on the day of my visit, back in May, it was certainly hot enough to fry an egg omelette on the roof of the pick-up in which I was travelling.

Paul Eatinger is the general manager of the plant and to him fell the task of showing me around. I know that such a job isn't always embraced with fervour for journalists tend to be a curious bunch and they are prone to asking difficult questions. However, he need not have worried on this occasion as not only is the factory squeaky clean but also he had absolutely nothing to hide.

And with reason. For here we are looking at a processing plant which really and truly can claim to be state-of-the-art in its make-up. Not for Logan the usual damp conditions and the complicated pipework; no pools of water, rusty metal nor scraps of waste product lying about. Walk through connecting door and you'd think you were in a bakery – that's how neat and tidy the operation is.

Automation has virtually ousted manual tasks

The plant is a little over three years old, in fact, although its conception dates back to 1987. It is owned by the eponymous Denis Logan who is a farmer in the area and looks after around 11,000 acres. Originally he had bought an existing plant, elsewhere in Oregon, with the express intention of performing the processing operation. An accident at the facility, though, resulted in it burning down so he cast around for a new site. The Port of Morrow area was finally selected, helped by its water transport and distribution possibilities.

Denis Logan was essentially looking for a market niche; as a co-packer (he supplies about 50% of the plant's potato requirements), he was equally determined to offer a high quality product into the bargain.

It's clear to see that even from a cursory glance around the plant that automation has taken over from the manual way of doing things. This has had the knock-on effect of reducing the cost of the finished product, a range which includes skin-on wedges and french fries.

On the day of my visit the wedges were in full flow, a change for me, at any rate, as one accustomed to seeing either fries or chips on the line. Although this operation would be classified as small to medium in its scope, Logan is able to produce various types of french fries although these tend to be for quick consumption as opposed to long-term storage.

Coatings and batters are not a feature of the company's portfolio - yet - but it was revealed to me that product with a high solids content was the norm for the operations in the factory.

"The factory has been tailor-built to our specifications," confirmed Paul Eatinger. "We could have gone bigger but really there wasn't the need. A small footprint works well here; after all, there is always the

cost factor per square foot that has to be considered."

Whilst there is no (immediate) intention to expand the plant, it would be a short-sighted processor who did not build into the equation some leeway for future growth, as and when it might be required. When one learns that the plant is now working seven days a week with three shifts a day, one might be tempted to suggest that the time for growth is not so far into the future as first might be thought. Whilst the company was unwilling to disclose actual capacity and throughput, it would confess to something like a 2% share of the market.

Urschel Model GRL Cutter

My guide admitted that in the main the throughput presented few, if any, problems although "late storage" product could impinge upon this situation if the quality was variable.

Frozen product is the name of the game here and whilst Logan serves the local domestic market with potato products, it is also busy building up the international side of its operation. Increasingly, product is being supplied to Asia; it might on the face of it seem an expensive exercise but when one understands the problems that are inherent in the area in terms of growing suitable product, then the operation takes on fresh significance. Certainly quality is an important issue insofar as Asia is concerned. Other notable criteria include the packaging of the product itself: this has to be "just so" in the marketplace.

The company first became involved in this region back in 1988; fast food outlets are prime recipients of the Logan product but retail outlets and shops are also on the list. Despite the problems that have beset the area's economy, the demand for Western goods and foodstuffs has not abated that much. Japan, in particular, continues to exhibit a strong interest in potato products.

In full flow: Key's input has helped the conveying side

And what of the actual mechanics of the operation?

As we have mentioned earlier in this article, Logan represents a melding of engineering supplier and end-user. Walking around the wedge line it's very much a question of playing spot the supplier. There's a blancher from **Apollo Sheet Metal**, for example, and the dryer is courtesy of **National Drying**. **Cloudy & Britton** has furnished the freezing facility and the cutters come from that well-known supplier **Urschel**. **Bosch** has lent a hand in the packaging stages and the weighing is by the (seemingly!) ubiquitous **Ishida**. An abrasive peeler bears the **Vanmark** label whilst the steam peeling equipment was supplied by the Irish company **Odenberg**.

Quite an array – but the major part of the line is down to **Key Technology**, the link with Walla Walla. Indeed Key is involved with this plant from the cutting stage onwards. The conveying, which utilises both plastic and metal in its composition, features much of the Iso-Flo range for which the company is so well known. Part of the line diverts product through an AccuScan set-up; here product is sampled and checked at regular intervals so that the QC staff can be sure of the throughput.

The plant musters both a Tegra and and ADR111 which look after the overall quality of the product passing through the line. As ever, the application proved extremely difficult to photograph because of the powerful lighting it utilises! But it's a tried and tested solution to this particular processor's requirements. The engineering company now offers so-called UpTime Key Services programme which involves on-site maintenance, winterization and start-up, a parts inventory and a full report on the machine in question along with other services. Indeed, the service factor has seen much development by Key which believes that a contract doesn't end with the delivery of the machine; quite the reverse, in fact, and this is why it has begun to offer tailor-made solutions to those using its sorters.

The plant doesn't just benefit from up-to-date machinery either. To ensure that the plant looks tidy and ergonomic, where practicable all the piping and ducting has been routed away from the heart of the plant and diverted into the roof space. A suspended ceiling covers the entire affair and although the design involved a fair degree of head-scratching, the result is both pleasing and well-considered. Access to the roof space is straightforward and any repairs are easily affected.

Clearly, much thought has gone into this plant - and the end product has merited the investment.

For more information contact: ***Urschel Laboratories, Inc., 2503 Calumet Avenue, P.O. Box 220 Valparaiso, Indiana 46384-2200 U.S.A. Phone: 219/464-4811 Fax: 219/462-3879 E-MAIL: info@urschel.com Web Site: www.urschel.com***