



case study

Naturally Homegrown Foods

tna helps gourmet chip manufacturer achieve more consistent flavour while reducing seasoning application rate



overview

company: Naturally Homegrown Foods Ltd
(www.hardbitechips.com)

challenge: Replace an out-of-date steel coating drum and dry powder applicator with an automated, flexible seasoning system that ensures consistent and efficient application of eight different dry seasonings, with minimum machine downtime between flavour changes.

solution: The installation of the **tna** intelli-flav^{OMS 5} improved application consistency, lowered waste and simplified cleaning operations, enabling Naturally Homegrown Foods to reduce seasoning changeover times by 15-20%.



Based in Maple Ridge, British Columbia, Canada, Gourmet chip manufacturer Naturally Homegrown Foods Ltd specialises in the production of high quality batch-fried chips and supplies leading retail locations in Canada, the US and Asia. To meet growing demand, the company needed a flexible seasoning solution that ensured consistent and efficient application of eight different dry seasonings, with minimum machine downtime between flavour changes. In addition, the new system had to integrate and work seamlessly alongside other processing machinery in the facility.

challenge 1: improve flavour consistency

Flavour is often considered key to best-selling snack products, ultimately influencing product purchase in terms of consumer satisfaction and acceptance. With a primary objective to improve overall product consistency and meet growing demand for its high end potato chip brand, Hardbite Chips, Naturally Homegrown Foods needed a seasoning system that would ensure uniformity for every chip produced.

the solution

A perfect solution for the Hardbite range, the **tna** intelli-flav^{OMS 5} features a responsive variable mass seasoning system with dynamic vibratory weigher to directly control powder application from the drum. This enables an accurate, proportional amount of seasoning to be consistently applied to the product for improved coverage and flavour dispersion – even for products with irregular surfaces, including batch-fried chips.

“Here at Naturally Homegrown Foods, we have an unwavering desire to create the best potato chip out there, with each pack of Hardbite Chips dressed in aromatic, natural seasonings.



Delivering unrivalled product quality is therefore a top priority for us," comments Kirk Homenick, President at Naturally Homegrown Foods. "We've seen a vast improvement in seasoning consistency as a result of installing the **tna** intelli-flav^{OMS} 5 – most notably, we've been able to reduce our seasoning application rate from 8-9% down to 5-6%."

Further performance benefits are realised through the positioning of the scarfplate on the **tna** intelli-flav^{OMS} 5 infeed. Positioned closer to the top of the tumbling product, the scarf adds dry powder into the flavouring area more accurately, providing high quality, consistent seasoning. "The addition of this equipment has made such a difference for our facility compared to the older screw auger feature in our previous system," notes Homenick.

In addition, the scallop-designed infeed conveyor curves to match the shape of the drum which reduces product drop, helps control product direction and results in reduced product waste.

challenge 2: enhance level of flexibility

Rapidly changing consumer demands have increased pressure on snack manufacturers to run a variety of capacities, package sizes and materials within their plant. With the Hardbite Chips range including eight different flavour profiles, Naturally Homegrown Foods required a seasoning system that offered rapid cleaning time for flavour changes and minimum downtime.

Teri Johnson, regional sales manager – **tna** explains: "To increase their product portfolio at minimum cost, food manufacturers are increasingly looking for more flexibility in their existing production lines to customise their offering and respond to shifts in consumer demand and preferences. Manufacturers adding new flavours to their product range, for example, will require a system that allows for quick product and flavour change and outputs to be adjusted according to demand."

the solution

The **tna** intelli-flav^{OMS} 5 has a simple modular design that is fully enclosed to help prevent seasoning, dirt and other materials from building up, thus allowing for increased levels of hygiene and ease of cleaning. In addition, the system's pivoting drum provides accessibility for hard to reach areas, simplifying day-to-day operations.

"As a small plant that is experiencing growing demand, it's imperative that seasoning changeovers and cleaning downtime is kept to a minimum to ensure optimum production levels. Since the **tna** intelli-flav^{OMS} 5 was installed, changeover times have been reduced by 15-20%. Now we are able to carry out a seasoning changeover in less than 20 minutes thanks to the system's simple design," adds Homenick.

looking ahead

"The entire installation was completed quickly and on target to prevent interrupting production during a time of high demand. Once in place, the system basically behaved as a plug in and play," comments Homenick. "**tna** has a great reputation in the marketplace and we were impressed with the level of service and flexibility in system design. They were able to deliver a solution that addressed all of our needs on quality and controls, with the necessary support. We have been greatly appreciative of the **tna** intelli-flav^{OMS} 5 system and what it brings to our operations – the seasoning system has delivered on our key objectives of improving overall consistency and seasoning application. It has equally supported our growth and helped us achieve increased household penetration of the Hardbite brand, by allowing us to produce a highly consistent product."

Also commenting on the installation, Johnson adds: "We are delighted to partner with Naturally Homegrown Foods to help make their production line more efficient and support them during this exciting time of growth. Our technical expertise and dedication to customer service gives us the opportunity to create and supply innovative products to our customers worldwide, offering start-to-finish solutions for the entire production line."



tna is a leading global supplier of integrated food processing and packaging solutions with over 14,000 systems installed across more than 120 countries. The company provides a comprehensive range of products including materials handling, processing, cooling and freezing, coating, distribution, seasoning, weighing, packaging, inserting and labelling, metal detection and verification solutions. **tna** also offers a variety of production line controls integration & SCADA reporting options, project management and training. **tna's** unique combination of innovative technologies, extensive project management experience and 24/7 global support ensures customers achieve faster, more reliable and flexible food products at the lowest cost of ownership.

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