NEW BENCHMARKS IN SALMON PROCESSING

THE REVOLUTION IN WHITEFISH PROCESSING

BOOSTING EFFICIENCY IN SOUTH AMERICAN FISH PROCESSING

NEW SALMON DEHEADER RAISES QUALITY
NEW BENCHMARKS IN SALMON PROCESSING

One of the most advanced salmon processing plants in the world will begin operating in May 2018. The capacity of Lerøy Seafood’s new state-of-the-art facility in Jøsnøya, Norway, is expected to exceed 100,000 tons per annum. Marel will supply high-tech salmon processing systems to the new factory, making it one of Marel’s largest fish industry contracts to date.

Lerøy Seafood Group is the leading exporter of seafood from Norway, and the world’s second largest producer of Atlantic Salmon. Each day they supply the equivalent of three million meals of seafood to more than 70 markets worldwide, with products including salmon, trout, mackerel, herring and shellfish.

Never before has such a high level of automation in salmon processing of this scale been achieved. Lerøy will install the latest Marel technology, setting new benchmarks in the industry. Investment in technology is increasingly important in today’s salmon processing industry, where limited raw materials make quality and yield paramount. Marel will supply state-of-the-art solutions for filleting lines, whole fresh salmon packing and logistics for the new plant.

Lerøy will monitor and control yield and quality using Marel’s Innova Food Processing Software. In filleting, for example, Innova will control the filleting process and provide a comprehensive real-time reporting function via dashboards that will give the operator a complete overview of throughput, yield and volume. Lerøy’s approach is highly innovative and Marel is very proud to be working closely with Lerøy, to deliver efficient high-tech applications for this groundbreaking project.

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“FLEXICUT MAKES GOOD BUSINESS SENSE.”

FUTURE OPPORTUNITIES WITH FLEXICUT

When Icelandic fish processor Oddi hf. decided to invest in the Marel FleXicut pinbone detection and removal system, it was an investment in quality, efficiency and future possibilities for new product development.

“The installation of a Marel FleXicut pinbone detection and removal system at Oddi’s processing facility in Patreksfjördur, Iceland, in March 2017 marks a high point in the long standing partnership between the two companies.”

Oddi has operated Marel equipment for decades, beginning with the early Marel scales, and has keenly followed Marel’s whitefish innovations ever since. When the new generation flowlines entered the market, it made sense to take advantage of having everything connected, and now Oddi is equipped with a whole range of Marel processing equipment – from scales, graders and portion cutters, to Innova software that monitors production throughout all processes.

“‘The smooth flow this creates makes a big difference to our efficiency,’ explains Oddi Managing Director Skjaldur Palmason. “Each step we’ve taken with Marel over the years has consistently delivered results to our bottom line.”

MAXIMIZING VALUE

Recent market conditions in Iceland have been tough for fish processors, with a strengthening currency making it difficult to remain competitive. It may therefore seem a strange time to invest heavily in new equipment but, as Palmason explains, “The best thing we can do in these circumstances is work towards countering the challenges by doing everything we can to maximize value. In this context, FleXicut makes good business sense.”

“We’d followed FleXicut from when it was first introduced at the Brussels show in 2015, still in development, and it was always a question of when rather than if we’d invest,” Palmason adds.

The deal was finalized at Marel’s Whithefish ShowHow in Copenhagen in November 2016, after discussions between Oddi and Marel specialists confirmed the layout and set out the return on investment and long-term benefits of the installation.

Demonstrations of the FleXicut at the event highlighted how the machine can produce uniform, precision cut products. “It made the perfect setting to seal the deal,” Palmason says.

UNIQUE IN THE MARKET

The new line at Oddi will include the FleXicut pinbone detection and removal machine with fillet portioning, as well as the FleXisort product distribution system.

The FleXisort is specifically designed to work with output products from the FleXicut using a modular drop down mechanism. It distributes portions into up to eight different product streams specified by FleXicut’s software intelligence.

“In our view, this is the biggest step in whitefish processing in decades; it’s a revolutionary,” says Palmason.

“We believe that this combination of precision pinbone removal and gentle handling is unique in the market,” Palmason explains.
“We expect it will help us continue to maximize the value of our raw materials, as well as better meet the demands of the market. As soon as the market knows of the possibility of the uniform products FleXicut can deliver, it will demand nothing less.”

QUALITY PROCESSING
“At Oddi, we put the emphasis on quality over quantity, and FleXicut will help us keep serving the high-value market, as well as broaden our product opportunities,” says Palmason. “It will help us create more product lines for customers, which adds to our competitive advantage, with superb quality in the production of fresh loins and smart fillets.”

“And with ever greater competition in the business, FleXicut will help us reduce costs by minimizing manual labor and maximizing yield by producing products that enable us to keep waste to a minimum,” he adds.

This year, Oddi is celebrating 50 years since its founding in 1967. “It’s great timing to invest in the future,” Palmason says. “We’ve invested heavily in the past year, and the installation of the FleXicut system next month will be the highpoint – a great way to celebrate our 50th anniversary!”

GO TO:
marel.com/flexicut
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EFFICIENT BRAND PROMOTION
Wraparound labels make it easy for fish processors to brand their products with plenty of space to communicate essential product information and ensure a winning product presence on the retail shelf. The M360 labeler is designed for premium labeling of all popular tray sizes and is ideally suited for skin packs.

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• More labels on a reel, fewer reel changes and less downtime
• Increased application speed
• Increased surface print area for brand management
• Consistency of format on-shelf
• Tamper evident for improved security and safety

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AROUND THE PACK
Efficient, consistent, flexible labeling

Marel has launched a new high-speed labeler that employs the latest technology in flexible linerless labeling. It creates full wraparound labels as well as C-wrap partial wraparound labels and top labels.

EFFICIENT BRAND PROMOTION
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VERY EASY TO OPERATE
Setting up and changing labeling programs is very easy – you simply press a button and the machine adjusts itself automatically, ensuring high efficiency and minimal downtime.

ENVIRONMENTALLY FRIENDLY
Using no carrier backing paper, the M360 generates zero backing paper waste. Other environmentally friendly features include improved efficiencies and volume applications with label reels that weigh 40% less than self-adhesive labels.

FIXED WEIGHT OR CATCH WEIGHT
The M360 labeler is available as a standalone unit for fixed-weight packs or it can be connected to Marel’s weigh price labelers for catch-weight products. It complies with all food-labeling regulations.

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**PRODUCTIVE PINBONE REMOVAL**

**Multiexport Foods in Chile** have greatly improved their salmon pinbone removal efficiency with Marel pinboning lines. Multiexport Foods is a Chilean company established in 1987, devoted to the farming, processing and sale of salmon and trout. Multiexport Foods currently has two processing plants – Smoked and Fresh Frozen – which are among the most modern and efficient in Chile. It serves more than 30 markets and has established a presence in the world’s largest supermarkets and food service chains.

The salmon industry around the world now operates in an environment of limited raw materials, making quality, yield and efficiency more vital to salmon processors than ever before. In South America, the salmon industry is dynamic and complex, and Chile alone is one of the world’s leading salmon producers. But the key challenge remains the same: how to produce quality salmon efficiently.

Flexibility is vital to Multiexport Foods’ commercial strategy, so it can quickly adapt to the needs of its markets. To maintain this level of flexibility, the company is constantly looking for ways to improve its processes; in this case by making the removal of salmon pinbones more efficient.

Multiexport Foods installed two Marel automated pinboning lines in their fresh-frozen plant in Puerto Montt, Chile: “The Marel pinboner meets our needs in terms of productivity – i.e. the efficient removal of pinbones from salmon fillets – easy operation, hygiene and accessibility for technical service crews,” says Claudio Vera, Operations and Plant Manager at Multiexport Foods.

**IMMEDIATE BENEFITS**

Increased productivity, reduced labor costs, and a high level of hygiene were among the benefits noticed straightaway. “Once the Marel pinboning lines had been installed, the benefits were immediate. Efficiency improved significantly and so did staff rotation and specialization, resulting in better working conditions,” says Vera.

The company reports that the return on investment for the equipment was achieved in roughly 11 months, taking into account the growth in productivity and the reduction in labor costs.

**RAPID INSTALLATION AND START-UP**

Investment in Marel equipment also means investment in Marel expertise, with the provision of advice and guidance during each installation and beyond, to ensure full utilization during the operation and maintenance of the equipment.

The installation of the Marel pinboners took just a couple of days over a weekend, and the equipment went into operation the following Monday. “Everything was very well organized during the installation of the equipment. Coordination between Marel’s engineers and our own was excellent,” says Vera.

**SUCCESSFUL PARTNERSHIP**

Multiexport Foods is so happy with the success of their Marel pinboners that they’re now considering installing a third pinbone removal line. “We are extremely satisfied with our partnership with Marel, and are very interested in continuing to expand our future business with Marel technology,” says Vera.

“We require reliable equipment without major stoppages, which is resistant and robust, simple to operate with an efficient maintenance service, and a lasting supplier-client relationship based on new technology and close ties – and we can achieve all this with Marel” Vera concludes.

**GO TO:**

marel.com/pinboning
An automatic SmartLine Grader has replaced labor intensive manual grading at Peruvian fish processor Fisholg & Hijos with excellent results.

The installation of a 12-gate Marel SmartLine grader has completely changed the grading process at Fisholg & Hijos. The installation is part of an ongoing automation process for the company. Established in 2007, Fisholg & Hijos produces and exports seafood products that include anchovy, tuna, mackerel, squid, scallops, mahi-mahi, shrimp and hake out of Paita, the leading seaport of northwestern Peru.

FROM MANUAL GRADING TO AUTOMATIC
Before installing the Smartline Grader, the whole grading and batching process at the company was done by hand; a labor intensive process that needed to be automated and simplified.

“The problem that we had with manual grading was its inaccuracy,” says Walter Olaya, general manager of Fisholg & Hijos. “There was always the risk of misclassified portions and wrong codes being applied to the product. By automating the process and installing the SmartLine graders we have overcome this problem and minimized the possibilities of mistakes.”

LESS LABOR COST – NO MANUAL HANDLING
Since automating the process, Fisholg & Hijos has increased production capacity by 15% and reduced the total labor costs by 8%. With a unique hygienic design, the SmartLine Grader delivers accurate batches quickly and efficiently.

“We have less labor cost and our product quality has improved,” says Olaya. “The new grader enables us to meet customer requirements and offer a better quality product with less manual handling.”

IMPROVED ACCURACY AND CONSISTENT QUALITY
Less product handling results in higher quality and a much better product presentation. “The SmartLine Grader has given us the accuracy and consistency we need. This generates more confidence in our product on the market,” explains Olaya. “It has been beneficial to us as customers that are very demanding in their purchasing parameters can now come to us directly without using intermediaries and we can deliver the exact products they want.”

FAST AND EFFICIENT PROCESS
Real-time reporting is built into the SmartLine. It gives Fisholg & Hijos a full overview of the production process and helps maintain the accuracy and speed that they need.

“The faster and more efficient the process, the closer we are to our customer’s requirements,” says Olaya. “We have a complete overview over the grading operation and can adjust it according to our needs.”

FLEXIBLE APPLICATION
The SmartLine system is flexible and can be used for a variety of products. Fisholg & Hijos use it to grade whole fish, fillets and a range of seafood. “It is multifunctional and we like the fact that we can use it for various processes,” says Olaya. “This makes it possible for us to use it all year continuously.”

PARTNERSHIP AND SERVICE
Marel works closely with its customers from the beginning and installation was quick and smooth. Technical staff from Fisholg were involved from the start and staff received onsite training from Marel on how to use the machine.

“It is very important to us to have great service from our suppliers. Marel has been on hand to assist us with anything we’ve needed. The cooperation has helped us maintain the best hygiene and quality conditions while we still get the best yield possible,” Olaya concludes.

GO TO: marel.com/smartline-fish

Marel has developed a new salmon deheader that minimizes manual handling and improves quality and yield.

NEW SALMON DEHEADER RAISES QUALITY

The new MS 2720 automatic deheading machine for salmon is designed to achieve optimum yield by measuring each fish and adjusting the cutting tools accordingly. The tail is also cut off so that the salmon exits the machine ready for filleting.

“High precision cutting Using the latest servo technology, the MS 2720 is capable of deheading up to 20 fish (2 - 10 kg) per minute. The MS 2720 is equipped with six high quality knives that achieve high yield and quality output from the various cutting processes. Precision cutting of the head and tail maintains the quality of the fish and ultimately delivers a better fillet.

AUTOMATIC TRANSFER TO FILLETING
The deheader is designed to be fully integrated with Marel’s filleting machine, the MS 2730. The automatic transfer of the fish from the deheader to the filleting machine minimizes manual handling and helps maintain the best possible product quality.

RELEASED FOR SALE LATER IN 2017
The new salmon deheader is still in its prerelease phase and Marel is working with key salmon industry operators to finalize its development. It is designed to improve quality, yield and throughput in this stage of salmon processing, and is expected to be released for sale in Q4 2017.

GO TO: marel.com/salmon

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GO TO: marel.com/salmon
LOW GIVEAWAY, HIGH ACCURACY GRADING

Marel’s Custom Grader has increased throughput and reliability for the final target weight in the box packing process at the Ventisqueros salmon processing facility in Chile.

FRESH PRODUCTS FOR EXPORT
Ventisqueros processes freshly harvested salmon at its modern 8,000 m² processing plant in Puerto Montt, Chile, and specializes in value-added products. The company prides itself on the freshness of its products, which it exports to markets around the world including Asia, Europe, the Middle East and the Americas.

AUTOMATING TWO PACKING LINES
Ventisqueros continually looks for ways to improve its processes. In order to improve the final box packing procedure, and to better manage the hiring of their seasonal labor force, the company decided to look for an inline solution to automate their manual packing lines.

Traditionally, the use of graders in the Chilean fishing industry is applied to large volumes, such as large boxes, massive production or raw material reception. Ventisqueros had different requirements and in collaboration with Marel they developed a technical project that better suited their specific needs.

EFFICIENCY AND ACCURATE WEIGHT
The main challenge of manual packing, along with fluctuations in the need for labor, is the giveaway that is inevitably generated in the final packed product. In the manual packing process we identified around 2-3% of losses with giveaway. After installing the new Marel Custom Grader the percentage was reduced to 0.5%,” says Gonzalo Acevedo, Processing Manager of Ventisqueros.

“Our customers demand a fair price and with the new system we can now offer the right weight for the price category.”

SHORT PAYBACK TIME
As well as ensuring a more accurate weight and a reduction in giveaway, the new system replaced two manual packing lines. “More than the increase in throughput, the main improvement was the increased process efficiency,” says Acevedo.

THE COMBINATION OF THESE ELEMENTS MADE THE PAYBACK TIME VERY FAST: WE PRACTICALLY RECOVERED THE INVESTMENT IN A COUPLE OF MONTHS.”

CUSTOM-MADE GRADING
Marel’s Custom Graders are a versatile suite of standardized, modular options designed to fulfill a wide range of grading needs. The dynamic graders can be used by many systems, as infeed, flow control, batching, dispatch, packing and takeaway. “One of the key elements of Marel equipment is that it is highly reliable compared to competitors,” says Acevedo. “The Marel machines are robust and do not require much maintenance.”

“One of the great distinctions of Marel in this project was the collaboration of the technical crew and the designers to create a full inline solution that would fit our packing process. I do not know of any other company in the market that offers the same high level of quality and efficiency in its aftersales service,” Acevedo says.

SECURITY AND CONFIDENCE
Ventisqueros and Marel teamed up a couple of years ago, with the growth of the Chilean salmon industry and the corresponding development of the main technology and equipment suppliers for the fish processing industry. Marel products at the Ventisqueros facility include packing lines, graders, scales and Innova Food Processing Software.

“Knowing more about the solutions and equipment offered by Marel, we feel a certain security and confidence that is also perceived by the client; it is a more reliable process,” Acevedo concludes.

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“IN THE MANUAL PACKING PROCESS WE IDENTIFIED AROUND 2-3% OF LOSSES WITH GIVEAWAY. AFTER INSTALLING THE NEW MAREL CUSTOM GRADER THE PERCENTAGE WAS REDUCED TO 0.5%.”

With almost 30 years’ experience in salmon and trout cultivation and processing, Ventisqueros is one of the most stable processors in the Chilean Patagonia region. The company is known for the quality of its products and its strong commitment to the sustainability of the business. Ventisqueros began its activities in aquaculture and quickly embraced the whole processing chain as one of Chile’s first salmon processors. Ventisqueros is also one of the first salmon companies to measure its carbon footprint in an effort to lower the environmental impact of its operations.
Access to a continuous, reliable workforce is a key challenge for many seafood producers today. This can result in delayed or cancelled contracts, especially during the peak season, and can lead to a reluctance to expand the production scale. Dai Dai Thanh Seafoods has solved this problem by investing in an I-Cut 130 PortionCutter from Marel. This has enabled the processor to increase its orders, while fully meeting its customers' requirements on product size, quality and uniformity.

**ACCURATE PORTIONING MADE EASY**

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**THE CHALLENGES OF MANUAL CUTTING**

Cutting pangasius into portions manually is very labor and time intensive, and is very difficult to do consistently. As Hang Quoc Dinh – Sales Manager at Dai Dai Thanh Seafoods – explains, it is almost impossible for workers to judge the weight of portions to an acceptable level of accuracy, so each portion needs to be weighed before and after manual cutting. The overall result is a high error rate, low productivity and uneven cuts.

**RAISING PRODUCTIVITY**

After testing the I-Cut 130 and calculating a fast return on investment, Dai Dai Thanh Seafoods decided to invest in the machine to raise productivity and as a solution to the shortage in skilled labor. With high-speed cutting (up to 1000 cuts per minute) and high precision, the I-Cut 130 PortionCutter vastly reduced the need for manual cutting, and freed up a third of Dai Dai Thanh Seafoods’ skilled workers for other tasks.

**UNIFORM RESULTS**

Once the I-Cut 130 was installed, the results in uniformity were immediate, with almost no errors. This enabled the company to become more competitive, and with a large number of skilled workers now able to undertake other tasks, it was easy for Dai Dai Thanh Seafoods to expand its product range and use the portion cutting machine for both straight cuts and to slice pangasius fillets at a 45° angle.

**HAPPY CUSTOMERS**

Since installing the I-Cut 130, the company has received good feedback from its customers about the quality and consistency of the products. Japan, for example, accounts for 20-30% of Dai Dai Thanh Seafoods’ total production of pangasius portions and the Japanese market is particularly demanding. Japanese people often calculate their diet precisely, by weighing each component of a meal in order to calculate the nutritional value appropriate to specific age groups. This is why they have strict requirements for precise and uniform product weight. The I-Cut 130 helps ensure the company’s strong position in the Japanese market.

**HAPPY EMPLOYEES**

Pham Thi Man – Technical Manager at Dai Dai Thanh Seafoods – estimates that an I-Cut 130 PortionCutter can do the work of up to 60 skilled workers on the cutting line. She says that it also helps to ensure a safe work environment, as it is easy to operate and clean, and to adjust the cutting angles of the blades, which are safely positioned out of reach. It is simple to program the I-Cut 130 to measure the void ratio of each pangasius fillet for cutting into fixed weight and fixed length portions and steaks.

**MORE COMPETITIVE PROCESSING**

The I-Cut 130 PortionCutter is designed specifically to meet the processing needs of larger companies. It is the ideal solution for cutting fresh, boneless fish into portions of fixed weight and/or fixed length. With a low loss rate of 0.05%, Dai Dai Thanh Seafoods has reduced costs significantly, and reduced the pressure on workers as well. The company is more competitive, has increased its orders and can more easily meet its customers’ demands for high accuracy and high quality.

**WITH A LOW LOSS RATE OF 0.05%, DAI DAI THANH SEAFOODS HAS REDUCED COSTS SIGNIFICANTLY, AND REDUCED THE PRESSURE ON WORKERS AS WELL.**

**GO TO:**

marel.com/portioncutting
Bruce Wareham’s experience in the Canadian fish industry stretches back more than half a century. He is the founder and former CEO of Icewater Seafoods, and before that was Executive Vice President of Production for High Liner Foods. Wareham has witnessed the transformation of the industry across time, and was instrumental in Marel entering the Canadian market back in the 80s. He is a wealth of knowledge and insight about the challenges fish processors have faced over the years.

**ROOTS IN THE FISH INDUSTRY**
Bruce Wareham started working for his family’s salt fish business in Newfoundland in 1963 and has been in the fish industry ever since. He has drawn on his resourcefulness, experience and expertise to survive all the major shifts in the Canadian seafood industry, as well as run his own thriving business in Newfoundland.

**BRINGING MAREL TO CANADA**
It was Wareham’s keen eye for good processing solutions that led to the introduction of the first Marel waterproof scales in Canada in 1986. Wareham was Divisional Manager of National Sea Products in Arnold’s Cove, Newfoundland, at the time.

“When we started in the late ’70s with fresh and frozen cod, the bulk of the product was produced into three packs basically: layer pack, cod block and of course fresh cod fillets. To produce the five-pound layer packs, we had to have scales, and that was why I got in touch with Marel when the company was in its infancy,” says Wareham.

“Until we got the Marel scale, we could never find one that was watertight. I had read an article about Marel and their scales, and how good they were. We purchased some, and I guess that was the beginning of Marel in Canada.”

**SURVIVING THE ’92 COD MORATORIUM**
Like many in the Canadian seafood industry, Wareham experienced firsthand the hardships of the 1992 Cod Moratorium. At the time, Wareham was the Executive Vice President of Production for National Sea Products which later became High Liner Foods, Canada’s largest fish processing company.

The fish was gone, the resources depleted and Newfoundland and Labrador was hit hard. Wareham had to lay off the people, shut down the factories and tie up the trawlers. “When I look back at it now, I don’t know how I did it,” Wareham says quietly. “I guess it was just the adrenaline that kept me going.”

**FACING CHALLENGES AND ADAPTING TO CHANGE**
“To continue surviving after the moratorium hit in ’92 we had to reorganize and restructure operations,” Wareham explains.

Marel was one of the companies that was brought in and helped establish a new way of processing. New weighing systems, grading applications and processing methods were implemented. Wareham and his team faced the challenge head on, and today – decades later – the Arnold’s Cove fish processing facility is still thriving.

**FIRST TO START IQF PROCESSING**
Consumer driven changes moved the market towards different portioning and pack requirements. In the late ’80s, Wareham and his team at National Sea Products started producing IQF products. They installed Marel portioning and grading lines to replace manual work, continuing the close cooperation between both companies.

“We were the first plant, to my knowledge, in North America that did IQF portion products. We took the cod fillet, and we basically portioned it into a cod loin, a center cut and a cod tail. Then the piece of the belly went into cod block,” explains Wareham. “We’ve been focused on IQF portioned production since ’89 in Arnold’s Cove, right up to this day, and it is still going strong.”

**THE FIRST MAREL FLOWLINE INSTALLED IN NORTH AMERICA**
“The next big change came in 1997 when we installed a Marel flowline, the first in North America. A new Marel IQF Grading System went on-line in 2001,” says Wareham. “We are still using these Marel solutions, we have added different elements since, but these products are still running strong.”

**ICEWATER SEAFOODS ESTABLISHED**
The Arnold’s Cove plant turned out to be the foundation for Wareham’s own company, Icewater Seafoods, which was established in 2004. “At the time, I was called to the head office in Lunenburg, Nova Scotia, and I pretty much knew why I was going there,” Wareham says with a smile. “They told me on my birthday on August 3rd, 2003, that Bruce, we have tried to sell Arnold’s Cove. We haven’t got any takers. We decided we’re either shutting it down or we’re doing a deal with you to take the plant over. One thing or the other.”

“We work together. We share information and that’s the reason we’re still here and we’re still strong.”

“We are still using these Marel solutions, we have added different elements since, but these products are still running strong.”
Icewater Seafoods is ready and waiting to change and adapt to new ways.

Wareham and his son Alberto Wareham, who now runs Icewater, says Wareham. As the outlook for the Canadian cod resource improves, men like Bruce are always fortunate enough to be able to change Arnold’s Cove with it, to keep it all going,” says Wareham.

A PIONEERING SPIRIT

A knack for adapting to change, a flexible sourcing strategy and a sturdy work ethic have kept Wareham at the forefront of the Canadian seafood industry. In his role as Executive VP of Production for High Liner Foods, Wareham kept up with the latest trends in the industry, both in terms of processing technology and consumer trends. “As things changed, we’ve always been competitive. “We work together. We share information and that’s the reason we’re still here and we’re still strong,” Wareham says.

POSITIVE SIGNS THE COD STOCK IS RECOVERING

Icewater is the second largest holder of enterprise allocations for Northern Cod in Canada. When the Wareham family took over the Newfoundland operations of High Liner Foods, the cod allocations were included. “The moratorium was in ’92. We’re now 25 years later, or we will be in July 2017, and there are finally solid, positive signs that the cod resource is recovering around Newfoundland and Southern Labrador,” says Wareham.

READY FOR THE COD’S RETURN

As the outlook for the Canadian cod resource improves, men like Bruce Wareham and his son Alberto Wareham, who now runs Icewater Seafoods, are preparing for change. Whether it takes five years or ten, Icewater Seafoods is ready and waiting to change and adapt to new ways of fishing, new resources and a new way of processing.

INNOVA Food Processing Software

You may be surprised to learn that one of the most advanced fish processing plants in the world is in the Saudi Arabian desert. The National Aquaculture Group (NAQUA) facility was built near the coast of the Red Sea in 2000 and has been equipped with Marel equipment and software from the start.

NAQUA’s fully integrated marine farm covers approximately 250km² and produces a range of species including Red Sea barramundi, shrimp, sea algae and sea cucumber. The group’s annual processing capacity is around 100,000 tons, with products exported around the globe.

In 2011, NAQUA invested in new equipment and implemented Innova Food Processing Software throughout all processes. Now the processor is shifting up a gear and improving processes again, this time aiming to increase its throughput by as much as 100%.

INTEGRATED QUALITY CONTROL

To make this giant leap in throughput possible, NAQUA has invested in new Marel processing and packing lines, as well as an Innova paperless Quality Control (QCC) system.

The QC system is fully integrated with the plant’s automated packing lines, to ensure full traceability of products through to packing, and connects quality checks with the traceability system.

100% TRACEABILITY

As a vertically integrated company, NAQUA values connectivity on many levels, with product quality, traceability and biosecurity among its chief concerns. Marel recognizes these concerns and has reviewed all production processes with NAQUA management to make sure they are reliable and that traceability is 100%.

*When producing for the most demanding market in the world, only the best will do*,” says Cameron Maclean, Director Shared Services at NAQUA, in reference to Innova Food Processing Software and Marel’s processing solutions.

Innova’s traceability system is the most advanced on the market and includes automatic, real-time monitoring of each step of the production system. It enables full traceability of the raw material throughout the value chain, all the way through to checking that products are correctly labeled, and swiftly isolates any problem to minimize the size and cost of recalls.

Innova works by recording variants in the production and issuing warnings if any variations are greater than a predefined level. The Innova system goes beyond fulfilling all NAQUA’s traceability and quality requirements. Every single box produced is traced through the entire packing process, from weighing to boxing to palletizing.

Innova Labeling makes it easy to print labels that include all traceability information for every processing step, and a copy of every label is kept in the Innova database for reviewing any label, whether it was printed for a pack, box or pallet.

RELIABLE QUALITY CONTROL

When a product has been palletized, Innova checks to make sure that all quality control information for the pallet is complete. Only once this has been confirmed can the pallet be selected for shipping. If not, the pallet is marked as “quality check” and will only be released with a digital signature from the quality manager.

Innova monitors yield and throughput in real time for every production step, which gives managers the ability to react quickly as soon as any issue arises. By simply using Innova dashboards to monitor throughput and assess the reasons for any fluctuations, managers at NAQUA have already succeeded in raising throughput from 130 tons per day up to 200 tons per day, without any further investment in the plant.

PLANNING A PRODUCTIVE FUTURE

With the improvements that are currently underway, the goal now is to reach 400 tons a day, and it’s clear that Innova Food Processing Software plays one of the biggest roles in ensuring that this target is reached.

GO TO: marel.com/innova
JOIN US AT OUR NEXT SHOWHOW

You no longer have to imagine how the latest processing equipment could be integrated into your facility. We can show you how.

The Salmon ShowHow and the Whitefish ShowHow are held at Progress Point, our state-of-the-art demonstration center in Copenhagen. These unique events invite you to experience hands-on demonstrations of standalone machines and whole processing lines, with an extensive range of equipment under one roof covering the whole production chain from receiving to dispatch.

Discover how Marel’s industry leading products can help you organize your daily production and address the critical factors that affect raw material utilization, processing times, labor costs and food safety. Step into the virtual Innova Office to experience directly how Innova Food Processing Software can add further value to your production. Hear guest speakers and Marel experts address some of today’s key processing challenges.

GO TO:
marel.com/whitefishshowhow
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Marel is the leading global provider of advanced equipment and systems for the fish, meat and poultry industries.