

Seafood Processing and Equipment Guide



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GLOBAL FISHING SECTOR
PUMPING MILLIONS INTO
AT-SEA PROCESSING UPGRADES

16

PACIFIC SEAFOOD'S REOPENED
PROCESSING FACILITY THRIVES
ON SECOND CHANCE

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From the Editor

A WORK IN PROCESS

As it enters a new decade, the seafood industry has seen a great deal of progress with processing. State-of-the-art innovations have polished up facility operations, increasing efficiencies and adding value. Some of this same machinery has even found its way aboard vessels themselves, taking the concepts of freshness and immediacy to entirely new depths.

No matter which way – or where – you slice it, the seafood processing sector is churning out more dynamic offerings than ever before.

Several of the inner mechanisms propelling this

sector to the cutting-edge are on full display here in SeafoodSource's first-ever Processing and Equipment Guide. From equipment launches and breakthroughs, to modern packaging trends, noteworthy processing events, and new facility walkthroughs, this resource provides valuable global insights for you and your team about the current happenings and challenges playing out across seafood's cutting room floor.

Are you properly equipped for seafood's future? Read on, recalibrate, and revolutionize your processing prowess. ♦



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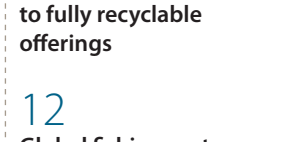
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New Bedford cold chain seafood packager follows modern trends to fully recyclable offerings

By Madelyn Kearns



Packaging Products Corporation (PPC) – a New Bedford, Massachusetts-based cold chain packager specializing in seafood, medicine, and perishables – announced that it was merging with international packaging products provider Pacific Packaging Products, Inc., in September 2019.

The merger was forged in an effort to broaden the reach of both packaging parties, the companies said, offering existing and future customers across North America top-tier sector services. The melding of PPC's expertise in seafood, perishables, and cold chain packaging with Pacific's expansive supply chain insights will offer markets of all kinds an elevated value proposition, noted Ted Heidenreich, PPC's president, in September.

"The combining of our core expertise in seafood, perishables, and cold chain packaging with Pacific's expertise in supply chain optimization and automation increases the value to all our customers and the market in general. PPC has always prided itself on unparalleled service, and it is great to be working with a family-owned company that shares the same values," Heidenreich said.

Founded in 1961, PPC specializes in "the design, development, and distribution of high-quality packaging, focusing on the care and protection of temperature sensitive products in transit, such as seafood, chilled foods,

vaccines, [and] reagents, as well as all enterprises seeking superior cold chain packaging and transportation solutions,” the company explained.

Pacific Packaging, which was founded in 1952, is a leading international provider of packaging products, equipment, automation, and supply chain management services. Headquartered in Wilmington, Massachusetts, the company has multiple locations across the United States, Puerto Rico, and the Dominican Republic.

SeafoodSource caught up with Heidenreich – who will serve as managing director of PPC moving forward – to discuss the intricacies of the acquisition and the trends guiding seafood packaging and shipping innovations into the future.

SEAFOODSOURCE: What kind of cold chain packaging solutions for seafood are trending right now?

HEIDENREICH: Change isn’t often adopted overnight, and this is true with packaging. As pioneers in tailored packaging solutions for the seafood industry, we have brought to market many innovations that are relevant the day they are launched, yet may take a few years to replace their traditional counterparts – even when the advantages are many. This is true of a product line of ours that is currently trending: Our ‘100% Recyclable Wax Alternative’ delivery box line is one we introduced to the seafood industry a few years back, which has seen steady growth until this year, when interest and need has accelerated.

It is important to understand that several factors are involved when introducing a modern replacement to the way things have always been done. Even for trifecta innovations that are cost-effective, increase efficiencies, and align with cultural agendas, a change in the way product is packed must overcome operational and mindset resistance. This is why sometimes external forces become the driving force for change. This is especially the case of our ‘100% Recyclable Wax Alternative’ box line, which is a tried and true product currently in the marketplace, mainly used by early-adopter brands, that is now surging in interest due to increased and real pressures seafood suppliers are facing to use recyclable materials in seafood deliveries.

Recycling is a topic we spoke about during [the 2019 Seafood Expo North America event] as a cultural trend

“In our product categories, we expect to roll out new, fully recyclable offerings to help our customers increase their goals for sustainability.”



that was only going to grow. Our customers are feeling the trickledown effect in a bigger way from their retail customers with corporate responsibility stances to uphold, whether self-made or pushed by regulatory measures, calling for reduced carbon footprint practices. We created our ‘100% Recyclable Wax Alternative’ boxes exactly for this purpose as it perfectly protects fresh fish deliveries for even multi-day cold-chain shipping cycles and is recycled by the end user in their dry corrugated pallets which can even turn them a profit.

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It's easy to think that 'a box is just a box,' but for us, our work is never done as we're continually working on improvements in performance, reducing waste, and preparing for future needs. PPC is well-poised for this current need for a recyclable fresh seafood delivery box, and we pride ourselves on continually developing and testing forward-looking alternatives that improve the seafood handling and delivery process.

SEAFOODSOURCE: Within the packaging industry as a whole, what kind of shifts/evolutions have you seen?

HEIDENREICH: Aside from the obvious topics surrounding recyclable materials and the importance of branded packaging, many of the major shifts in the packaging industry are in response to customer needs for cost and time reductions. This is a shift most industries have felt as a result of the retail space focusing on discounting practices, which challenges all businesses to tighten costs and broaden their customer base to continue growth. Packaging evolutions behind the scenes responding to this need for reduced costs come in the form of operational and material improvements to reduce manufacturing waste. These measures realize additional benefits reducing the environmental impact and have become a silent force driving material and automation innovation. We are continually improving our products through the manufacturing process rarely noticed by customers, as performance isn't sacrificed.

A more noticeable shift in the packaging industry is in consolidation of suppliers in response to the need for lower prices. Though many companies have only focused on merging 'like' companies to improve costs through buying power, we at PPC have recently merged in a very intentional way to improve both buying power and increase time-saving measures and cost-saving capabilities to our customers. We believe that packaging suppliers who can adapt to customers' cost and time



"Our '100% Recyclable Wax Alternative' delivery box line is one we introduced to the seafood industry a few years back which has seen steady growth until this year, when interest and need has accelerated."

saving needs through growth, while maintaining a high level of customer service and continuing to invest in forward-looking innovations, will be the right packaging partner for the seafood industry to carry them from today forward.

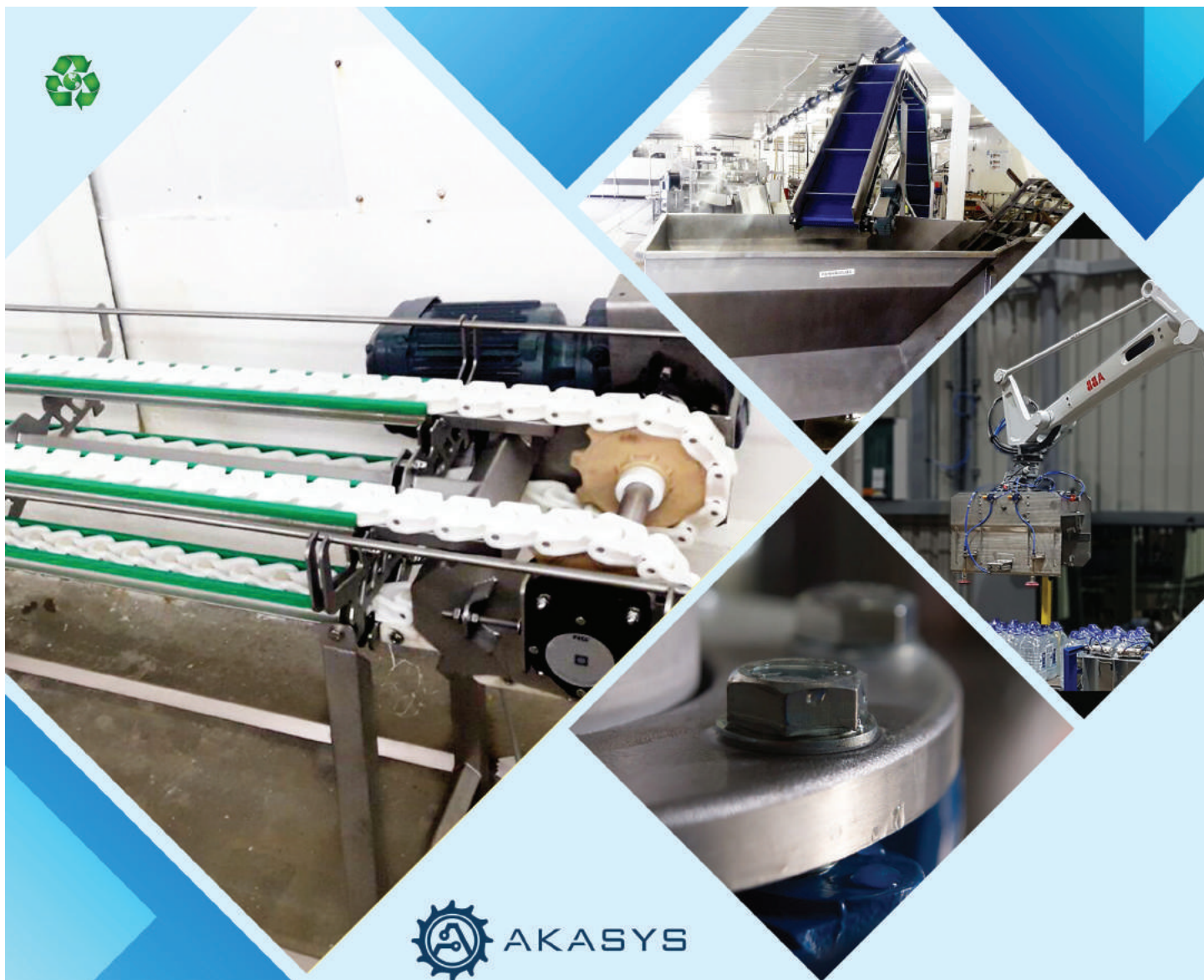
SEAFOODSOURCE: From PPC's perspective, what does the recent merger with Pacific Packaging

Products mean for the seafood aspects of your business?

HEIDENREICH: PPC's strength is found in the multitude of products that we designed specifically for the proper handling and protection of high-valued seafood. Every one of our customers use tapes, stretch wraps, strapping, and a plethora of additional general packaging items. These items are the core of Pacific Packaging's business. Our merger brings together PPC, the largest independent supplier of seafood packaging items, with PPP, the largest independent supplier of general packaging items. By doing business with us now, our customers can receive all packaging items they use and need at competitive rates as we continue to deliver the excellent customer service that built our reputation in this industry.

SEAFOODSOURCE: What can we expect from PPC and Pacific Packaging Products moving forward into 2020?

HEIDENREICH: In our product categories, we expect to roll out new, fully recyclable offerings to help our customers increase their goals for sustainability. Expect to see effective alternatives to foam for insulation. Our merger also brings with it a strong automation component where we can now design, deliver, and install labor-saving solutions for our customers whose growth is limited by the availability of labor or space. Another exciting development of our merger is that we will be rolling out Pacific's vendor-managed inventory program, where we can take on the burden of inventory management for a single category or for all the packaging that a customer uses. We are very excited to share these new capabilities with our customers and look forward to the coming new year. ♦



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Photo credit: Marel

Precision processing hinges on calibration

By Chris Chase

The world of seafood processing equipment has become ever more advanced as new technologies begin to come into the fold.

Those new technologies – from specialized cutting mechanisms to artificial-intelligence – improve the speed and efficiency that processing lines can operate at, but they also often come with added complexity. That complexity, in turn, results in equipment that needs trained operators who understand the tolerances and calibration required in order to operate efficiently.

One of the key parts of operating things properly is calibration, which ensures that the machinery is doing what it is designed to do.

“Proper calibration optimizes the performance of all machines where accuracy is important,” Olafur Karl Sigurdarson, the service business manager for Marel Fish, said.

Calibration itself is a straightforward concept: Setting up

equipment in such a way that measurements are accurate, and as expected.

“Calibration is the test and adjustment of equipment (or parts of equipment) which are critical for quantitative measurement,” Sigurdarson said. “Specific equipment types will need routine calibration in order to maintain optimal performance.”

Essentially, any part of a machine that needs to make precise measurements needs to be calibrated in order to ensure the measurements it is taking are accurate and within the specifications desired by the customer.

For example, say a machine is supposed to trim a certain amount of a fillet, or portion raw materials out to certain sizes. If the measurements the machine is using are flawed in some way, the end results could be affected.



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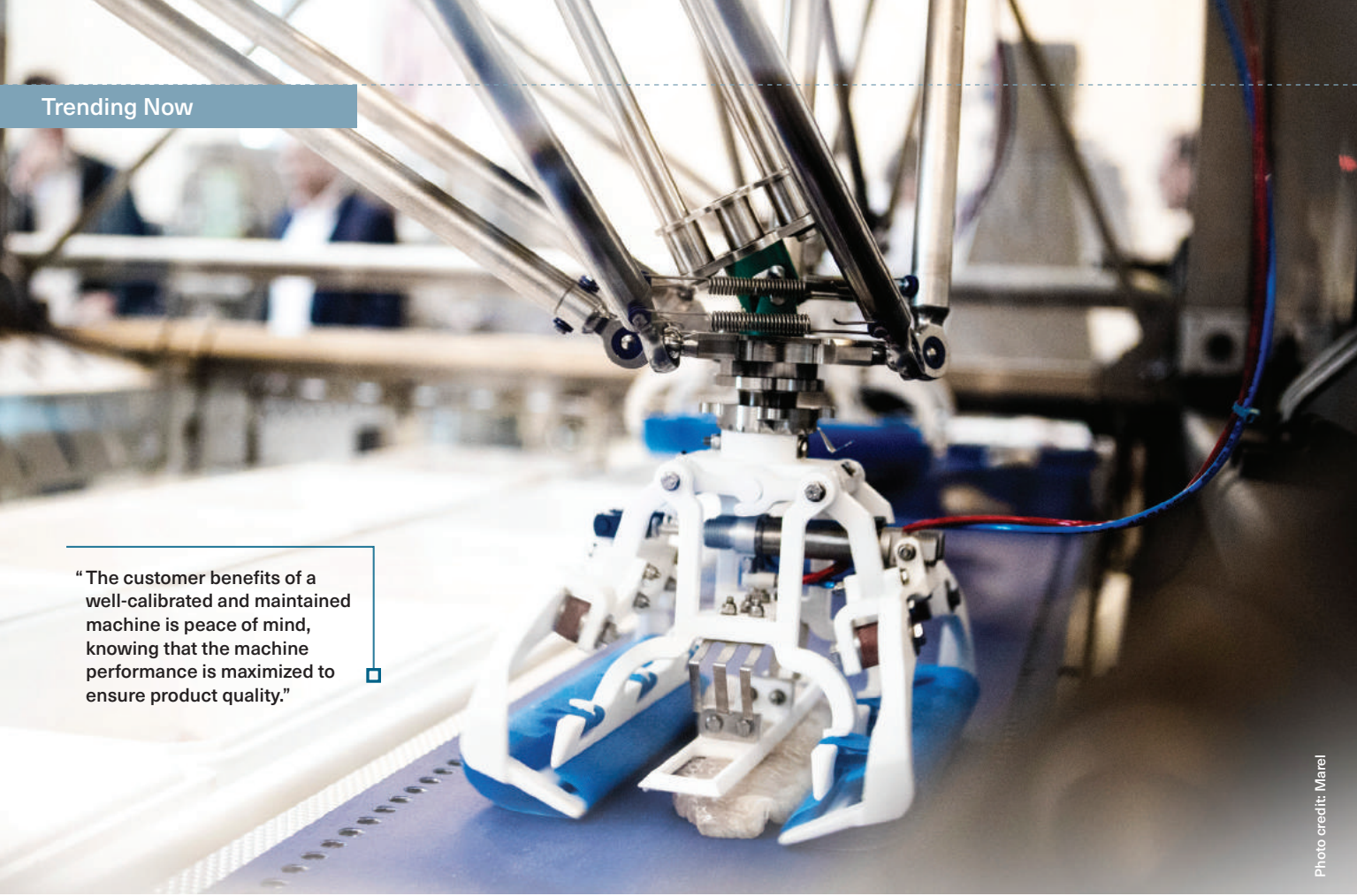


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"The customer benefits of a well-calibrated and maintained machine is peace of mind, knowing that the machine performance is maximized to ensure product quality."

"Therefore, there can be significant difference between a calibrated machine, and one that has not been calibrated or maintained properly," Sigurdarson said. "The customer benefits of a well-calibrated and maintained machine is peace of mind, knowing that the machine performance is maximized to ensure product quality."

If improperly calibrated, or not set up correctly, a machine can quickly cost a company money as it creates an inferior product.

"Failure to calibrate equipment can have impact on machine performance because of the knock-on effect of measurement error and/or loss of compliance," Sigurdarson said. "Not having a properly calibrated equipment can cause lost yield, downtime and lack of accuracy, for instance around portioning and bone detection."

If a machine to remove pinbones from salmon fillets isn't correctly identifying and removing them, it can either result in an inferior product, or it may require that the pinbones be removed by hand. Calibrating a device correctly, so that it successfully removes the pinbones, results in a product that the company intended, or even frees employees that would have been forced to remove the pinbones by hand for other roles. Plus, if a machine is causing increased loss of product, say through trimming off pieces of usable product, that can eat into profits as the losses stack on top of each other.

Marel, along with any company supplying processing equipment, doesn't expect the purchaser to figure things out on their own. Marel – along with other companies like BAADER, Valka, and more – typically provides training as part of its service portfolio.

"Marel offers a wide range of service solutions," Sigurdarson said. "Our service product portfolio includes both individual services like calibrations, as well as service contracts including a combination of services. Part of our service contract offering includes planned and predictive maintenance where periodic check-ups and calibration are included."

Marel also provides training to the company that purchases its product.

"Customer training is also part of our service offering," Sigurdarson said. That training includes training operators how to configure equipment for maximum performance, training maintenance teams on recommended daily routines to ensure optimum production output, training cleaning personnel on how to sanitize or cleanse the equipment, and more.

"Our service organization operates under the principle of a global reach with a local focus," said Stella Björg Kristinsdóttir, marketing manager for Marel. "Regional teams take the company closer to its customers, facilitating

“Regional teams take the company closer to its customers, facilitating faster on-site response times, while the international online support team offers remote technical support directly to the site or even the equipment where possible.”

faster on-site response times, while the international online support team offers remote technical support directly to the site or even the equipment where possible.”

The goal is to avoid any problems by making sure equipment is operating properly, but even in the event of any problems, downtime is kept minimal by having someone on-hand that can get things running again.

BAADER, too, offers training to its customers to get the most out of its equipment.

“The value of professional service and calibration is indeed very important to BAADER, and we offer respective training to our customers,” Julia Fuamba, global head of communications for BAADER, said.

Sigurdarson gave the following benefits for having properly trained personnel:

- Ensures any new or existing personnel are able to

contribute to plant efficiency and reinforce best practices.

- Ensures site product knowledge is up to date.
- Daily maintenance and performance checks to maintain equipment uptime and availability.
- Optimize the performance and yield of your solution.
- Extends equipment lifetime.
- Reduces damage, stoppages, and costs.
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Processing equipment is becoming more and more efficient, enabling companies to extract more value out of products than ever before. But a tool can only ever be as good as the use its being put to, which is why equipment developers want to make sure customers can use their assets in efficient, profitable ways. ◇

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Global fishing sector pumping millions into at-sea processing upgrades

By Cliff White

A global push to build newer, better fishing vessels is resulting in millions of dollars of investment in at-sea processing technology.

At-sea processing isn't necessarily becoming a bigger part of the global seafood industry, but investment in the sector as part of a broader fleet renewal effort is resulting in much-needed upgrades to vessels that do processing on board, according to Ruben Nielson, the vice president of U.S. operations for Carsoe, a Denmark-based manufacturer and supplier of seafood processing technology.

"There is a worldwide boom in building trawlers. That upswing should continue for the next four or five years,"

Nielson said. "The global fleet is getting old. At some point, companies have to make decision to put the money into building new."

That's now happening around the world, from Eastern Canada to Greenland, to Norway, and the United States, Nielson said. But no country is more rapidly upgrading its fleet than Russia, which recently adopted a federal subsidy program offering fishing companies additional quota in exchange for building new fishing vessels. The vast majority of more than 2,000 fishing vessels now deployed

Norebo, which controls around 450,000 metric tons of quota, is spending USD 350 million (EUR 318.5 million) to build 10 new trawlers.



in Russia were built more than 30 years ago and are close to – or beyond – the end of their expected useful lifetimes. In 2017, Russia approved into law its Fishery Industry Development Strategy, which calls for renewal of half of the nation's fleet over the next dozen years.

In the vanguard of that movement are sector leaders Norebo and Russian Fishery Company (RFC). Norebo, which controls around 450,000 metric tons of quota, is spending USD 350 million (EUR 318.5 million) to build 10 new trawlers, divided between six freezer-trawlers and four trawler-processors. The new processors will produce chilled fillets, minced fish, fishmeal, liver, and caviar, and will operate in the Russian Far East and the Bering Sea, according to the company.

Not to be outdone, RFC has ordered seven new “super-trawlers” at a cost of more than USD 600 million (EUR 545.8 million). The company's new vessels are designed to catch more than 50,000 MT of fish a year each and will be equipped with modern processing technology for the creation of “high value-added products,” primarily pollock fillets and surimi, the company said.

“Despite extensive modernization and major repairs of our trawlers, we are well-aware of the need to replace ships with new, with an appropriate ice class, increased productivity and the highest quality of products,” former RFC CEO Fedor Kirsanov said at the time. “Accordingly, we plan to install the latest equipment on the ships, which will allow us to process fish and seafood efficiently, obtaining a wide range of products of the highest quality, for supply to Russia and to foreign market[s].”

In Seattle, where Nielson is based, the move toward fleet renewal is happening at a slower pace. Carsoe recently scored the contract to outfit a new 271-foot catcher-processor being built for Arctic Storm, which fishes for pollock and cod in the Gulf of Alaska.

“This will be the largest and most advanced fishing vessel ever to be built in the U.S.,” Arctic Storm President and CEO Doug Christiansen said in 2018. Christiansen said the move is the first step in an overhaul of the company's four fishing vessels, which catch pollock and cod and convert them into fillets, surimi, fishmeal, and fish oil.

Another Seattle-based fishing company, Blue North Fisheries, which owns and operates five freezer longline vessels harvesting cod in the North Pacific, has also invested in an upgrade. It recently spent USD 35 million (EUR 31.2 million) launching the F/V Blue North,

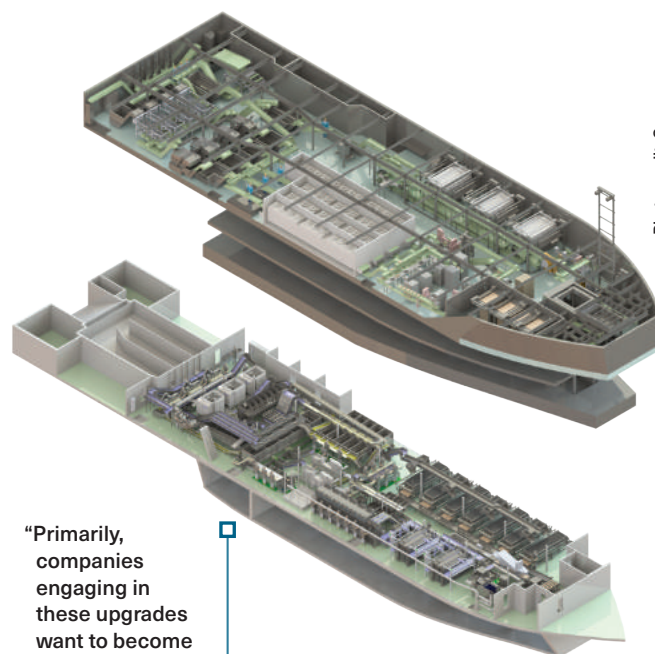


Photo credit: Carsoe

“Primarily, companies engaging in these upgrades want to become more efficient doing what they do, which is getting more fish in the boat and preserving it at a high quality.”

a 191-foot hook-and-line, freezer-processor designed to be the “best on the market,” according to then-CEO Kenny Down.

Down said the upgrades would help the company improve the quality of the fish landed, as well as help it to retain and market ancillary products such as livers, collars, stomachs, skins, and frames that can be sold in Japan, Korea, and China. Because the cod quota is relatively stable – meaning that it's not possible to make more money simply by catching more fish – Blue North is aiming for a higher profit margin through more efficient use of the fish it catches, Down said.

For companies building new at-sea processors, state-of-the-art technology such as automatic freezers, full palletizing systems, and traceability software are among the most sought-after upgrades, according to Carsoe's Nielson. The end goal is greater efficiency in fishing effort, he said.

“Primarily, companies engaging in these upgrades want to become more efficient doing what they do, which is getting more fish in the boat and preserving it at a high quality. They're also looking to create safer working conditions and for environmental benefits that come with upgrading equipment,” he said.

One upgrade that checks all three boxes is automatic freezing technology, Nielson said.

“It used to be working the freezer was really hard labor, and an area where you have a lot of accidents. But the new machines run the product in and out of the



Niisa Trawl recently completed two factory shrimp trawlers that include automatic separation of bycatch, grading of shrimp by size, a continuous cooking line, automatic-loading horizontal freezers, and on-board palletizing.

freezer automatically, so you get savings in automation and energy efficiency but also you're protecting your employees by eliminating a potentially dangerous situation," he said.

Palletizing equipment is another popular upgrade being installed in many of the new-builds in Seattle, Nielson added.

"After the product is frozen, it gets put into a box or bag and the machine puts it all on pallets, shrink-wraps it, and registers it so you can scan each label and trace each box through the supply chain," he said. "It helps so much with traceability, which is being demanded more and more by buyers. And if there are any product issues, you can trace it back to easily find the source of any problem."

The shrimp fishery in the Northern Atlantic – in particular in Eastern Canada and Greenland – is another hotbed of new vessel construction, with Niisa Trawl recently completing two factory shrimp trawlers that include automatic separation of bycatch, grading of shrimp by size, a continuous cooking line, automatic-loading horizontal freezers, and on-board palletizing. Polar Seafood and Qajaq Trawl ordered two similar state-of-the-art shrimp trawlers in 2017, the same year Royal Greenland signed a contract with Carsoe that will add a new shrimp and halibut trawler to its fleet. Due to the ship's wider range of catch, the company has asked Carsoe to supply a "complete processing plant," enabling

the trawler to produce fillet, head-cut, and gutted fish or round frozen products – all at the same time, via an automatic processing line, where the catch will be sorted by species and the fish graded. The new-build will also include automatic horizontal freezers and a freezer "hotel" for later onboard palletizing.

Similar vessels are being built for the Canadian fishery, Nielson said. And new vessels being built by Carsoe for the Chinese company Jiangsu Sunline Deep Sea Fisheries, and by Carsoe rival Optimar for Norway's Aker BioMarine, are focused on the Antarctic krill fishery. The Jiangsu Sunline vessel will be equipped with an automatic distribution line and freezing line capable of freezing 100 tons of krill a day. An automatic distribution sorter can separate the catch for quick processing into either frozen blocks or krill meat and fish oil. The vessel is expected to start fishing in Antarctic waters in 2019. Aker's vessel will have a daily catch capacity of 1,300 tons and a processing capacity of 200 tons of meal per day.

"Thorough analyses and calculations were performed on efficiency and energy-saving measures for the factory. The state-of-the-art facility will be equipped with the latest meal production equipment and a control system that offers an unparalleled level of control. Operating parameters will be logged continuously to maximize the quality and traceability of the product," Optimar said. "The risk of downtime is reduced by remote servicing from on-shore, with Aker BioMarine's new control center providing services 24/7."

In Norway, which has long been looked at as setting the standard for on-board processing innovation, water-jet cutting is becoming a standard part of on-board pelagic processing. And more companies are adding individual quick-freezing (IQF) technology, which previously had been prohibitive to include on ships due to the large size of the machines, Nielson said.

"Worldwide, what you're seeing is that companies are realizing they need to capitalize on the benefits of at-sea processing, if they want to maximize the value of their catch. They can follow the biomass if and when it moves, and there's an appeal for being able to process everything without having to steam for land and use a land-based processing facility," Nielson said. "But what's attractive for them is they're producing right where they're sourcing – they can freeze their fish or shrimp within hours of being caught. You're not going to find anything much fresher than that product." ◇

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Pacific Seafood's reopened processing facility thrives on second chance

By Madelyn Kearns

Back in August 2018, U.S.-based supplier and processor Pacific Seafood hosted the grand reopening of its Warrenton, Oregon-based dockside processing plant, a watershed moment for the company and the coastal fishing community behind a large part of the facility's operations.

It was in the summer of 2017 when Pacific first announced its plans to rebuild the Warrenton plant, once considered to be the area's largest employer before a 2013 fire destroyed the structure. The facility, which was originally built in 1941 and acquired by Pacific Seafood in 1983, provided more than 100 full-time jobs in Warrenton before the incident.

In what has come to be known by Pacific and the city of Warrenton as "the seven-day miracle," the company swiftly relocated its operations to nearby Astoria, Oregon following the blaze in 2013, and had its temporary site up and running only a week after the incident, with all employee wages paid, even during downtime. Due to Astoria's close proximity, Pacific was able to continue its work with North Oregon's local independent fleet before the move back to Warrenton last year, a prerogative for the company.

Many of the employees that worked for the company before the fire stayed on with Pacific in the days



"The new facility supports team members and their families with living wage jobs that include benefits such as healthcare and profit-sharing retirement."

and years that followed, and were recognized for their commitment during the reopening ceremony for the state-of-the-art processing plant last summer.

"I'm hard pressed to think of a bigger achievement than being one of the 62 team members who have stayed with us since the fire," Pacific Seafood CEO Frank Dulcich said in 2018.

It wasn't only from within that Pacific has received support – the community of coastal Warrenton has also been dedicated to the facility's reconstruction, and continues to be today, according to John King, the general manager of the new processing plant.

"The response from the Warrenton community has been very positive," King told SeafoodSource in October 2019. "The new facility supports team members and their families with

living wage jobs that include benefits such as healthcare and profit-sharing retirement. It is also home to a new dock that provides a market for up to 70 independent commercial fishing vessels. The activity at the dock is a boon to state and local governments, including an estimated [USD 220,000, EUR 200,301] annually in landing fees to Oregon's Department of Fish and Wildlife."

The Warrenton plant has received a technical upgrade with its rebuild that includes a first-of-its kind technology that cleans waste-water while also conserving water. Pacific Seafood said it's the first seafood processor on the U.S. West Coast to use the environmentally sustainable technology and "[hopes] it will prompt other companies to make similar investments."

Additional features of the 78,000-square-foot facility include:

- Two-story cold storage
- Expanded team member amenities
- New, sustainable waste water system

- Ease of distribution of Oregon-caught seafood, both nationally and internationally
- Operates year-round
- Processes fresh and frozen fillets, H&G, value-added, cooked frozen crab, and consumer ready products
- Able to offload numerous vessels at a time due to multiple cranes

King confirmed that the facility recently achieved certification under the BRC Global Standards, and that its new setup has broadened channels for the supplier.

"We are very proud that the Warrenton facility received an AA rating on its annual BRC audit, and recently added steelhead processing. Our state-of-the-art water treatment technology reintroduces clean water, free of any fish material, into the waterways. This material is collected and sent to our BioOregon facility where it is made into products such as fish oil and fishmeal so that the entire fish is utilized," King said.

King noted how Warrenton's upgrade has gone on to enhance the lives of local fishermen, one of the aspects Pacific is most proud of.

"The expanded capacity has certainly allowed us to increase our production capabilities, but the impacts we are most excited about are those that benefit the independent, local fisherman," he said. "In addition to the dock now being able to offload numerous vessels at a time, it is the only full-service processing dock with both ice and fuel on the West Coast, a critical need for those fishermen to operate and grow their businesses."

The facility mainly processes Dungeness crab, steelhead, whiting, and groundfish, but depending on the time of year, the plant sees even more variety, King added.

"The plant processes fresh and frozen fillets and H&G. As a year-round facility, the species vary depending on the time of year and include whiting, groundfish, salmon, tuna, and steelhead," King said.

A family-owned and operated company, Pacific was founded in 1941 and has its headquarters based out of Clackamas, Oregon. It employs more than 3,000 team members across 41 facilities in 11 states.

The supplier offers 34 Marine Stewardship Council-certified species as well as 4-star Best Aquaculture Practices (BAP)-certified steelhead trout, 4-star BAP-certified oysters, and more. It was recently named among SeafoodSource's "Top 25: Seafood Product Innovations" list. ♦

Cape Bald Packers to open new 50,000-square-foot lobster processing facility in New Brunswick

By Cliff White

Cape Bald Packers Ltd. plans to build a new lobster processing plant to replace the two facilities it lost to fire earlier this year.

The 50,000-square-foot plant will be built in Cap-Pelé, near the location of the site of its previous plant, which was lost in a fire on Sunday, 24 February, 2019. The plant employed 500 workers involved in freezing and

packing lobsters, and was declared a total loss, though it was covered by insurance.

DOWNEAST
Cape Bald Packers

□ "As a group, we are only trying to do good things. It's all about supporting a growth that is there to build on – improving quality and expanding markets."

Cape Bald Packers, which is one of Canada's leading processors of Atlantic lobster and snow crab, said the new facility will employ approximately 300 workers. It also will continue to operate a smaller plant in Cap-Pelé, which processes snow crab and Prince Edward Island mussels and houses the company's corporate headquarters.

In the 2 October announcement, the company said it will not rebuild a separate plant in Richibucto-Village, which is about 80 kilometers up the coast from Cape-Pelé. That plant, which burned to the ground on Thursday, 7 February, employed 150 to 200 people.

"Our association with a number of nearby processing operations and the reconstruction of Cape Bald's second facility in Cap-Pelé, have made it possible to consolidate production in the most efficient way possible in the best interest of our suppliers and customers," Cape Bald Packers Director Doris Losier said. "Even though the majority of our Richibucto-Village workers have already secured alternate employment, we will honor our promise to affected employees

to ensure that everyone can find employment within our operations or at nearby processing plants.”

Cape Bald Packers sells most of its products through the Downeast Specialty Products brand, exporting primarily to the United States, as well as Europe and Asia, according to the company.

“2019 has been one of the most challenging years in our 70-year history as a company. We are so grateful to our employees, our customers and our suppliers who have stood by us as we regrouped as a company, retooled our main plant and were successful in making arrangements with partner companies to assist in processing our raw materials with minimal disruption,” Losier said. “We are thrilled to be moving forward quickly to rebuild our second Cap-Pelé facility and look forward to the 2020 processing season.”

In its statement, the company did not address speculation that arson was a possible cause for one or both fires. In February 2019, David Deveau, the president and CEO of Riverside Lobster, which is owned by private equity group Champlain Financial Corporation, which purchased Cape Bald Packers in February just before the fires occurred, told SeafoodSource the company had questions about what caused them, given the close timing between them.

“If it was bad luck, we’ll have to live with it. If it was something else, that’s very unfortunate and discouraging,” he said. “As a group, we are only trying to do good things. It’s all about supporting a growth that is there to build on – improving

quality and expanding markets. That vision will be a win for everybody. There’s a great market in lobster, but if you can’t supply it properly or protect it, you lose it in time.” ◇

Phillips opens R&D, manufacturing facility in Maryland

By Christine Blank

Baltimore, Maryland-based Phillips Foods is bringing some of its manufacturing back in-house with the opening of a new R&D and manufacturing facility near its current office.

Phillips executives recently cut the ribbon on the 15,000-square-foot facility, which features a large test kitchen on the other end of the building that houses its current corporate offices, John Baxter, vice president of retail sales and marketing, told SeafoodSource.

Importantly, the facility will allow

Phillips to bring a portion of its manufacturing that had previously been handled by co-packers back in-house, Baxter explained. The 105-year-old company closed a 250,000-square-foot plant in Baltimore a couple years ago, and began using more co-packers for production of its value-added products, including soups and appetizers.

“It was larger than what we needed at the time,” Baxter said.

The new facility, which had been a foodservice commissary for a division of Sodexo, is retrofitted with equipment from the company’s old plant.

Expanded manufacturing capacity “will open up some new opportunities for us,” Baxter said.

“We can bring in new and current customers and engage them on projects we haven’t been able to work on previously.”

“It could help with some frozen items as well as refrigerated items – including the deli department, possibly. It will allow us to potentially work with other proteins, and not just



seafood,” he added, declining to reveal details on planned new products.

“There are a lot of discussions about which projects are going to take place first,” Baxter said.

The facility will be used for shorter runs and will complement – not replace – processing at Phillips’ Asian plants.

“Competitively, it wouldn’t make sense to bring the labor-intensive items here [to the U.S.],” Baxter said.

In addition to manufacturing, the space is designed to “re-engage and further our R&D stateside with a nice culinary kitchen. We can bring in new and current customers and engage them on projects we haven’t been able to work on previously,” Baxter said.

Phillips – which launched tuna products at retail for the first time this year, along with several new frozen seafood appetizers – was featured in SeafoodSource’s recent “Top 25: Seafood Product Innovations” list earlier this fall. ♦

Russian Fishery Company opens cod processing plant

By Ivan Stupachenko

The Russian Fishery Company (RFC) has put into operation a Russian cod plant in the Murmansk region, its first processing facility built under the investment quotas program initiated by the country’s government to renew and expand fish processing facilities and fishing fleets.

The plant’s designed daily capacity is more than 50 metric tons



(MT) of finished product made of cod and haddock. Export volume of premium quality products is projected to be about 5,000 MT per year. As SeafoodSource reported, the company is eyeing expansion far beyond Russian borders, including into Africa.

“The development of deep processing in Russia allows us to replace raw exports with supplies of high-quality products to the foreign market, which will ensure an increase in budget revenues,” former RFC CEO Fedor Kirsanov said.

The plant is equipped with modern equipment for the correct defrosting of raw materials, the freezing of finished products to ensure high quality, and the preservation of valuable nutritional properties of fish. The equipment includes an innovative robotic line for cutting fish fillets of cod species. Unique technology equipped with “artificial intelligence,” analyzing the structure of raw materials, allows it to achieve an exceptional quality of

fillet cutting with minimal damage to carcass fibers and a high degree of bone removal, the company said.

The cost of the new facility was RUB 900 million (USD 13.7 million, EUR 12.34 million).

Overall, RFC has invested into three plants under the government’s quotas program.

The Russian haddock plant, worth RUB 250 million (USD 3.8 million, EUR 3.4 million), will be built in the Murmansk region, too, with an output of 25 MT a day of cod and haddock. Construction on that plant started at the end of August.

In addition, a processing factory in Vladivostok will have the capability of processing 60,000 MT of pollock annually, including 25,000 MT of value-added pollock products. Total investment will be USD 12 to 15 million (EUR 9.7 to 12.2 million.)

Both projects in Murmansk are implemented by the RFC in partnership with the Agama Group. ♦

Peru's Fibras Industriales breaks into Japanese market with knotless net for aquaculture

By Madelyn Kearns



Twisted Knotless "Muketsu" Netting is innovated for optimal resistance despite not having knots.

Earlier this year, Lima, Peru-based net developer Fibras Industriales S.A. (FISA) introduced its Twisted Knotless "Muketsu" Netting to the Japanese market.

Made of nylon, polyester, or polyethylene, FISA's Twisted Knotless "Muketsu" Netting is innovated for optimal resistance despite not having knots, with each strand comprising the netting running through the other. The product, by nature of its composition, is light weight and "allows for better flow of oxygen in [aquaculture] cages," according to FISA.

"Most importantly, [Twisted Knotless "Muketsu" Netting] reduces friction with the water and other equipment during handling of cages or on fishing vessels," the company added.

Two main developers of "Muketsu" netting currently dominate the Japanese fishing net market, with the specific product manufactured by a limited number of companies worldwide, FISA explained. Over the course of the last 36 months, the Peruvian company has worked to increase its production capacity for its Twisted Knotless "Muketsu" Netting by 20 percent, which has prompted it to search for new markets, including Japan and Asia in general.

"Japan being a major consumer of "Muketsu" Netting, FISA decided it is time to introduce its top-quality netting that is manufactured with Japanese Machinery and

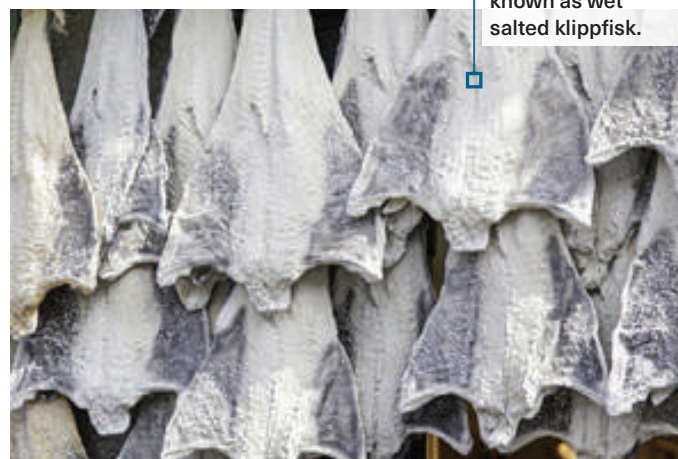
Japanese raw material to the birthplace of the product," FISA said.

FISA's Twisted Knotless "Muketsu" Netting was on display at the recent International Technology Expo, which took place in Tokyo, Japan from 21 to 23 August, 2019.

FISA is one of the largest multi-filament fishing net makers in the world, manufacturing a full range of netting for purse-seine fishing, trawling, long-line fishing, and fish-farming. Its line of products has been extended over time to include monofilament netting for aquaculture, trawl nets, and sports netting. ◇

Norebo's Polar Sea+ to install Skaginn 3X processing line for bacalao production

By Cliff White



Bacalao, also known as wet salted klippfisk.

Polar Sea+ LLC, a subsidiary of Russian seafood giant Norebo, has signed a contract with Akranes, Iceland-based seafood equipment manufacturer Skaginn 3X for an automatic processing line for bacalao, also known as wet salted klippfisk.

Murmansk, Russia-based Polar Sea+ handles fish processing for a variety of fresh and frozen fish landed by Norebo's fleet. Its processing facility was designed by Skaginn 3X and, with the new contract, it will add a specialty line "designed to gently handle the fish and

Photo courtesy of Skaginn 3X

produce superior quality bacalao destined for export to Southern Europe, South America and Africa," the company said.

"We chose to work with Skaginn 3X again on this project because their innovative products and solutions have delivered outstanding quality in the past," Polar Sea+ General Director Vladimir Zagorovsky said.

The line, comprised of a RoteX Supreme Thawing system, a brine mixing station, and an ergonomic trimming station, will be installed and ready to begin production by early 2020, according to Skaginn 3X Regional Sales Manager for Russia Pétur Jakob Pétursson.

"Polar Sea+ came to us, looking for a modern, high capacity saltfish factory. Our answer was to design an environment that would provide an effective and even flow with quality at the forefront," Pétursson said. "It will be the largest of its kind in the Northern Atlantic, with a capacity of producing 50 tons of finished product per day and the capability of processing saltfish for various different markets with minimal changes." ◇

Oxymat rolls out new series of aquaculture oxygen generators

By Madelyn Kearns

Processing equipment company Oxymat has completed the development of its Nordic Generator series for aquaculture and has moved production back to Denmark, where the generators in the series – including Half Pallet, Pallet, and the larger O200 series – will receive their final touches



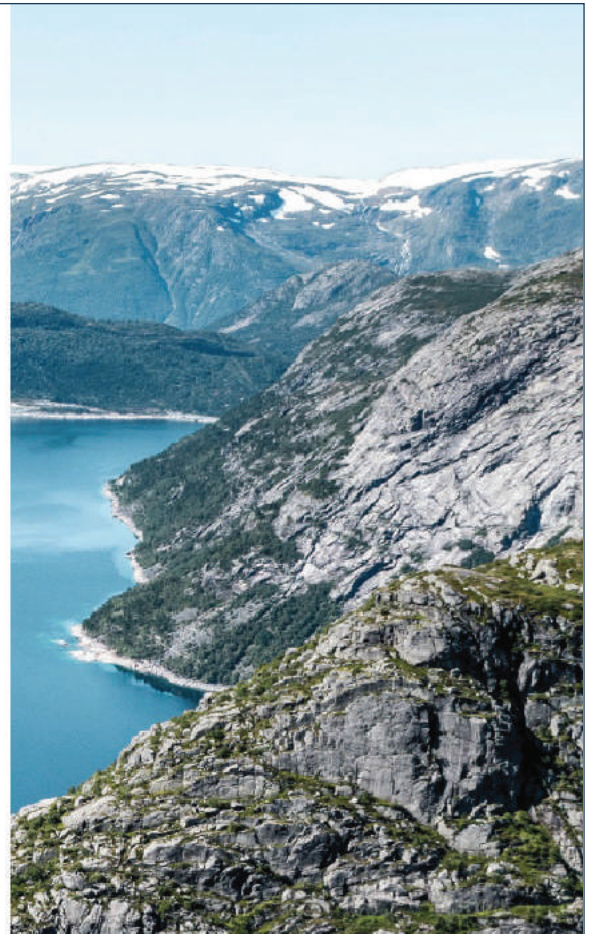
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"The fish-farming market will be able to benefit greatly from self-production of oxygen."

in "the world's most automated and high-tech PSA factory," the firm said.

Oxymat, which has operations in Norway, the Faroe Islands, and Chile, is considered to be the largest aquaculture generator manufacturer in the world with 88 employees, according

to the company. Specifically, the business has been supplying Norway with oxygen generators for the past 25 years, primarily for aquaculture, which has many uses for the technology including: in RAS plants, onboard well boats, for lice removal as well as ozone treatment.

The manufacturer participated in the 2019 Aqua Nor conference, showcasing its completed Nordic Series for the first time at the event.

"The fish-farming market will be able to benefit greatly from self-production of oxygen," Oxymat said. "The Nordic Oxygen Generator series is the most climate-friendly solution for oxygen on the market. Contrary to getting liquid oxygen on tank, no polluting trucks are required. With a documented energy consumption of 0.55kW per kilogram of oxygen 93 [percent] purity, breeders will get a solution that is economically advantageous. In most cases, return on investment (ROI) is less than two years. In addition, there is a focus on high reliability and quality. We have gathered a lot of know-how from our customers and Oxymat always helps the customer to find the right solution."

Half Pallet, Pallet, and O200 series comprising the Nordic Oxygen Generator suite all boast a unique module structure that makes it easy to customize to a customer's specific wishes and requirements, Oxymat said, adding that the firm also often creates a "backup solution that provides a safe and stable oxygen supply" for its clientele. Oxymat's onsite oxygen can save fish farmers 35 percent on OPEX, the company added.



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In addition to its newest development, Oxymat also featured some of its legacy products at Aqua Nor.

"At Aqua Nor, customers and visitors will experience 25 years of development that Oxymat has been through," the company said. "From the first aquaculture oxygen generator installed in 1995 at eight kilograms per hour to the world's largest smolt plant of 640 kilograms per hour, which was installed in the Faroe Islands in 2019. And the installation on the world's largest wellboat, Ronja Storm, in 2018. These references and customers do not come by themselves. Oxymat has for 25 years been the forerunner of the development of oxygen plants that are adapted to the customer's needs and requirements for safe supply of oxygen. Aquaculture is developing rapidly, and the biomass of fish is growing due to the growing supply and demand of meals on the table. This will significantly increase the demand for oxygen in the future." ◇

Valka supplying Båtsfjordbruket with new fillet processing lines

By Chris Chase

Iceland-based seafood processing equipment company Valka has announced that it has contracted with Båtsfjordbruket to provide two complete automated fillet processing lines.

The company, which specializes in high-tech, automated processing for whitefish and salmon, will build two complete systems for trimming, cutting, and distribution of packing of fillets and portions, according to a release from Valka. Båtsfjordbruket is a subsidiary of the Nordic seafood group Insula AS.

"The new Valka production lines will allow us to strategically improve our capabilities and serve our customers in the best possible way. Furthermore, it will greatly improve our competitiveness in an ever more demanding market," Frank Kristiansen, the CEO of Båtsfjordbruket, said.

The automated lines, the two companies said, are a way to provide narrow product specifications to customers while offsetting the challenge posed by a lack of skilled workers in the industry.

"With the new highly automated processing lines, the company is ready to produce a complicated mix of products, fresh and frozen in a highly efficient manner," Valka said.

Valka has worked with Båtsfjordbruket before; in 2015, a fully automated whole fish grading system was installed at the plant.

"We are honored to be part of this ambitious project and in helping Båtsfjordbruket achieve their goals," Kristjan Kristjánsson, general director of Valka AS, said.

Valka recently debuted a new water-jet cutter at Seafood Processing Global in Brussels, Belgium. ◇

"The new Valka production lines will allow us to strategically improve our capabilities and serve our customers in the best possible way."



MARK YOUR CALENDAR: SEAFOOD PROCESSING EVENTS TO WATCH

By Madelyn Kearns

The world of seafood processing is vast and constantly alight with new developments and breakthroughs designed to support an ever-changing industry. With so much going on, it's always beneficial when stakeholders can convene to tackle challenges and celebrate success, which is what they have done through several targeted global events, such as BAADER's first Innovation Day and Marel's Whitefish ShowHow.

In the process of scheduling your next business travel itinerary? Curious about what kind of processing events you should keep on your radar, and some of the key takeaways from past editions? Find the answers to your inquiries and more below.

BAADER Innovation Day

Attendees of processing machinery developer BAADER's first Innovation Day event gathered in Lübeck, Germany in August 2019 to contemplate a critical question: How is it possible to guarantee food for the world's growing population, with less space to do so and in the face of decreasing resources?

Held on 29 August at the BAADER Technology Center, the Innovation Day meeting saw a variety of speakers approach the question of feeding the global population – which is expected to grow to around 9.7 billion by 2050, according to the UN World Population Prospects 2019 – through the optimization of various production processes worldwide. Presenters included David Hughes, the professor often

referred to as Dr. Food, as well as iSeaPartners Jeffrey Davis, Wim de Laat of BioscienZ, Matthias Moser of Hydrosol, Stefan Töpfl of the German Institute of Food Technologies, Thor Sigfusson of Iceland Ocean Cluster, and Feras Alsamawi of Amazon Web Services.

During his discussion, Töpfl – who is a professor associated with the German Institute of Food Technologies – identified some of the major themes playing out in global protein processing, such as the propensity to process food as little as possible; the optimization of processes and automation of food production, which work to save time and energy; and the development of new methods for obtaining protein. High-pressure processes and pulsed electric fields are a few of the techniques Töpfl listed as catering to these trends.

Meanwhile, Iceland Ocean Cluster Founder and Chairman Thor Sigfusson “made the case for reducing the silos and establishing a better link between science and business,” during his Innovation Day speech. Sigfusson argued that innovation and collaboration could be used to



Photo credit: TSluether

encourage protein providers to create less waste and more value from available materials. He outlined a new value pyramid that could be utilized by the seafood industry to reduce waste through repurposing discards for cosmetics, animal feed, pharmaceutical goods, health products, and more. By utilizing more of the raw product, Sigfusson said, seafood companies can generate up to EUR 80 (USD 88) per fish, rather than the accustomed range of EUR 14-16 (USD 15-17).

At the conclusion of the Innovation Day event, Dennis Lohmann, the head of product management at BAADER, emphasized the importance of food and feeding people.

"At BAADER, we are driven by our vision 'Innovating Food Value Chains.' Let us all work together to find solutions for feeding this growing world on a sustainable basis," he said, thanking the day's speakers and participants.

Lohmann's parting words echo BAADER's new mission statement and brand promise – "We innovate Food Value Chains" – which it rolled out in 2019 to honor 100 years in business. The company culminated a major rebranding effort at the start of the year, a course of action meant to reflect its evolution into a modern, digital, full-solution provider across several food value-chains.

The company's poultry business was renamed from BAADER LINCO to BAADER as a part of its rebranding process, and its logo was redesigned "to portray both

heritage and evolution and is combined with a new mission statement and brand promise," BAADER explained.

"We are undertaking an extensive rebranding process and from 2019 onwards – exactly 100 years after Nordischer Maschinenbau Rud. BAADER was founded – we are marketing all our divisions under one name," said Petra Baader, the company's executive chairwoman, in March 2019.

Marel's Whitefish ShowHow

Food processing equipment manufacturing company Marel showcased its latest high-tech processing solutions in Copenhagen, Denmark on 25 September during its Whitefish ShowHow event.

Hosted by Marel, the Whitefish ShowHow features demonstrations running throughout the day for seafood industry leaders and software specialists. Visitors are shown how Marel equipment and software works to ensure processors "make the most of Industry 4.0" by better utilizing raw material, reducing processing time, and increasing traceability, the manufacturer said. Attendees of the event are also invited to "experience cutting-edge innovation and technology via virtual reality," according to Marel.

"The ShowHow strongly reflects what we aim to achieve every year – and every day really – working with our customers in the industry to find better and smarter ways to process fish," Sigurdur Ólason, the managing director of Marel Fish, said.

Among the platforms at the core of this latest Whitefish ShowHow – the fifth event of its kind to date – was Marel's Innova Food Processing Software program. The software is one solution that seeks to utilize data to gain full production control, during a time when the value of data is increasing exponentially by the day, Marel said.

"Data is key to gaining full production control and visitors to the Whitefish ShowHow will be able to see data being generated by the machines in real time, and gain insights into how fish processors can become more competitive by improving their ability to track and analyze data," the company explained.

In his opening address at the latest Whitefish ShowHow in September, Ólason noted the rise in robotics and digitalization across the seafood processing industry, and how it has inspired the development of new ways to make the most of the raw materials. Marel has doubled its investment in software R&D in the past year alone to accommodate such evolutions, Ólason said.



Photo credit: Marel

"We're at the forefront of the industry, and we need your input to create the future and transform the way food is processed – that's what today is about," he added, to kick off the event.

In his speech, guest speaker Freyr Thórdarson, DNB Senior Vice President, also honed in on the fast approaching reality of an automated future.

"Digitalization isn't a challenge as such, it's just something businesses now have to do now," he said.

Thórdarson went on to link a number of megatrends to the fish processing industry – including technological breakthroughs, demographics, urbanization, climate change, transparency, and shifting economic power – and encouraged industry processors to embrace automation.

Attendees of the event flocked to a series of live demonstrations of three robotics lines, Marel said, including

a new concept in intelligent box packing that enables processors to pack into multiple box sizes simultaneously. The newly released SmartLine with advanced monitoring capability was also on display at the Whitefish ShowHow — the trimming flowline, which is designed for farmed fish species such as seabass, seabream, and tilapia, monitors operator performance using data integration directly to Innova.

In the Innova Lab, event visitors could monitor the performance of the equipment in the demo hall in real-time, and test their skills with Marel's new FleXicut patterns app, which was launched on the day of the forum. The app enables users to try their hand at adjusting the cutting pattern for Marel's FleXicut pinbone removal and portioning innovation "to achieve the highest possible fillet value." ♦

UPCOMING EVENTS

Next year, the India International Seafood Show (IISS) will focus on technological advances and sustainable practices as they relate to India's seafood processing sector, the Hindu Business Line reported. Organized by the Marine Products Export Development Authority (MPEDA) in association with Seafood Exporters Association of India (SEAI), IISS is a biennial event that sees Indian exporters meet with overseas importers of the country's marine products. Scheduled to take place from 7 to 9 February, 2020, in Kochi, IISS will feature technical sessions hosted by national and international experts across the event's 7,000 square meters of exhibit space.

While Seafood Processing Global will remain in Brussels, Belgium for its 2020 edition – taking place from 21 to 23 April – the leading seafood trade event will be moving in 2021 to Barcelona, Spain, expo organizer Diversified Communications announced in September.

"The location of our event contributes to our customers' overall experience. The Brussels Expo and the city of Brussels were great partners to launch and grow this event, and we appreciate the services and support they provided over the years. Moving the event to a larger city and venue, with opportunity for long term growth, is a necessary evolution. It will enhance the visitor experience and the business being done between buyers and sellers," Mary Larkin, the president of Diversified Communications USA, stated.

In 2021, Seafood Expo Global and Seafood Processing Global will take place from 27 to 29 April.

Don't forget to mark your calendars for Seafood Processing North America, which comes back to Boston, Massachusetts from 15 to 17 March, 2020. At the event, which will be in its 40th edition, attendees share ideas, find new processing equipment, make connections, and get the news on preparing, delivering, and packaging seafood products. More than 22,150 total attendees from over 120 countries attended Seafood Expo North America/Seafood Processing North America in 2019. ♦



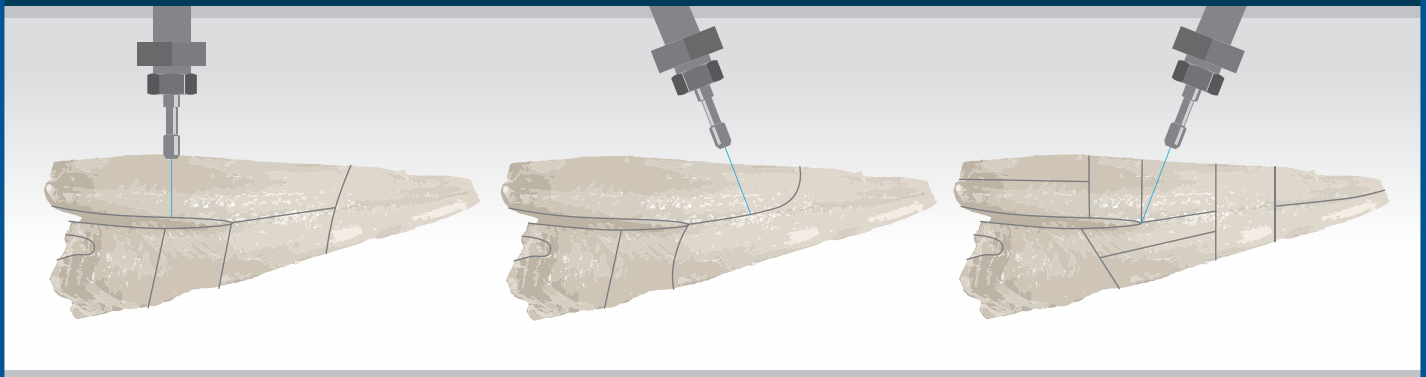
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