

Icelandic Seafood and Fishing Industry Innovation



Expo Global, Brussels:

Seafood Technology and expertise from Iceland for fishing and processing



WiseFish in the Cloud

WiseFish is an ERP software that covers the whole seafood value chain from fishing and aquaculture through production to sales and distribution.

The WiseFish subscription plan is designed with flexibility and customization in mind.

Monthly fees for software updates and service access.















Visit our booth #6127-4 – Hall 4 and experience the latest WiseFish developments.



Wise » Borgartún 26, Reykjavík » Hafnarstræti 93-95, Akureyri » Iceland +354 545 3200 » sales@wise.is » wisefish.com



Choose quality, choose

CIPILM XICE E liquid ice machines and Pre-Coolers

- · All ice production is on board
 - rd · Rapid and efficient cooling
- · Shelf life increases by 5-7 days
- · Decreses mocro bakteria formations
- Significantly faster down cooling · The liquid ice completely enwraps the catch

WHERE THE

COOL CHAIN NEVER BREAKS



FROM CATCH



UNLOADING OF FISH



IN TRANSPORT



WITH CUSTOMER





"When you transport fresh fish RIFSNES between continents, and by using OPTIMICE® liquid ice you increase shelf life 5-7 days and the fish keeps the best quality all the way."



Iceland – on the top of the world

Iceland is a world leader in terms of utilisation and handling of fish, as well as being at the forefront when it comes to technology within the fishing industry. Few, if any, nations can get as much out of each cod, as every part of the fish is utilised. Nothing goes to waste.

Through technological advances and with precise, computer-monitored processing, Icelanders have managed to increase the value of fillets significantly, dividing them precisely into pieces that give the biggest return for each produce category.

Technology also allows Icelandic fisheries to respond quickly to orders or changes to orders. An order that arrives in the early morning can be a product on a flight by noon, reaching the buyer in the evening, and the consumer next morning. Fish that is caught in Iceland today can be on your plate tomorrow. You can't get much fresher than that.

Another benefit of technological advancement is the immediate categorisation and registration of the catch in online computer systems, informing the team on land simultaneously about the combination and quantity of the catch. This way, the sales force knows what to expect, and can organize the sales accordingly.

But the fillets are far from the only valuable part of the catch. Other products can generate as much value, if not more. Fish heads are dried and exported. Fish skin is either processed as leather or used in various health products, such as collagen for medicinal purposes. A product made from fish skin is used as skin substitute for use in surgery and for treating wounds, supplied to, among others, the US army. Liver is reduced for oil, enzymes and food supplements are produced from offal, and bones are dried and exported.



Publisher:

Ritform ehf. Suðurlandsbraut 30 108 Reykjavík Tel +354 515 5215 Iceland ritform@ritform.is www.ritform.is

Editor:

Valþór Hlöðversson, valthor@ritform.is

Designer:

Guðmundur Þorsteinsson

Advertising:

Ingibjörg Ágústsdóttir, inga@ritform.is

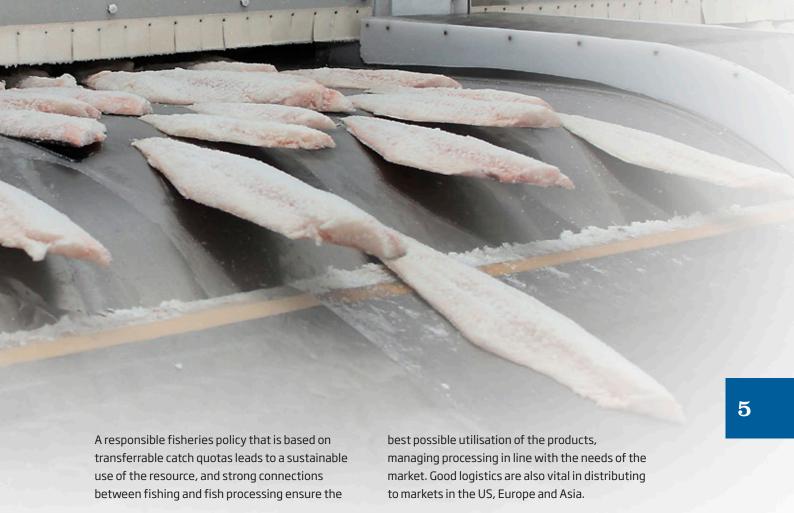
Printing

Svansprent ehf.

Distributed free at the European Seafood Exposition and Seafood Processing Europe in Brussels in May 2019.







Preserving food freshness

The 60x40 fillet boxes from Tempra are more efficient, stronger and provide longer shelf life

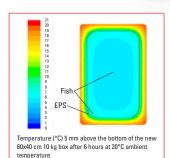
The 10, 13 and 15 kg box-line is designed to maintain freshness of food longer than comparable packaging.

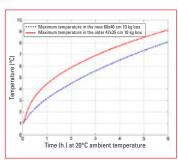
Advantages of the new boxes are the following:

- increased length and capacity lead to better treatment of products
- long fillets fit easily within the box
- * more space for ice or ice packs
- * box size is 60x40 cm, with better pallet stackability
- * design of the corners makes boxes stronger than before
- increased box strength allows higher pallet level
- better insulation achieved with denser stacking on pallets
- * rounded corners increase insulation and extend product shelf life

With the Tempra fillet boxes Icelandic fish can now be delivered fresher than ever to consumers worldwide.







Iceland Responsible Fisheries

Recognised by the Global Sustainable Seafood Initiative







Iceland Responsible Fisheries Certification provides professional and credible third-party certification. It is a straight forward, robust, practical, and cost-effective approach allowing Icelandic fisheries to be verified as responsibly managed.

The Iceland Responsible Fisheries Management Certification Programme (IRFM) is recognised by the Global Sustainable Seafood Initiative (GSSI). IRFM is in alignment with all Essential Components of GSSI's Global Benchmark Tool, which is primarily based on international reference documents from the FAO.

JOIN THE IRF PROGRAMME

There are great benefits of joining the Iceland Responsible Fisheries programme. It provides access to marketing and promotional material, as well as various types of assistance in promoting Icelandic origin and responsible fisheries.

Co-ordinated promotional efforts mean more effective marketing of Icelandic seafood and an improved image internationally.

Companies in the value chain of Icelandic seafood can apply for authorisation to use the logo of origin in their marketing efforts, or the certification mark, when they have obtained chain of custody certificate.



www.responsiblefisheries.is

What is The Global Sustainable Seafood Initiative?

The Global Sustainable Seafood Initiative (GSSI) is a global platform and partnership of seafood companies, NGOs, experts, governmental and intergovernmental organizations working towards more sustainable seafood for everyone.

GSSI's mission is to ensure confidence in the supply and promotion of certified seafood, as well as, to promote improvement in seafood certification schemes. This is achieved through GSSI's Global Benchmark Tool, underpinned by the FAO Code of Conduct for Responsible Fisheries and other FAO guidelines. The Global Benchmark Tool provides clarity on, and transparency in, seafood certification by recognising robust and credible certification schemes, and supporting them in identifying areas for improvement. The Benchmark Process is open to all certification schemes. For more information, visit www.ourqssi.org.

GSSI is gaining stronger support

Global Seafood Sustainable
Initiative (GSSI) is gaining
strong international support
as new companies continue to
join the GSSI Partnership. Alaska RFM,
Iceland RFM, MSC and Audubon Gulf RFM are all
fisheries certification schemes that already have
been recognised by GSSI.

Few other fisheries certification schemes have publicly announced their support and application to become recognised.







www.icefishnews.com

Ads: Tel.: (354) 898 8022 inga@ritform.is

Get pumped for the future in quality



Skaginn 3X is introducing the new gold standard in fish processing, the ValuePump TM 2.0, delivering clean, firmer fillets with a higher yield and flesh that is far less susceptible to gaping during rigor. Using state of the art technology, the ValuePump TM 2.0 creates superior product quality while optimizing resources and reducing waste.

Get the first look at the ValuePump™2.0 at the Skaginn 3X stand #4-6127 on day 2 of the Brüssels Seafood Expo at 14.00.

The ValuePump TM 2.0 is the future of fish processing today. Only from Skaginn 3X.



www.skaginn3x.com



Iceland, with a population of just over 330,000 people has become a world leader in the Sea Tech industry. Icelandic Sea Tech companies are among the best in their field and Iceland is internationally known for its innovative technologies and solutions. The Icelandic "model" is driven by innovative solutions with focus on sustainability and top handling and utilization of the catch.

But why this strong focus on Sea Tech solutions for Icelanders? Fishing has been a part of our history and traditions since Iceland was first settled. One might say it is a part of our DNA.

Thanks to experience gained over the centuries, the fishing industry in Iceland is a very modern, technologically innovative and highly effective industry. To achieve this, a lot of effort and focus has been set on a responsible and sustainable management of resources and scientific knowledge.

Additionally, the industry is highly focused on market needs. Strong competition requires constant selection of the best and most efficient projects. This means meeting increasing market demands through high quality and standards.

Specialists in the field of Sea Tech solutions are constantly improving the design of ships, finding the right balance between the effectiveness of the ship or machine as well as energy saving. Another key element of success is the approach of handling and utilization of the catch, with focus on

sustainability. The main criteria being quality over quantity and obtaining maximum value out of the products which can be reached only by using the most advanced technology and equipment. Thanks to innovation, Iceland has become a world leader in the field of efficiency and utilization of the catch.

Taking part in Seafood Expo Global 2019

Promote Iceland actively supports Icelandic Sea tech companies in promotion activities in various markets. Exhibitions such as the Seafood Expo Global in Brussels, are very important in all marketing and sales. Icelandic companies have participated in this event for many years with great success, and each year a new company joins the group. We expect that this event will create a successful platform for introducing Icelandic capabilities in innovative technologies and solutions. In an exhibition like this, companies have the opportunity to meet their current clients and strengthen their relationships, introduce new innovations and technologies as well as gain new clients and relationships that can later become good business.

At last

Icelandic companies can offer modern, technologically innovative and highly efficient solutions that are in demand in the modern fishing industry. The Icelandic Sea Tech industry has a unique, competitive advantage. We look forward to meeting you in Brussels at our booth # 4-6127



Ingveldur Ásta Björnsdóttir Project Manager, Trade & Export.

9

ADVANCED PROCESSING LINE

Fully automated operations with capacity of 4.000 kg/hour with 8-10 people*

The Valka advanced processing line ensures more profitable fillet production with exceptional quality, more valuable products and less labor



SEE IT IN ACTION

Grading, batching and packing

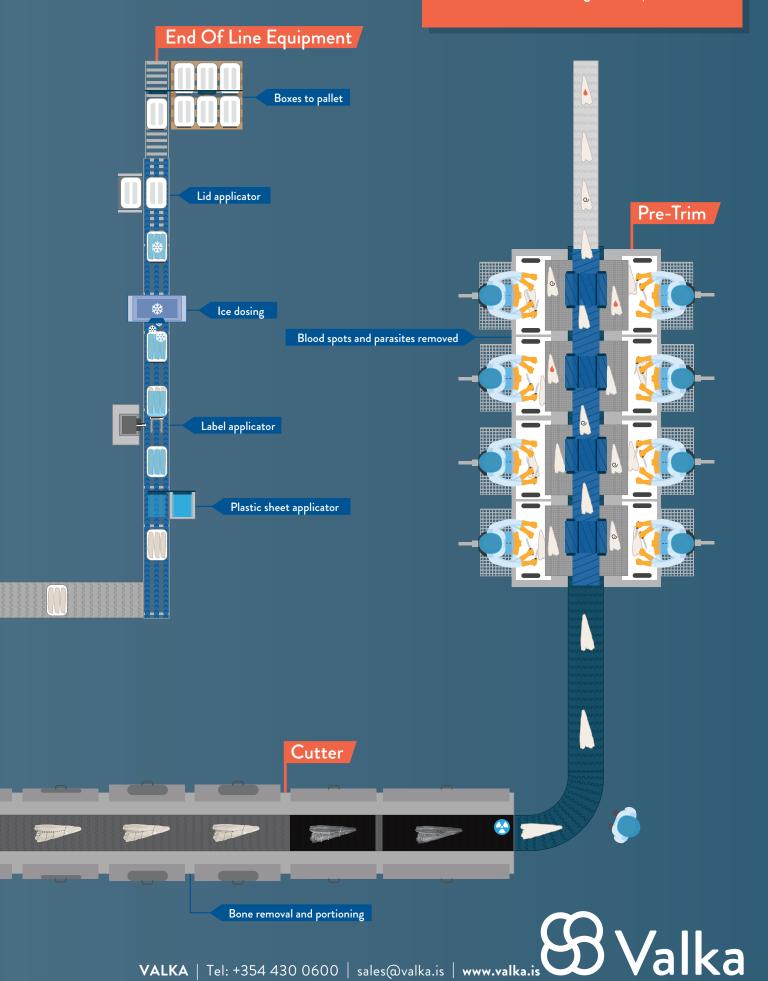
Aligner Grader

Portion Grader

Automatic distribution to product channels

MEET US IN BRUSSELS

at Seafood Processing Global | Hall 4-6115



VALKA | Tel: +354 430 0600 | sales@valka.is | www.valka.is

TakeControl!

Major players in the international seafood prosessing industry choose fish processing machines and solutions from VELFAG to secure optimum yield and fillet quality, maximum throughput of fillets, unique capability to process wide size range of fish with minimum maintenance cost.

"Take control" quality system for VELFAG's fish processing machines offers constant monitoring of yield and throughput – adjust the processing to each individual fish processed – live online data directly to your quality check – remote access directly to your desk & for adjusting and trouble-shooting.



Berlin NC 105











Join the winning leagues of fish processing





velfag.com

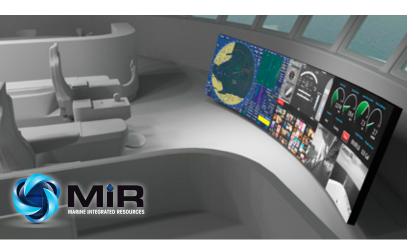






Knarr Maritime Consortium

Icelandic technology solutions and value creation



The future in wheelhouse design. Intergraded Video Wall Concept design from Nautic RUS and a newly established integration house MIR LLC.



Nautic vessels will be delivered with first class interiors, with the best possible accommodation for all crew members and integrated with solutions from a majority of the company members of the Knarr Maritime Consortium.



Knarr is an Icelandic Maritime Consortium, consisting of six major technology solution providers building on decades of experience in the Icelandic fishing industry.

Knarr Maritime also has an office in Moscow and Nautic opened a design bureau in St. Petersburg called Nautic-RUS, currently employing 45 experts in engineering, interior design and graphical presentations.

Each of the six companies has a long and successful history in the Icelandic fishing

industry and have as such very strong ties to the core business on an international scale. All six companies have been at the centre of the Icelandic fishing fleet renewals oevr the last decade as well as deliveries into projects to the fishing industry world-wide.

The Icelandic fishing industry is a successful and profitable business that has not relied on any subsidies over the past 40 years. We know that efficiency is a key element to a successful operation.

14

"The modern Knarr is a ship where fishing and fish processing is the criteria for every detailed vessel design and integration of Knarr member Technologies.



The Raptor is a concept vessel under development and aimed at the renewal of the small- to medium-sized fleet in Russia and world wide.



Construction of 10 vessels for Norebo in Russia has started and recently the keel of vessel #2 Kapitan Geller was laid, the first one in the series, Kapital Sokolov is under construction in Saint Petersburg.

Turn-Key solution

Each of the members of Knarr is in itself a strong entities that individually provides successful solutions to the Icelandic and the international seafood industry.

As a team, we provide the client with comprehensive Turn Key solutions, integrated vessels or land-based factories with the latest technology. We provide proven successful solutions both locally and increasingly exporting, designing and implementing as well as in to international projects.

Each of the six member companies in the Knarr collaboration has the ability and industry network to pull in subcontractors and suppliers to enable a successful completion of large-scale and versatile projects for the marine industry.

The strong relationship between the companies within Knarr is a major benefit and asset to our customers as we have worked together on several projects worldwide to build trust that lasts. This allows us to exchange industry details and insights visualised in comprehensive 3D drawings within the group, ensuring complete alignment of the total design. A complete and aligned drawing package will ensure a smooth process for the shipyard and installation teams.

For the clients, this will be seamless teamwork that will ensure the best possible result of the final vessel or land-based fish factory with cutting edge technology.

Further information: www.knarr.is, www.nautic.is, www.nautic-rus.ru

"Knarr Maritime
Consortium is established to market the
designs, developments
and technology
solutions provided by
the Knarr member companies in order to
deliver state of the art
Turn-Key fishing
vessels."

The companies that make up Knarr are the following:



a ship design company, Naval Architects & Engineering Consultancy.

SKIPATÆKNI a ship

a ship design company, Naval Architects & Engineering Consultancy.

www.skipataekni.is



an integrated technology provider of processing solutions & equipment.

www.skaginn3x.com



cooling and refrigeration system solution provider.

www.frost.is



an integrated fish finding equipment and telecommunication provider.

www.brimrun.is



an electrical winch manufacturer, winch control and auto trawl provider.

www.naustmarine.com



Curio strives to improve use of raw materials



Curio Ltd in Iceland is one of the world's leading producers of hi-tech seafood processing equipment, specializing in highly efficient solutions for heading, filleting, skinning and knife sharpening.

Curio's flagship is the C-2011 whitefish filleting platform, a unique filleting system based around a single design concept. There are 4 standard frame models and 2 extended frame models sharing 95 % of the same components, allowing an unparalleled level of flexibility when it comes to utilisation and flexibility, processing different sizes and species of fish. With a size range spanning 400g to 12kg on the standard frame and from 3kg to 18kg on the

extended frame the C-2011 Platform is the

world's most dynamic filleting system available for whitefish processing.

Offering a high and consistent yield, a simple user interface, a clear and easy

maintenance, cleaning, and repair work, the Curio machines are a clear favourite for the majority of Icelandic fillet producers. Steadily increased exports over the past years have seen deliveries to the UK, Norway, USA, Lithuania, Poland, Spain, Portugal, Belgium, Ireland, Holland, Denmark and now also Russia.

Continuous Improvements over two decades

"Product development is a key factor at Curio. Our technical improvements

are continuous and our company's role is to make excellent machines even better, constantly looking at solutions to improve processing efficiencies and obtain higher yields," says Curio's founder and CEO, Mr. Elliði Hreinsson.

One of Curio's latest innovations is the C-5010, the first high-precision Computer-Controlled Collarbone Cutter for whitefish available to the fish processing equipment market. This machine allows for increased yield, improved consistency and working conditions and reduced operational costs. "Our research shows that with this machine, yield can be improved by up to 8% compared to adapted heading machines and up to 2% compared to manual cutting, thus increasing utilisation of raw material and consequently the profitability of the industry. The C-5010 can stand alone or be used as a part of a processing line with our filleting machines." says Mr. Hreinsson.

Curio's stand at the Seafood Expo Global in Brussels 2019 is the #4-6211 in exhibition room 4, where those attending are given the opportunity to visit and acquaint themselves with the company and its products.

access for daily

Innovative Processing Equipment for Heading, Filleting and Skinning



Visit us in Brussels, stand 4-6211/Hall 4 at Seafood Expo Global, 7-9 May 2019 www.curio.is



Valuable Innovation

Increased efficiency driven by innovation and profitability in Icelandic Seafood sector has gained attention. An informal Icelandic fishing cluster, as Michael Porter described fisheries stakeholders, including Matis Icelandic Food and Biotech R&D, back in

2007 has gone beyond its focus on responsible fisheries. It has contributed greatly to increased value creation from each fish landed, to large extent thanks to focus on increased value rather than focus on volume, especially since 2003 and the establishment of the AVS Research

Balancing catching and processing capacity to maximum sustainable yield helped set focus on outputs rather than hoping for increasing inputs. Focus has been on maximising what value the catch can be processed into. Value creation of catch to export from Iceland has exceeded the FAO Fish Price Index in this century. Knowledge has been implemented, expanding from traditional definitions of fishing and fish processing. The AVS and efforts of Matis have induced innovation in the Icelandic seafood sector and helped introduce novel solutions. Recently focus drifted from advancing the fisheries sector, resulting in reduced investment in research and innovation, the proposed "Food Fund" may avoid reduced advantage and competitiveness of the Icelandic fisheries sector. The Horizon 2020 programme has significantly contributed to ongoing innovation efforts in the blue bioeconomy within Iceland, particularly since 2015.

Though innovation has led to the introduction of new products, traditional conventional products - salted, chilled and frozen - generate over 90% of export value

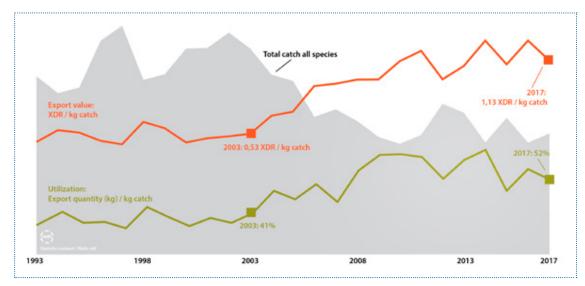
of Icelandic cod. The blue bioeconomy possesses vast opportunities, both in amount of biomass and the positive health impact of seafood shown in numerous studies that can counteract increasing pressure on already struggling health care systems.

Fisheries have been the backbone of value creation in Iceland for over a century. Responsible management, elimination of discards and constantly improving utilisation of the catch from monitored marine environment leads to better use of limited natural resources. Complying with a scientific management system and developing production processes with food technology has opened new export channels. Improved production processes include a holistic value chain approach, where the raw material is handled properly from catch to consumer.

Matis is a leading research and innovation community with vast expertise in the entire seafood value chain. Matis is active in research, innovation and development in fisheries and especially seafood processing in Iceland. The research and innovation projects of Matis included from 2008 until 2018 graduations of 24 PhD's and 90 with master's degrees through industrial collaboration.

These are among the ways Matis supports its partners to increase value and deliver safe and sustainable products for their customers to improve the public health.

Arnljotur Bjarki Bergsson, Chief Impact Officer Matis arnljotur@matis.is.







Product no. 20156 PUR
Height 68 cm · Width 71 cm · Length 91 cm
Capacity 260 litres



Product no. 20260 PUR · 20676 HD

Height 75 cm · Width 100 cm · Length 120 cm

Capacity 600 litres



Product no. 20163 PUR · 20563 HDHeight 75 cm · Width 103 cm · Length 122 cm
Capacity 630 litres



Product no. 20270 PUR · 20687 HDHeight 86 cm · Width 100 cm · Length 120 cm
Capacity 700 litres



Product no. 20173 PURHeight 88 cm · Width 117 cm · Length 147 cm
Capacity 930 litres



Product no. 20176 PUR
Height 88 cm · Width 117 cm
Length 199 cm
Capacity 1250 litres



See our whole product line



marel.com/fish

MAREL AUTOMATION,
ROBOTIZATION AND DATA
MANAGEMENT IN A BRAVE
NEW PROCESSING WORLD



Marel's innovative solutions in both salmon and whitefish are constantly setting new industry standards. Cutting-edge technology has been in focus at Marel since the company was founded more than three decades ago, and Marel is now driven by a determination to develop smarter solutions that enable processors to meet consumer demand for ever greater product quality and diversity.

A PROCESSING REVOLUTION

With the onset of Industry 4.0, a wave of new technology has inspired better, more automated ways to process fish. A new generation of Marel products is equipping the smart fish processing factories of today and the future to help them meet challenges such as limited availability of labor and raw material, and the desire to process very large volumes.

Marel now offers fish processors capabilities such as fully automatic, high-speed portion packing; advanced feedback on trimming lines to give operators the information they need to improve results; and high-precision weighing with full digital control.

The QC Scanner, PaceInfeeder for the Filleting Machine, and FleXicut Salmon (automatic pinboning and portioning) are three new salmon processing products released early in 2019 that improve results in terms of end-product quality, yield and reduced labor costs.

SMARTER PROCESSING WITH THE RIGHT DATA

Connectivity is one of the most important aspects of smarter processing, and advances in software contribute greatly to raising automation. Factories are becoming smarter as software becomes an even bigger part of the production process, and interconnected software solutions now control and monitor the journey of fish throughout processing.

Marel constantly enhances the connectivity of its solutions and has recently released two new software modules. The first offers individual trimming performance monitoring on the FleXitrim line. The second improves salmon filleting results, providing complete equipment control and real-time monitoring.

Marel focuses on enabling its customers to get the best possible results – particularly in terms of quality, yield and throughput – more efficiently, more sustainably and with greater automation. In short, on helping processors achieve smarter processing.





D-Tech - Automatic sanitisation solution



D-Tech is an revolutionary disinfection technique that caters to demanding food related industries that require cost effective and modern disinfection procedures in their production facilities.

D-Tech is a system that creates a disinfecting mist/fog in an area that needs to be sanitized by dispersing tiny little droplets evenly in the treated area, eliminating harmful microbes very effectively.

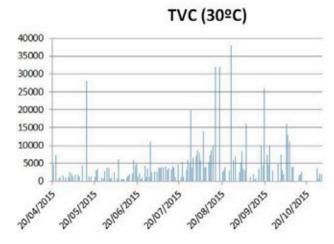
360° degree effectiveness!

The D-Tech solution provides numerous benefits compared to conventional methods for sanitizing:

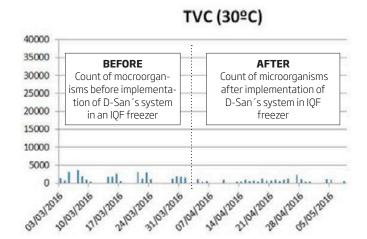
- » Increased efficiency of the sanitisation
- » Less use of water
- » Fast sanitisation

- » Less use of chemicals
- » Automated sanitisation
- » Control of DisAct via the internet

D-SAN - Leads to drastic fall in microorganisms



Above measurements are from a processing plant using traditional methods of cleaning and disinfecting



Above measurements are from the same processing plant. Traditional sanitation. Sterilized with D-San´s system and D-San´s disinfectant



D-Tech ehf.

Ocean Cluster House - 101 Reykjavík - Tel.: 00354-692-5040 - ICELAND email: ragnar@d-san.eu



The refrigeration specialists

MEET US AT STAND 6127 IN HALL 4





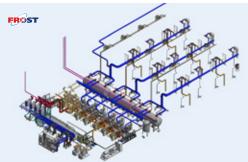
By far the biggest super trawler build in Russia so far, 121 meters

 $450 \text{ t/}24 \text{ freezing capacity in NH3/CO}_2$ cascade system and tyfoxit system for cargo hold's Designed by: Wartsila



10 new 82 m freezing vessels to be built for Norebo in Russia

NH3 pump system with Tyfoxit system for cargo hold's Designed by: Nautic



Vardin Pelagic largest pelagic plant in the world

with NH3 pump system Chiller's and heatpump's. 7,5 MV@-42°C freezing capacity

Gydrostory and Lenin land based fish factories in Kuril Islands and Kamtchatka NH3 pump system's



1 new 82 m freezing vessel built in Spain for HB Grandi Iceland

NH3 Pump system with Tyfoxit system for cargo hold's

Designed by: Rolls Roys

Thorlakshofn

a powerful export harbour



The direct sailing route of the Mykines cargo vessel between Thorlakshofn and Rotterdam has proven to be very successful, and a great boost for the activity level in the local harbour. This new sailing route of the Smyril Line Cargo is especially economical for those who wish to transport fresh produce between Iceland and Europe. For example you can buy fish from the Thorlakshofn fish market on a Thursday or Friday, and have it arriving in Rotterdam by Monday.

"Thorlakshofn is very well located in terms of fish export via sea from here to Europe. Due to the short time it takes to sail between Thorlakshofn and Rotterdam, buyers can receive their products in a much shorter period of time than before. A fully equipped cold storage is located by the harbour, and there are salmon and arctic-char fish farms in the close vicinity. Here we also dry fish and produce bacalao. Furthermore, Thorlakshofn very well connected by land in all directions, and only 40 km from Reykjavík," says Hjörtur B. Jónsson, the Harbour Master in Thorlakshofn.

To meet the increasing demand for high quality services, Thorlakshofn has undergone great developments within the harbour area and is now fully equipped to receive larger ships. The harbour was deepened significantly, and the maneuvering area is now 230 m in diameter, making it easier for large cargo ships to move within the harbour.

"These developments are of course aimed towards future growth and we also feel we offer very interesting services for transport by sea. Facilities have also been greatly improved for other ships and boats that dock at our harbour, and the activity level has increased greatly with the Smyril Line Cargo weekly sailing."

Thorlakshofn offers a variety of construction lots, intended for businesses of various sizes and types. The municipality has planned a large industrial and service area by the harbour and the surrounding area. Land is plentiful, with great conditions for developments. The location is optimal for most demands financers make when it comes to location in industry and production, but other businesses are well suited as well. "We have received a number of inquiries and applications for industrial lots after the direct sailing between here and Rotterdam began. We have near endless room for developments and a variety of industrial lots close by the harbour, and therefore it is easy to find one that suits every kind of business," says Hjörtur.





PORLÁKSHÖFN

- the future location for your company?

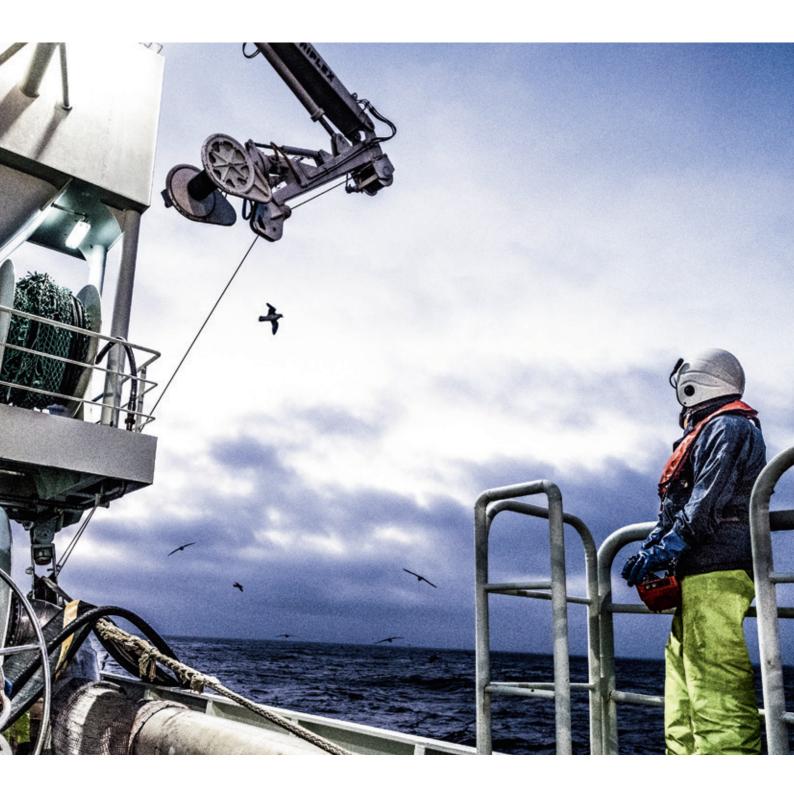
The cargo ship Mykines which is owned by Smyril Line Cargo, sails between Þórlákshöfn and Rotterdam on a weekly basis, all year around. The sea transit time is the shortest on offer in the southwest corner of Iceland.

Porlákshöfn is located on the southwest coast of Iceland and the town has the only cargo and fishing vessel harbour on the south coast, until you reach Hornafjörður. Transportation from Þorlákshöfn is easy as the town is well connected to all areas of Iceland and is located only 40 km from Reykjavík and 85km from Keflavík Airport.

There is a wide range of land available in Þórlákshöfn for companies of various sizes and types. A major industrial and service area has been planned and will be located in the harbour area and inland of the harbor area. The land area is vast and the conditions are suitable for development. The location is also advantageous with regard to the requirements generally set out by investors e.g. with regard to the location of industrial sites and manufacturing but is also ideal for other operations.

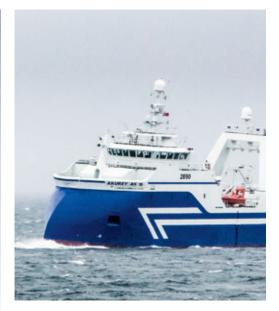
Please contact us if these advantages could work for your business and/or you would like to receive more information.





WILD CAUGHT ICELANDIC FISH SUPPLIED IN HARMONY WITH NATURE

With our own vessels and our own production we bring our partners around the world high quality Icelandic fish, caught and cared for in harmony with nature.















GOING TO BRUSSELS?

VISIT US AT OUR STAND HALL 6 BOOTH 6-815

www.hbgrandi.com/expo



WiseFish across the globe



WISE is a leading international developer of Software Solutions for the seafood industry with WiseFish, a certified Microsoft Dynamics NAV solution, as their primary product on the international market.

"WiseFish offers multiple solutions to the Seafood industry, such as WisePeripherals, the integrated trade solution, HACCP quality control, catch and quota management, traceability from raw materials to end-product. It is an end-to-end solution, using Microsoft Dynamics NAV as the platform, including a total ERP solution", says Jón Heiðar Pálsson, head of sales and marketing at Wise.

"We now have a new version of WiseFish out, and are also happy to introduce WiseAnalyzer for fisheries as well – a user friendly BI and data warehousing software that allows you to quickly access and analyse your live company data, including financials, sales, purchases, inventory, and resources,"

WiseFish ensures good oversight for managers in the fishing industry: "It keeps track of fishing and fishing methods, how much is landed and what types of fish. The program can also monitor quota status, and keep track of production processes. Another benefit is that WiseFish can connect with other systems on the

floor, such as Marel's Innova software, and have the system speak with peripheral equipment like scales and handheld computers."

Remote installation a great success WiseFish is sold across the world, and is used in Iceland, Norway, the Faroe Islands, Germany, Australia, and New Zealand, to name just a few countries.

The first WiseFish remote software installation was completed recently with great success. Jón Heiðar explains: "We recently installed and launched WiseFish remotely to Omicron in Suriname, one of Suriname's largest processors and exporters of frozen and fresh fish. WiseFish staff used remote access, working around the time difference between the two countries, to set up the system. All went well and without any travelling by WiseFish or Omicron staff. Assistance and coaching is also done via the web. The incorporation and implementation was such a success that another company from Suriname, Marisa Fisheries, has started doing business with WiseFish. Britney Kasmiran, an employee of the company, is currently in Iceland, working on a master's degree in fishery studies at the University of Iceland and has studied the WiseFish software and will therefore bring useful skills back home.

Our largest project in Europe is currently updating and introducing new solutions for the influential Parlevliet & Van der Plas, the Dutch-German fish business group that recently took over all shares in Deutche See GmbH in Bermerhaven, the largest German fish producer and marketer." Euro Baltic is a part of Parlevliet & Van der Plas Group (P&P Group) in the Netherlands and is among the larger herring-processors in the Baltic.



Jón Heiðar Pálsson: "WiseFish incorporates the entire value chain in the fishing industry, from fish farming or fishing to production, sales and distributions, and offers full traceability."





"In this upgrade all the connections to the production systems will be simpler and more efficient and it will take the place of a lot of excel-documents which have until now been used to keep track of fishing, discharging and sales. Euro Baltic's experience of using WiseFish has led to the P&P Group deciding to incorporate WiseFish into more subsidiaries, among others tuna fishing company CFTO in France," says Andrés Helgi Hallgrímsson, the sales manager of WiseFish.

Various options - tailored to your needs

Although WiseFish has been the IT partner of choice for many of the largest and most prominent seafood organisations in the industry for over two decades, it also provides solutions for smaller and medium sized companies.

"The success of WiseFish is largely due to the fact that it incorporates the entire value chain in the fishing industry, from fish farming or fishing to production, sales and distribution, and offers full traceability," Says Jón Heiðar. "We provide them with the tools and resources they need to increase profitability and streamline business processes while keeping pace with an increasingly demanding

wisefish.com

regulatory environment. We enable managers to work smarter, not harder. "

"A subscription to Microsoft Dynamics NAV and software solutions is an economical and convenient model that provides an opportunity to obtain our business solutions through a monthly subscription," says Jón Heiðar, adding that rather than paying an up-front purchase cost you have a modest monthly charge for the software, upgrading and services. Included in the service is data saving, copying, data security protection and an SQL database. WiseFish also has an inbuilt HACCP quality system that can be used for all production."

"Our unique blend of Seafood and Information Technology expertise is recognized worldwide, and this is thanks to our excellent employees and company spirit. We are proud to say that we have a diverse workforce and a gender balanced management team, which is somewhat unusual for an IT company" says Jón Heiðar.

4QSolutions: A new WiseFish partner in USA and Canada

Wise has key offices on four continents and a network of partners and customers around the globe. The newest addition to the partner network is in USA and Canada, 4th Quarter Solutions, based in New Jersey.

4QSolutions will focus on selling, supporting and installing WiseFish seafood industry-focused packages, both on premise and subscription's modules. It will provide expert knowledge for implementing, training, application support, development and project management for Dynamics NAV and WiseFish Seafood Solutions.

4QSolution focuses on providing the best business applications available for

modern companies in today's world where circumstances change and opportunities arise rapidly. The primary role is to provide successful implementations and support to customers by offering the best software solutions possible for companies in the seafood industry.

www.4qsolutions.com



15022NN



Fuel is black gold these days of volatile fuel prices and burning fuel without needing to hurts. Marport gear sensors are designed to play a role as a contributing factor in maximising efficiency, targeting fishing at the most productive spots and keeping fishing time to the minimum needed to fill the fishroom while keeping your fuel bills down.



Time is money, and cutting down on lost time and wasted effort is the key to streamlining any fishing operation. The better the sensors on the gear and the more detailed the information reaching the skipper, the shorter the time the fishing gear has to be in the water. Our aim is to provide the essential information to keep fishing time strictly to the time needed, without wasting time or effort.





Short tows are the thing. Getting the fish from the water to the fishroom as fast and as fresh as possible it what keeps quality high and prices strong. Marport's codend sensors aim to tell you when there's just enough fish in the gear for a prime quality haul, without needing to tow that extra half-hour to be sure.



Marport's sensors have been designed from the outset to work seamlessly with other systems. We don't see why you should have to fit an entire system when a single component needs replacing, so our sensors dovetail with other manufacturers' sensor arrays and wheelhouse displays.



In today's world sustainability has become more than simply a buzzword; it's an essential aspect of modern fisheries. Today's approach is to take what you need and leave the rest. Nobody wants to slaughter any golden geese and we aim to provide skippers with the gear they need to align their catches to the needs of the market.





In Europe, Samskip has a network of reefers and trains, cold storage, ships and trucks.

Samskip tailors sustainable transport solutions for each customer

"We participate in the Brussels Expo every year. Being the largest fishing expo in the world, it is tremendously important for companies like Samskip. This is where most of the customers and those who work in the industry meet and mingle. It is almost like an annual festival. For us it is vital to be highly visible and to introduce our services and our emphasis in finding the correct solution for each customer," says Birkir Hólm Guðnason, CEO of Samskip hf. He says the company also participates in the Boston Seafood Expo, but that the Brussels Expo is considerably larger and vital for the European market.

Delivering fresh fish to markets

In Europe, Samskip has an extensive

network of reefers and trains, cold storage and warehouses, ships and trucks.
Guðnason explains: "Here in Iceland we have a new shipping schedule we introduced last October. We have five ships here - one for the coast, and four that sail to Europe, according to our customers' needs. The new schedule is designed for optimal days for exporting fresh fish and best days for import.

One ship departs from Iceland on Wednesday, arriving in Rotterdam on Sunday to deliver fresh fish for the market at Boulogne sur Mer on Monday morning. That is the biggest sales day, offering the best prices.



Birkir Hólm Guðnason, CEO of Samskip hf. "The European Seafood Exposition and Seafood Processing Europe in Brussels is tremendously important for both fisheries and companies like Samskip."

Another ship leaves from Iceland on a Thursday afternoon, arriving in Hull on Sunday with fresh fish for the British market, sold the next day. The Thursday ship also carries a cargo of fresh salmon from Arnarlax, picked up from Bíldudalur the day before departure. The other two ships return to Iceland on a Sunday and Monday, which is great for Icelandic imports.

Our emphasis is on the shortest possible transport, and to arrive on the best days in Europe: Mondays are the largest market days for fresh fish, and by making sure that we deliver by that time we are strengthening our position in export for both fresh salmon and whitefish. Our coastal vessel does a weekly tour in Iceland, picking up frozen fish and other cargo which then leaves on the Thursday ship from Reykjavík."

Sustainable transport throughout Europe

Samskip offers a complete transport solution, with an extensive transport network throughout Europe. "Our goal is to

grow sustainably and profitably, and to provide quality services for the fishing industry and other industries. We have a clear policy regarding the environment and wish to be a leader in sustainability. For example, our Rotterdam cold storage, Frigocare, is operated by solar batteries. We have set clear goals to reduce our carbon footprints by 11% between 2015-20 for transport on land, and by 10% for shipping. We are also recycling more of our waste, from 46% to 60%, thereby significantly reducing our carbon footprint. We just signed a contract with Íslenska gámafélagið, a company that collects and handles waste and recyclables, and fishing company HB Grandi to export styrofoam for recycling. With new technology at HB Grandi, the styrofoam boxes can be pressed down by 95%, and it is therefore quite revolutionary to recycle them instead of burying them in landfills.

The goal of our service is to tailor-make sustainable solutions for the needs of our customers, offering a selection of solutions, from reefers, trains, trucks, and ships," says Birkir Hólm Guðnason.



Samskip's goal is to tailor-make sustainable solutions for our customers' needs.



Markus Lifenet – a leader in man overboard safety and rescue at sea

www.markusnet.com

Pétur Th. Pétursson, managing director of Markus Lifenet ehf.

With its origins in the port of Hafnarfjörður, Markus Lifenet's managing director, Pétur Pétursson is justifiably proud of the company's achievements. Although it hasn't always been an easy ride, the company has grown steadily over the past decades. Today it has a staff of 6 and customers around the world.

Prospects for the company look good and Markus Lifenet certainly enjoys an added prominence since they were asked to take lead in development of new ISO standards for means to recover people from water, as follow up to the new SOLAS regulation III/17-1. This role brought a new focus to the company and its frequently pioneering work. Pétur Pétursson said that in compiling the new ISO standards, the emphasis has been placed on the human element and in particular on generating a safety culture, as safety at sea is not something to be taken lightly.

Simple and portable

It's not always obvious that someone preparing to enter into freezing water to rescue a fellow crewman or person in need for help, will always know just how to react to an emergency. Not everyone has the courage or the clarity of thought that this kind of incident requires, but our person in

water recovery system Markusnet, has repeatedly proved its worth under the harshest conditions. It's a portable and simple piece of equipment that has the added advantage of being effective and relatively cheap compared to some products on the market. Most of our person in water recovery systems are designed so that one crewman can deploy them in a matter of seconds, and for two to four crewmen to lift the victim back on board manually. A light deck crane can also be used to retrieve the victim,' he said.

Unwavering faith

It is now 40 years since skipper Markus Thorgeirsson began developing the prototype Markusnet, designed specifically for recovery of persons from the sea in rough sea conditions. At the time, the idea was seen as innovative while also being simple. Since then, the Markus Lifenet products have become an important part of the array of recovery equipment that commercial vessels carry, thanks to Markus Thorgeirsson's vision and confidence in his idea, as well as Pétur's relentless drive to collect and distribute information on techniques and knowhow to recover people from water and floating objects over the last 30 years.





Markusnet type MS

Instruction for use

Entering the Markusnet









Other options for use







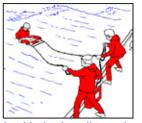
Deploying the Markusnet











Undo the attachement line and release the container. Lift the container of the backplate hook with the handle on the back and carry it to where it is needed. Grip the neck of the throw-bag and open the bag. Release knotline on the outer end over the side and throw the throw-line upwind towards the casualty. When the calualty has reached the throw-line, release the net structure and lifting lines on inner end over the side. Smartly pull in any slack in the lifting lines and allow slack as the casualty pulls the net towards him. **Maintain tension on the lines at all times.** Work with the swell to bring the casualty to the ship's side and back on board.



Lloyd's Register / SOLAS type approval certificate no.: SAS S160032 Icelandic Maritime Administration approval no: 06.11.2014

For further information, see: www.markusnet.com

Man overboard safety and rescue is our concern and speciality.

eland, Tel.

Manufacturer: Markus Lifenet Ltd. Gjáhella 13, IS-221 Hafnarfjordur, Iceland. Tel. Intern.: +354 565 1375 - Email: sales@markusnet.com – www.markusnet.com

TC-100 tailcutter - better fillet quality





Better skinning and filleting when tailcutting.

TC-100 tailcutter in use.

The Icelandic TC-100 tailcutter is a surprisingly effective device that integrates seamlessly into the filleting line. It has been developed in one of Iceland's most advanced fish processing plants in Grundarfjordur and shown remarkable results in reduction of belly flap flaws, easier 3D scanning and longer lasting sharpness of the knives.

The TC-100 tailcutter is designed by Unnsteinn Gudmundsson, who has been working as chief engineer for the fishing company G.Run ltd. in Grundarfjordur for the last 30 years. Since 2014,

when he completed the final version of the machine the tailcutter has been part of the G.Run filleting lines. Measured outcomes show 20% less block and minced products as well as 25% higher productivity with better filleting. Many other fishing plants use the TC-100 tailcutter with same result.

No additional employee needed – no additional labour cost.

For further information, images and videos, please visit our website.

TAILCUTTER TC-100



- Higher percentage of better quality products
- Easier to insert the fish into filleting machine
- · Fillets perfectly cut from tailend
- Much better skinning/flawless fillets
- No additional labour cost

4FISH



NO CATCH IF YOU DON'T FISH

The ICELANDIC FISHING EXPO will be held for the second time at the Laugardalshöll Sports and Exhibition Centre in Reykjavík, 25-27 September 2019.

The EXPO was first held in 2016 to great acclaim, with over 100 participants and more than 15.000 guests, both local and international.

Secure your booth now for this grand exposition of the North-Atlantic fishing industry!

See more at www.icelandfishexpo.is



Keeping Icelanders alive for centuries

www.handknitted.is



"You'll find a large selection in our shops, individually made at home by local knitters," says Þuríður Einarsdóttir.



The Icelandic sweater is easily identified by its distinct pattern.

While Icelandic sweater-knitting stretches back for centuries, the Icelandic wool tradition is now epitomized in the modern day sweater, knitted from the special lopi-yarn: wool that has not been spun into thread. Characterized with its circular yoke and timeless patterned borders, you should make sure you are obtaining an original Icelandic sweater. A driving force behind the continuous popularity of the Icelandic woollen products, The Handknitting Association of Iceland operates under the slogan of "Buy directly from the people who make it".

The "Fatherland"

For centuries, woollen sweaters, trousers, hats, and mittens were part and parcel of every farmer's and fisherman's life. Woollen undergarments have also been such a stable element of the Icelandic wardrobe, it is affectionately called "fatherland". The unique properties of the woollen garments, with their ability to retain heat even when wet, has undoubtedly saved many a life. While the mittens may have given way to rubber gloves of modern days, the woollen sweater is still held in high esteem among Icelandic fishermen, battling harsh conditions in the North-Atlantic.

Unique in its composition, Icelandic sheep wool consists of two types of fibres. While the fine, soft and highly insulating inner fibres provide warmth, the water-repelling, long and glossy outer fibres provide protection from wind, rain, sleet and snow. Together, the contrasting fibres combine in providing warmth and protection while remaining breathable and lightweight.

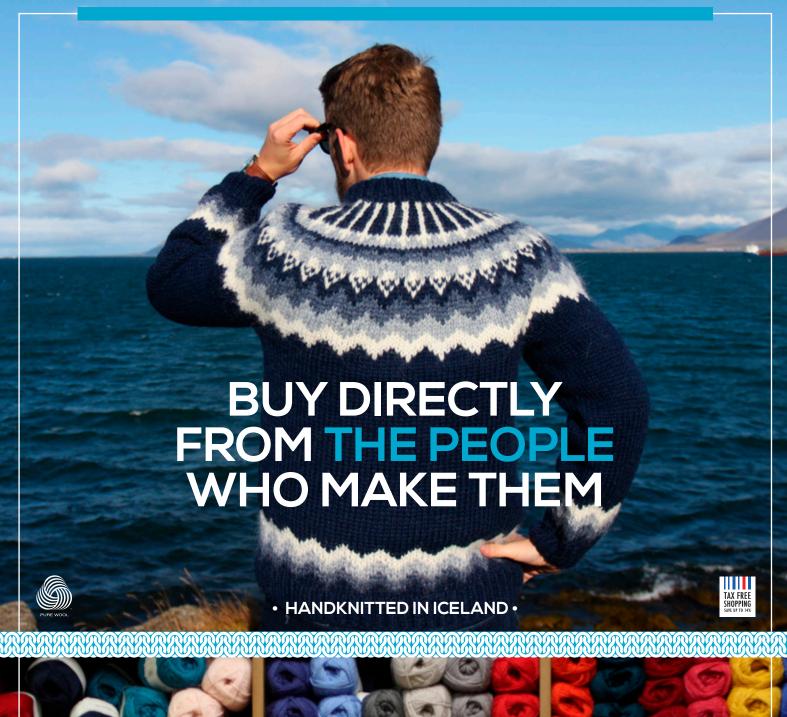
Buy your handknit, Icelandic sweater

In recent years, travellers from all over the world have discovered the quality of the Icelandic wool and have been inspired by its colour variations and knitted patterns – many of which have a long history – in garments sold at their two stores in Reykjavík, Skólavörðustígur 19 and Borgartún 31.

"We have a large selection of sweaters - whole, buttoned or zipped - mittens, woollen hats and scarves, you'll find a large selection in our shops, individually made at home by local knitters," says Puríður Einarsdóttir. "Customers from all around the world have fallen in love with our products and admire the craftsmanship. While many have described our shops as true woollen havens, with all the variety on offer, where you can buy everything from handknit items to knitting yarn and patterns."

38

For centuries, woollen sweaters and mittens were part and parcel of every fisherman's life.











Premium quality all the way



A fish has a long way to travel from Icelandic waters until it starts to sizzle in a masterchef's pan in Paris.

Fresh and delicate products like seafood call for careful and professional handling. At Samskip, we offer value-added solutions and a wide range of services to seafood companies, ensuring that the product is delivered efficiently and safely.

