

THE NEW POLY-ICE APOLLO

A new, powerful and expandable type of pelagic trawl door.

Hampidjan's trawl door division is now offering the new Apollo steel pelagic trawl doors.

Apollo doors are among the most powerful and low-resistance doors that have ever been produced, according to extensive trials that have been carried out with the first production models. Squaring power is exceptional, which makes altering course or turning during a tow easier, as well as making the normal handling of these doors much more straightforward than any other type of trawl door currently on the market. The low weight of these doors also provides a significant fuel saving – a vital factor now that fuel prices are steadily rising.

Apollo doors are considerably more stable than other types of door, maintaining the trawl's opening and the trawl itself more stable than has been possible until now.

The Apollo pattern doors are a high-aspect Vee-design, with a height significantly greater than the door's width.

An additional factor that gives Apollo doors an extra advantage is that they are expandable with added sections that can be bolted on to the upper and lower edges. This allows each door to be expanded by 10 to 15%, or more if necessary. This approach has been developed primarily to allow a trawler to make use of the same set of doors with different sizes of trawl gear.

It remains to be seen whether or not skippers will make use of this option, but this is an exciting development that adds to the flexibility of these trawl doors.

Jón Eyfjörð, skipper of the Sighvatur Bjarnason VE-81, was the first to try out the new Apollo doors and reported that their performance was outstanding.

Maron Björnsson, skipper of the Gudmundur Ólafur OF-91, is starting out with these new doors and a pair has also been delivered to Reykjavík trawler Therney RE-101. Samherji trawlers Vilhelm Thorsteinsson EA-11 and Baldvin Thorsteinsson EA-10 will also be fishing with Apollo doors shortly.

A number of Icelandic and overseas customers have shown their interest in this new type of trawl doors and



we expect the progress of the trawlers now using them to be followed with great interest in the next few months.

Hampidjan has put a great deal of time and effort into the development and construction of the new Apollo trawl doors and we hope that they will be successful for both our domestic and overseas customers.



NEW

APOLLO TRAWL DOORS
– HIGH-POWER DOORS WITH
LOW RESISTANCE

Blue whiting in – cod and saithe out!

Blue whiting in – cod and saithe out!

Bycatches taken during the blue whiting fishery in Icelandic waters have become a problem over the last two years. Roundfish that is caught with blue whiting can not be utilised, partly due to the long towing time and also because the catching vessels have no facilities for handling roundfish.

During the later part of the summer last year many fishing areas east of Iceland were closed due to unacceptably high bycatch rates and the decision was taken to try and separate out the roundfish using grids.

The grid was tested on board Borkur NK-70 on blue whiting grounds east of Iceland. Faxi RE-9 also took part in the trials as a control, fishing alongside Borkur with the same type of gear to give the best possible comparison between the two gears with and without the grid.



The blue whiting grid hauled back on board Borkur NK

This was possible with the close co-operation between skippers Sturla Thordarson and Olafur Einarsson on Borkur and Faxi.

Trials took place from 22 to 29th September last year under a special licence from the Ministry of Fisheries. Specialists from the Marine Research Institute, the Directorate of Fisheries and the Hampidjan joined Borkur for the trial trip to observe the catch and the fishing gear,

and to record as accurately as possible the catches of blue whiting and other species taken as a bycatch, which turned out to be mostly small saithe.

The grid used in the trials was obtained from Norway and adapted for the conditions in Iceland. Grids of this type have already been used successfully in Norway in separating cod and saithe from catches when trawling through shoals of herring. The grid is fixed between the codend and the belly. When fish passing down the belly encounter the grid, the blue whiting pass through the bars with their 60mm gaps, while roundfish follow the bars downwards and out through an opening in the lower panel of the gear.

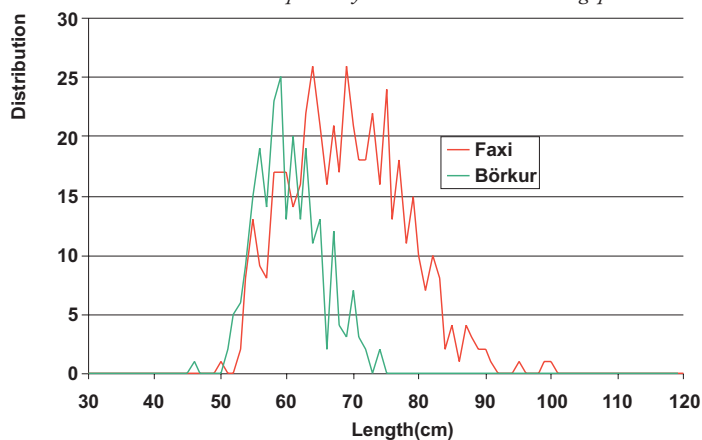
Results from the trials indicated that grids such as these can be used relatively easily on board most blue whiting trawlers. There had been doubts as to whether or not the grid would be robust enough to withstand the tensions that are part of hauling 400 to 500 tonne bags of fish and that it was

expected that the grid would be reduced to its constituent parts. This was not the case, although it was noticed that the steel grid was quickly bent out of shape and there were breaks at some of the welds. Then there was a changeover to a plastic grid obtained by Tben from Canada, which appeared to withstand the tensions much more successfully when it was rolled onto and off the net drum. It was also clear that roundfish were separated more successfully with this grid than with the steel grid.

The next step is to develop the grid further, possibly with a different gap between the bars of 55mm and using a grid with larger dimensions. It is clear that the grid will not be a permanent fixture in these trawls, but used only when a predetermined percentage of the catch reaches a set maximum limit. For these reasons, the grid and the netting section around it need to be designed and built so that the complete section can be taken out or put in as required.

Length distribution of saithe caught as bycatch on board Faxi and Borkur.

*Borkur was using a grid with 60mm gaps between the bars.
Better results could probably be achieved with 55mm gaps.*



Graph: Marine Research Institute, Haraldur Einarsson, 14-02-05

The new Gloria Helix is full of surprises!

Says Swedish pair trawler skipper

Since the 1950s Scandinavian fishermen have been developing their pair trawl fishery and have achieved some spectacular results. Cosmos Trawl AS – a partner in the Hampidjan Group - has been at the centre of this development. Cosmos recently invested in a licence to produce fishing gear using Hampidjan's patented self-spreading technology.



The Gloria Helix trawl in the North Sea Centre flume tank

Cosmos – ready for the 21st century

Swedish skippers have already tried the Gloria-Helix trawls and substantial groups of Icelandic and Faroese skippers have also given their opinions. Cosmos expects that the same technology will also soon find its way into other pelagic sectors. Cosmos is concentrating on the self-spreading technology with the support and assistance of the Hampidjan Group. The company is well prepared to follow developments in this field, with all the advantages that this entails for the group's many customers in Scandinavia and northern Europe.

Reports from pair team skippers

Gloria-Helix trawls have been used successfully for the past two seasons by pair teams fishing for mackerel and herring.

Results have been that fishing has been between 25 and 50% more efficient compared to conventional pelagic pair trawls under similar circumstances, Elis

Gustavsson, skipper of the Våstfjord GG-218, told Catch On editor Gudmundur Gunnarsson recently.

"The new Gloria Helix trawl is full of surprises!" he said. Kenny Jansson of the Bristol GG-229, the newest vessel in the Swedish fleet, added: "Our experience with the self-spreading trawl has been very positive. Fishing efficiency has been increased and it is easier to tow and

control the Helix trawl than a normal set of gear. We were even able to tow a knot faster than usual, which means that we also catch larger mackerel."

So far Swedish skippers have used Gloria-Helix self-spreading trawls in the North Sea, the Skagerrak and in the Norwegian Sea, and will soon be trying it in the Baltic as well.



Shooting the trawl.

Production of a 2048 m Gloria blue whiting trawl for "Peter Marlene".



Self-spreading technology

A revolution in fishing efficiency

Around the middle of the 1990s Hampidjan first heard about developments in a new technology for fishing gear by individuals who were not connected to the fishing gear supply industry. There were no immediate indications as to what the new technology was, but later it became clear that this was the so-called self-spreading concept. The group who had been working on the development of self-spreading technology were interested in working with Hampidjan to develop their ideas further. After discussing these ideas, Hampidjan's managers were convinced that this represented an exciting new step forward in the development of fishing gear technology that could improve fishing efficiency significantly. In October 1998, Hampidjan signed an agreement with the developers of this new technology.

Hampidjan saw the following advantages in the self-spreading technology:

- Self-spreading technology
- The self-spreading ropes square the meshes.
- Improved volume of the trawl.
- No vibration or oscillation in the trawl while towing, and less towing resistance.
- Minimal noise from the net towards swimming fish.
- Less stress for fish inside the trawl.
- No twists or tangles.
- Greater stability while towing, making a turn, or in a cross-current or while changing depth.

- Easier fishing close to the surface at high speeds.

The first self-spreading trawls

Hampidjan's first self-spreading trawls were delivered to Alaska at the beginning of 1999 for fishing Alaska pollock. The first such trawl used in Iceland was delivered to Thorsteinn EA in April the same year and was used for fishing blue whiting around Rockall, which set things rolling. Early in 2004 Hampidjan bought all of the patents and patent applications for the self-spreading technology.

The first generation – double twisted ropes

To begin with, Hampidjan's self-spreading ropes were made with two ropes twisted together into one spreading rope. Each mesh therefore has two S twisted and two Z twisted ropes. The new ropes worked well to begin with, but a few problems appeared with twisting and abrasion that led to the development of a new generation of twisted spreading ropes.

Second generation – Helix ropes

Following extensive trials and research, the result was a rope with a braided cover that was christened Helix, and which also gave 20% better results than the previous double twist ropes. These Helix ropes have the double advantage of having the self-spreading capacity, as well as an abrasion

resistant cover. Helix rope is made with a nylon core, with a braided polyethylene cover. The cover incorporates the braided twine that gives it its self-spreading properties. The Helix cover gives the rope and cover added protection against twisting. The Helix rope is quite stiff and does not tangle easily to the point that we feel that twisting problems such as occurred in the wings of trawls are now solved.

As a Helix trawl is shot away, the meshes can clearly be seen separating as the gear immediately squares itself like a parachute behind the trawler. The only drawback with Helix ropes is that there are difficulties in splicing an eye in them or splicing two ends together.

For this reason it was necessary to knot the first trawls and quite heavy knots were formed in the largest diameter ropes. Working with these ropes was time-consuming and required great care as the configuration is quite different to conventional gears. Several different solutions were tried for constructing these meshes until the best option chosen was to use aluminium clamps to fasten them.

Clamping Helix ropes

In co-operation with Brødrene Markussen in Denmark, who showed an immediate interest in the project, it was possible to develop a method of clamping ropes that has worked very well in Hampidjan's trawls. There are a number of definite advantages with clamping meshes:



- Each bar in the large diameter meshes is clamped.
- This makes the construction process easier and a 30 to 40% greater strength is achieved compared to knotting the meshes.
- This gives greater strength, allowing thinner ropes, therefore less water resistance.
- With no knots, repairs are easier.
- Aluminium is a light metal with a relative mass of 2.40, so the trawl as a whole is not made heavier.
- Twisting of meshes and tangles are practically eliminated.
- With 20% greater efficiency in squaring, the wings and belly are squared much better and the effects are seen right down into the belly.
- Vibration and oscillation of the meshes is reduced still further compared to the double twisted rope system used previously.

Hoffell was the first trawler to use a Gloria pelagic trawl with Helix ropes in April 2002. A month later a similar trawl was delivered to Venus for fishing deep sea oceanic redfish in May 2002. A year later, Venus was also used to test the first Gloria Helix trawl with clamped meshes on redfish with excellent results.

Revolution in mesh measurement

New digital mesh gauge on the market

A new and sophisticated mesh gauge was introduced by Belgian company Marelec and Dutch company Observator at the end of last year.

The new gauge is designed to provide an objective measurement of meshes without manual effort needed. The gauge is electronic and shows the results of every measurement on its screen. Each measurement is made with a pre-determined force of either 4kg or 10kg and meshes from 10mm to 300mm can be measured. The Omega gauge has a memory capable of storing the results of up to 1000 series of 20 measurements.



A built in infra red facility allows data to be downloaded directly to a PC.

The reasons for developing the new gauge were that mesh gauges and mesh measurements were no longer thought to be sufficiently accurate for legal purposes when cases were being brought to court within the EU. The 29 month Omega project was launched in October 2002 and came to an end in February 2005.



The cost of the project as a whole has been 759,593 Euros.

The Omega project was a combined effort by eleven European research institutes and companies. The project leader was Ronald Fonteyne of the DVZ fisheries research institute at Oostende in Belgium. A new set of regulations concerning mesh sizes based on the Omega gauge and its capabilities is being prepared

and this is expected to be introduced later this year.

The Icelandic Marine Research Institute made use of the Omega gauge during its selectivity research last year and Hampidjan staff have also used the Omega gauge on the company's own trawl gear netting. Their unanimous opinion was that this is a piece of equipment that the industry has long been waiting for.

Marelec's agent in Iceland is Raftidni hf in Reykjavik.



Successful Hampidjan tank trip!

New and environmentally friendly capelin trawl.

Twelve Hampidjan staff spent a few days from 30th of March to the 2nd of April at the SINTEF flume tank in Hirtshals.

Aims

The main aim of the trip was to test several versions of pelagic trawls for capelin. This was the first outing for a new and revolutionary design of pelagic trawl from Hampidjan. The opportunity was also taken to test the blue whiting/roundfish sorting grid that was tried out last year on Börkur NK-70. The trip was a great success and all those taking part were satisfied with the results from the flume tank.

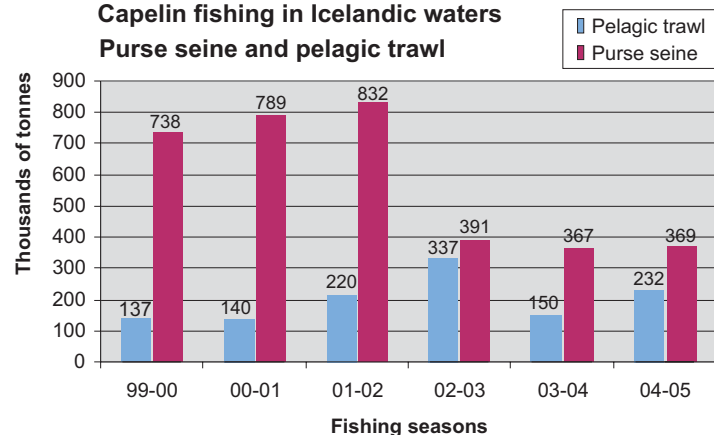
Conclusions

The conclusions of the trials were that the versions of the

trawl tested were highly promising and gave every indication that full-scale gear is worth testing later this year, before the capelin season starts in earnest. These trials will probably be carried out in November this year, if conditions allow, as long as the capelin show themselves on fishing grounds north of Iceland as they did during the last season.

It was noticeable that the capelin trawl opened very well, far down into the belly, so the capelin should have a quick and clear route down into the codend. This is expected to result in much fewer stickers and less delay in the capelin making their way down the trawl. The group were very pleased to see how stable the Gloria Hi-Flow trawl was in the tank, indicating that the self-spreading panels are working well to eliminate vibration in the ropes of the meshes. The high level of vibration that is normally seen in pelagic trawls undoubtedly damages small fish such as

**Capelin fishing in Icelandic waters
Purse seine and pelagic trawl**



capelin when they are in the belly of the trawl, where there can be considerable turbulence and movement of the fish so that some of them can be killed in the disturbance.

Behind the tests

The trials at the tank in Hirtshals were carried out by Hampidjan at the request of several capelin boat skippers. They felt that changes were needed to their pelagic capelin trawls,

especially in the light of negative publicity that has surrounded the capelin fishery in the last few years. The first trials fishing of capelin in trawls was begun in 1993 and this kind of fishing was continued over limited periods through the 1990s. It was during the 1999-2000 season that there was a considerable increase, when 137,000 tonnes of capelin were caught in pelagic trawls, compared to 738,000 tonnes in purse seines.



Against trawling

The opponents of trawl fishing want to see pelagic trawling banned completely. Their opinion is that the capelin stock is damaged by this method of fishing when many vessels are towing repeatedly through shoals. They have said that this damages the fish, as large volumes of capelin escape through the meshes and die, or else are caught in the meshes.

In favour of trawling

Those in favour of trawling are of the opinion that the claims of damage from pelagic trawls are exaggerated and point out that the main reason for using pelagic trawls is that practically no catches are taken during the 'trawl season' that lasts from the beginning of the year to mid-February. It is important to add that the landing values of trawl-caught capelin are also higher, as this fish has a higher fat content and substantial amounts of this are frozen for export to Russia. It has been made



The tank trip to Hirtshals. Back row from left: Jón Grétarsson, Oddgeir Jóhannsson, Sturla Einarsson, Lárus Grímsson, Hördur Guðmundsson, Haralður Einarsson and Halldór Guðnason. Front row from left: Guðmundur Gunnarsson, Haralður Arnason, Ólafur Einarsson, Maron Björnsson and Arngrímur Brynjólfsson.

clear by the skippers of factory trawlers that it is much more cost-effective for them to process frozen capelin when fishing with a trawl as this gives them greater flexibility than fishing with a purse seine, due to the possibility of limiting catches to manageable amounts.

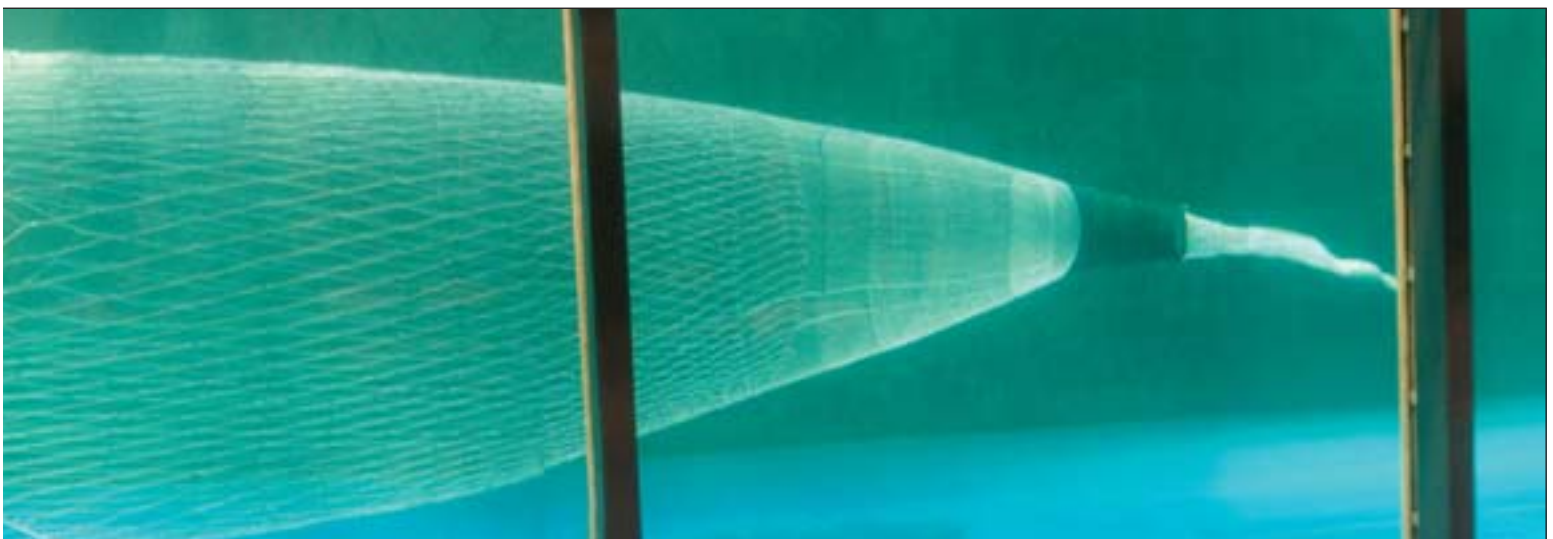
Research

These are opinions that conflict, for and against, but

as no underwater research has been carried out in this field so far. On the other hand, the Marine Research Institute has invested in a sophisticated set of underwater camera equipment which is due to be delivered later this year. Hopefully this will make it possible to examine the claims made over the damage inflicted by pelagic trawls, before the capelin season starts at the end of the year.

Pros and cons

All fishing gears have advantages and disadvantages. This also includes purse seines, which can be highly efficient under the right circumstances. Maybe it is now time to look into the possible damage inflicted by purse seine fishing, such as when small capelin are caught off the north coast during the summer?



Fjardanet hf

Specialists in fishing and aquaculture equipment

The Fjardanet fishing gear company came into being at the beginning of this year with the mergers of net lofts Netagerd Fridriks Vilhjálmssonar hf and Netagerd Vestfjarda hf under the Fjardanet name. Fjardanet is an all-round fishing gear supplier with branches in six Icelandic ports, Neskaupstaður, Fáskrúðsfjörður, Seydisfjörður, Akureyri, Siglufjörður and Ísafjörður, with the additional cage washing service based at Reyðarfjörður.

Fjardanet also runs servicing facilities for liferafts at its Ísafjörður and Neskaupstaður branches. Fjardanet is a vital link in Hampidjan's chain of service in Iceland, with its branches in some of the main fishing ports around the country, providing the full range of services at all of its locations. Hampidjan can call on skilled staff with many years of experience of fishing and fishing gear work at all of these branches, and we place a heavy emphasis on maintaining an ongoing relationship with skippers and owners in developing fishing gear. At the east coast net lofts gear and servicing for the



FJARDANET

pelagic fleet is particularly important and the company is working on improving its facilities for this kind of specialised work. Recently we installed new net drums at the Seydisfjörður branch to make servicing pelagic trawls faster and more efficient.

The liferaft service offers vessels the opportunity to service liferafts while they are in port, or even while their fishing gear is being repaired as well.

In addition to liferafts, we also offer a variety of safety equipment for vessels of all sizes.

The only specialist aquaculture gear provider

Fjardanet has been steadily building up its range of services for the aquaculture sector over recent years and has become a leader in this field as the only company in Iceland that has specialised in this kind of work. We supply net bags, anti-bird netting, cast nets and anchoring systems for cages, as well as being able to supply cages, lift nets, buoys and cage marking lights that run on batteries charged by solar panels. Fjardanet has recently begun co-operation with Sæplast. Fjardanet is now Sæplast's sales and service provider for the aquaculture buoys that Sæplast manufactures in Norway. Fjardanet's home page can be found at www.netagerd.is.

Tben ehf to sell Hampidjan's netting and ropes in Iceland

At the end of last year Tben ehf in Hafnarfjörður took over sales and distribution in Iceland of Hampidjan products, including trawl netting, twines and ropes. Tben is a Hampidjan subsidiary located in Hafnarfjörður at Hvaleyrarbraut 39-41, with an 1800 square metre stock area.

Tben is competing strongly on the domestic market to provide an all-round service for all of the fishing gear needs of the Icelandic fleet. The company offers a wide variety of equipment for efficient fishing.

Tben also offers trawl wire and is well equipped to

supply both hand-spliced and clamped wires and to splice trawl warps to requirements. The company's staff can supply new rockhopper footropes and repairs to existing ground gear. Tben recently began importing rockhopper plates. Using these plates, a trawl's wings square up to 15% better and catches can be 20% better, according to research carried out by SINTEF.

We can't forget the knotless netting that Tben imports from Net Systems. So far two codends from Net Systems netting have been made up for pelagic trawlers Sighvatur Bjarnason and Thorsteinn. These codends have performed



exceptionally well due to the reduced water resistance compared to conventional codends and catches find their way quickly and easily down to the codend.

Tben's managing director is Thorsteinn Benediktsson and the company's home page can be found at www.tben.is



Peter Marlene on top on North Sea herring

Esbjerg pelagic trawler Peter Marlene (ex-Charisma) started well on herring east of Shetland earlier this year. In the first trip with a set of 1024 metre Gloria Helix gear from Cosmos Trawl, Peter Marlene's trawl was shot away first on Wednesday night and they had a full load of herring by Saturday morning.

Seven hauls – 370 tonnes in the best one

The trawl was rigged with a set of 100 metre Dynex sweeplines with six metre extensions on the lower sweeps and 1000kg weights each side. The doors were a 15 m² pair of Thyborøns.

The depth of water on the fishing grounds was around 106 metres and the gear was towed with the footrope two

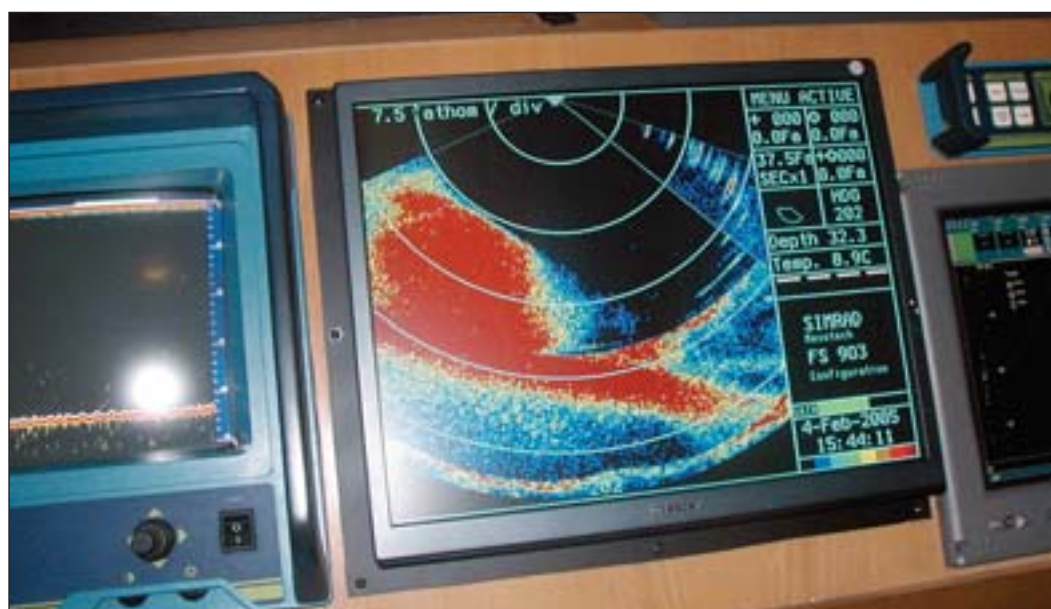


Midwater trawler "Peter Marlene" from Esbjerg.

metres from the bottom on warp lengths from 275 to 310 metres and a spread between the doors of 120 metres. The trawl opening was 52 metres

with a horizontal opening of 65 metres. Towing speed was an average of 4.30 knots and fuel consumption was running at 570 litres per hour.

According to the skipper, the trawl performed well all round, with what was seen in the trawl mouth finding its way back to the codend. The trawl was faster sinking than other gears they have used and the trawl handled very well close to the bottom. It responded well, leaving the bottom quickly when the warps were shortened. Herring shoals are found close to the ground during the daytime, but are looser off the bottom during the night. Shooting away took only 25 minutes, including the time it takes the crew to get off the deck and into the galley, compared to the hour it normally takes to shoot away a competitor's trawl



Good concentration of herring on the trawl sonar.

Hampidjan Baltic

This year has seen a watershed in Hampidjan's activities in Iceland. Production of ropes and netting, which has been located here since the company began, has been moved to our subsidiary company in Lithuania.

Hampidjan Baltic is located at Siauliai in Lithuania, a town halfway between the port of Klaipeda and the capital city of Vilnius. Siauliai is a town of 130,000 inhabitants, most of whom are employed in the service and manufacturing industries.

Over the last year Hampidjan Baltic has built a new 4500 m² production facility, and extension of the existing 10,000 m² building.

The rope making machines from our Bíldshöfði factory have been transferred to the new factory. This is a magnificent building that offers a great many more possibilities than our older facilities in Iceland. The new building has a much greater roof height with only a few supporting pillars, providing an extensive production area.



Hampidjan moves house

Over its seventy year history Hampidjan has only had two locations, both of them in Reykjavík.

Shortly after the company's foundation in 1934 its first factory was built at Raudarárholt in Reykjavík. This was a 450 m² factory, which remained Hampidjan's production

centre for more than 50 years. Over those years the factory was steadily enlarged until it finally occupied 7300 m² of space.

As the Holt area of Reykjavík was absorbed by the city centre, it ceased to be a suitable location for industrial production. So, in the 1980s the company



embarked on the construction of new office and factory buildings at Bíldshöfði 9 on a large plot that had been allocated. The company moved there in 1993.

Following the transfer of Hampidjan's net and rope manufacturing to Lithuania, the Bíldshöfði premises have been sold and the company has moved to new offices at Flatahraun 3 in Hafnarfjörður.

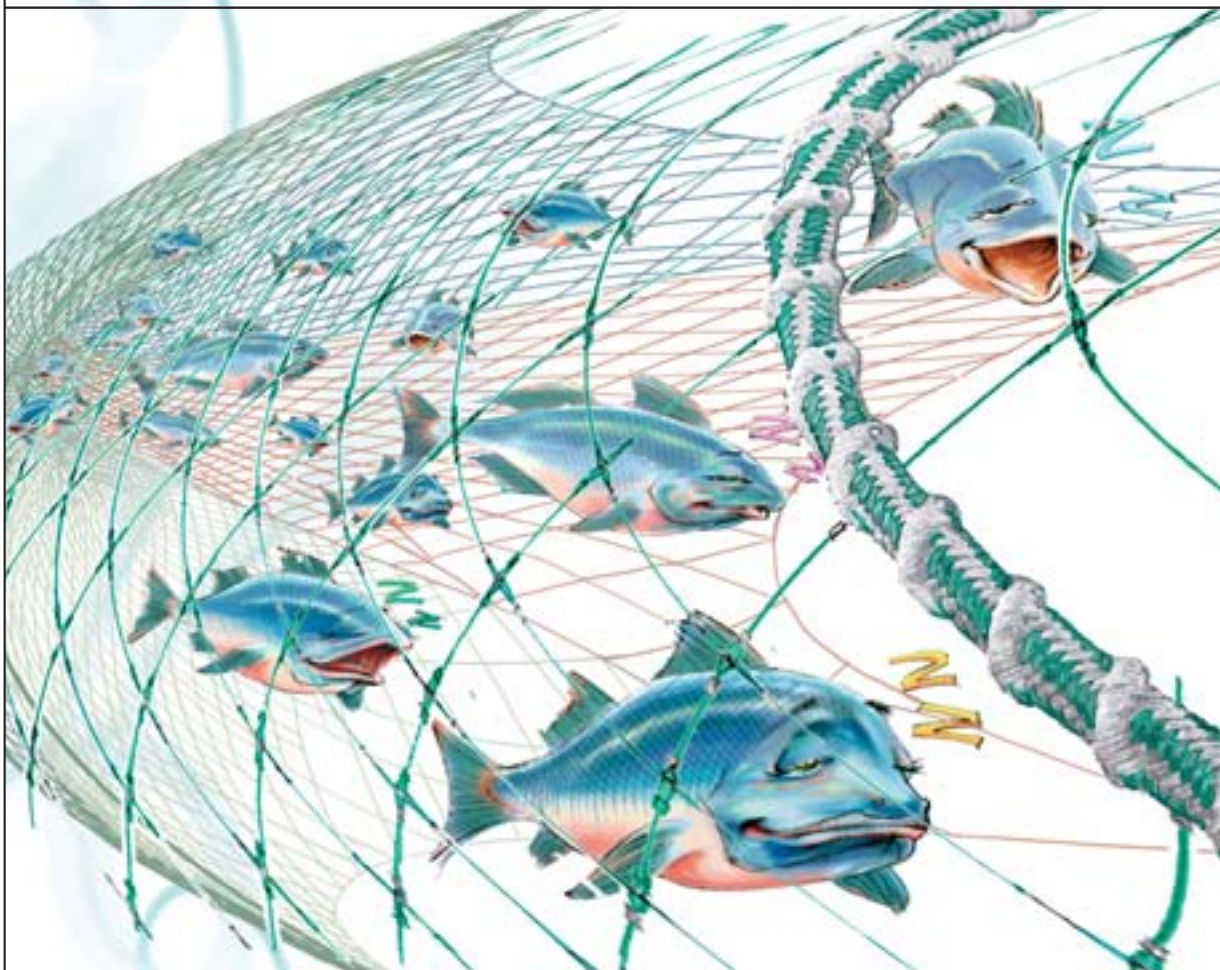
SILENCE IS GOLDEN

Silently approaches the Helix self spreading trawl the fish

**Silence is one of many attributes of the self spreading technology.
The self spreading trawl sweeps gently through the deep sea
without alarming the prey.**

Helix fishes more

**The self spreading material keeps the trawl wide open and steadies the trawl
while towing, turning and in side currents.**



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500 litres per day less fuel consumption!

Reports pioneer in trawling with Dynex sweeplines on redfish.

Pasqual Atlantico's skipper was the first to use Dynex sweeplines on deep sea ocean redfish.

Skipper Birgir Sverrison of the factory trawler Vestmannaey told us recently that he is very satisfied with the Dynex Dux sweeplines he is using to trawl for deep sea ocean redfish in the Irminger Sea. In 2002 Vestmannaey was the first Icelandic trawler to start using Dynex Dux sweeplines on redfish with a set made in 21mm Dynex to square a 2048 metre Gloria trawl from Hampidjan, as we reported in Catch On no. 14 in August 2002.

However, we should have mentioned that the pioneer in all this was skipper José António Senos, skipper of the Portuguese trawler Pasqual Atlantico. He took a set of 24mm Dynex sweeplines from Hampidjan in 2000 and was immediately aware of how quickly this investment paid for itself. The same set of sweeplines is still in use and appear to be still in excellent shape.

We were aware of our mistake when we met skipper Senos at the flume tank in Hirtshals. He came straight over to us with the article, and said straightway: "I was the first to use Dynex sweeps, not Vestmannaey!"



The Portuguese trawler Pasqual Atlantico.

We apologise for the mistake in not mentioning this at the time when he was ahead of every other skipper to lighten his gear and increase catches, allowing him to work alongside more powerful trawlers on the same fishery. Being the first to take a decision like this one requires courage when the results are not easily predicted.

He said that it was a surprise that he did not need to use much more warp to make up for the low weight of the Dynex sweeplines. Skipper Senos is using an additional 5 to 10% more warp, but the gear as a whole is lighter to tow than with steel wire sweeplines, representing a fuel saving. The trawl is also more responsive, making it quicker to change the gear's depth when trawling. This corresponds to skipper Birgir Sverrison's experience with Vestmannaey since 2003. He told us that he uses the same

warp length as before, but the sinking time for the trawl is slightly longer down to the towing depth of around 400 fathoms.

It is clear that there is a significant fuel saving with Dynex sweeplines and it is a surprise how long owners and skippers have waited to make the change to Dynex Dux. Price may be an issue for some, but in a comparison with Vestmannaey's gear, it has been shown that the Dynex sweeplines are 2.50 times more expensive than a set of 24mm three-stranded wire sweeplines of the kind that is normally used on this fishery.

But a further issue is that if the Dynex sweeplines are handled properly, they can last up to five times longer than the steel wire equivalents. In addition, there are all the advantages of using Dynex sweeplines that the skippers of Pasqual Atlantico

and Vestmannaey have reported to us.

- The Gloria trawl is significantly lighter to tow, with up to 500 litres lower fuel consumption per day.
- Similar or same warp length needed.
- Much easier handling for the deck crew.
- Less strain on net drums.
- Much quicker delivery of the trawl.
- Dynex Dux has an unbelievably long working life.



Sweepelines on board Vestmannaey that have now been in use on redfish for three seasons.