

In the fast lane FJORD FSTR

4
2
3M
8
6
4



«We promise increased profitability through operational excellence.»

Ann-Kari Heier
Chief Operation Officer



Enabling the green shift

When we started Telenor Maritime back in 2004, we were a handful of ambitious telecom engineers with few external resources, but we had a clear vision: To connect the world. To achieve this, we had to develop something ingenious. Operating several ships for large clients required optimised workflows and automation of tasks. Effectiveness and an agile way of work has been the backbone of our solutions since the beginning. Digitalisation was our next natural step.

For a company focusing on cellular systems at sea, digitalisation became increasingly crucial. The architecture of everything we create is based on the principle that the operation must be autonomous, with the ability to control everything remotely. The platform we developed over a decade ago is still at the core of Telenor Maritime, but it has evolved and expanded as requirements, technologies and the environment have changed.

The shipping industry faces new demands towards the maritime green shift from authorities, class companies, partners, suppliers and end customers. Through close collaboration with key parties, we ensure that we are at the forefront, that we are involved in setting the business standard, and thus can offer the best future-proofed solutions to the market.

The digitalisation of on-board operational functions cuts operating costs, increases quality, reduces errors and provides predictability. With digitalisation, intelligent systems can analyse and continuously supply high-quality data 24/7, both to ship and shore.

For a chat about the green shift at sea or inquiries about our products and services, do not hesitate to contact my colleague Roger Vimme at +47 907 83 495 /rvi@telenormaritime.com or meet us at Shippax this autumn!



Leading the digital transformation at sea

Published by
Shippax AB
Box 7067
SE - 300 07 HALMSTAD
Sweden

Tel: +46 35 218370
info@shippax.se
www.shippax.com

Visiting address
Hornsgatan 4
SE - 302 33 HALMSTAD
Sweden

Publisher
Elizabeth Mandersson
elizabeth@shippax.se

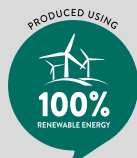
Editor-in-chief
Philippe Holthof
philippe.holthof@shippax.se

Advertising
advertising@shippax.se

Statistics
statistics@shippax.se

Subscriptions and Accounts
subscription@shippax.se

Founder
Arne Steving, in 1965



Printers
DanagårdLITHO AB, Ödeshög, Sweden

Contributing correspondents and news items do not necessarily reflect the opinions of the editors.

Information believed to be correct but cannot be guaranteed.

No reprint or further distribution without permission.

SHIPPAXINFO is owned by Shippax AB,
reg no 556937-9414.

ISSN 1102-934X
© SHIPPAXINFO



WORTH THE WAIT!

FJORD FSTR boasts a lot of firsts. First and foremost, this Austal Auto Express 109m catamaran is the largest vessel by volume ever built by Austal, a leading builder of high-speed craft, including ferries. Even more remarkable, perhaps, is that it was not built in Henderson, Western Australia but rather in the Philippines, being the largest aluminium vessel ever built in that country. In fact, FJORD FSTR is only the second ro-pax fast ferry built by Austal Philippines, yet another feat. With modules for the catamaran also built in Vietnam in facilities rented by Austal prior to the company moving into its new Vung Tau yard, the construction of FJORD FSTR was a truly international project of which all the parties involved should be proud.

Ordered in the summer of 2017, FJORD FSTR was scheduled for delivery in early 2020. By the time the vessel was rolled out of the giant construction hall on 7 February in that year, further progress was temporarily marred by the COVID-19 pandemic with Fjord Line no longer in a rush to take delivery as passenger-orientated ferry services across Europe had partially been paralysed anyway.

Travelling became a challenge throughout the period and getting the delivery crew to the Philippines to pick up the finished FJORD FSTR was one of the many bumps along the long COVID-19-affected way. FJORD FSTR eventually left its birth place in Balamban on 7 March 2021 with the delivery voyage abruptly stopped when the giant containership EVER GIVEN blocked the Suez Canal, astern of which FJORD FSTR was one of the ships in the queue. Following the freeing of EVER GIVEN, FJORD FSTR could continue its delivery voyage and arrived in Hirtshals for the first time on 11 April.

The 1,200-passenger and 404-car capacity FJORD FSTR was welcomed for the first time in Kristiansand on 7 May, exactly two months after having left the Philippines.

The high-speed ro-pax catamaran was subsequently made ready to take up service across the Skagerrak with typical crew familiarisation and final fine-tuning. It then returned to Kristiansand for its official naming ceremony on 4 June. The first commercial sailing was postponed several times on account of COVID-19. Eventually, 25 June became the BIG day for the craft's maiden voyage.

With the introduction of FJORD FSTR, Fjord Line is raising the bar considerably after having operated the 1998-built Incat 91m wave piercing catamaran FJORD CAT since the 2008 summer season. Everything is 'bigger and better' while fuel consumption is on a par with the much smaller FJORD CAT, illustrating just how much more fuel-efficient fast craft have become since the 1990s. Obviously, besides reducing the fuel bill, this also means a reduced environmental footprint per transported vehicle and passenger.

FJORD FSTR offers the fastest crossing between Norway and Denmark with high-speed schedules remaining unaltered at 2 hours and 15 minutes. Fjord Line is now readied to bounce back in a post-pandemic context. Besides its routes from Denmark to Norway, the company also operates the now Norwegian-flagged OSLOFJORD between Sandefjord in Norway and Strömstad in Sweden, a route that relies heavily on revenues being earned from the ship's vast duty-free shops.

We congratulate Fjord Line with the introduction of FJORD FSTR and wish good luck to all the people who sail on this fantastic vessel!

A stylized, handwritten signature in blue ink, consisting of a series of loops and a long horizontal stroke at the end.

Philippe Holthof

Interview with Fjord Line CEO Brian Thorsted Hansen



FJORD FSTR: A TOOL FOR GROWTH

"It is an investment in our strategy for growth," states Brian Thorsten Hansen, the CEO of Fjord Line, referring to the company's new large-capacity fast ferry for the Skagerrak crossing. "We wish to take a larger share of the cake, and FJORD FSTR is our tool. Not only does it offer larger capacity and enhanced comfort for the travellers, but it also offers a better capability for high and heavy vehicles, coaches, caravans and mobile homes with a mix of low and high lanemeters. FJORD FSTR offers economies of scale as well as new potential such as the possibilities of extending the sailing season on the Kristiansand-Hirtshals route or other deployment."

TEXT: DAG BAKKA JR.

Fifty-three-year-old Brian Thorsted Hansen took over as CEO of Fjord Line in January this year, but he is no newcomer to the ferry industry. After initial experience in banking and finance, he joined DFDS in 2006 and spent 14 years with the international ro-ro and ro-pax ferry operator where he rose to become a vice president and head of Business Unit Group Passenger. There he oversaw a digital transformation of a ferry operation that handled 7 million passengers a year and also integrated a country-based organisation into an international one.

Thorsted Hansen is bringing his extensive knowledge to Fjord Line, a relative newcomer in the Skagerrak market but with a growing market share and, until the COVID-19 pandemic, good profits. He was attracted to the operator's multi-layered business models as well as the passionate private owners, the Teigen and Andresen families, and their long-term growth ambitions. The company is headquartered in Egersund on Norway's southwestern corner.

His initial challenge is to take the company from being a significantly

reduced COVID-19-era operation through a start-up phase as restrictions are eased back into a full summer schedule on all the three main services. On top of this, the new high-speed ferry ordered from Austal in 2017 arrived in Hirtshals on 11 April to be made ready for service. The situation has been made challenging by the fact that there was no fixed timeline as to when the COVID-19 restrictions would allow FJORD FSTR to take up its Kristiansand-Hirtshals service. "We will be ready when the authorities give the green light," is Thorsted Hansen's only response.

Competitive vein

Coming from DFDS, Brian Thorsted Hansen is no foreigner to competition. “Competition is good,” he reckons. “It leads to a constant focus on how we are working and how to maintain and improve standards and to be best-in-class when it comes to customer satisfaction.”

The market for ferry services between Norway and Denmark is shared between Color Line, DFDS and Fjord Line; all three serve northern Jutland and the former two serve main routes to the Continent. Color Line traditionally operated from the ferry ports of Larvik and Kristiansand to Hirtshals and replaced four vessels with the two ‘Superspeeds’ in 2008. Fjord Line originally served Norway from the west coast ports of Bergen and Stavanger to Hirtshals until the present owners brought in the sister ships STAVANGERFJORD (2013) and BERGENSFJORD (2014) on the triangular service Bergen/Stavanger-Hirtshals-Langesund, thereby also making a landfall on the east coast of Norway.

Combining the mini cruise experience with tax-free sales, the carriage of private cars and commercial traffic brought results, doubling turnover from NOK 890 million in 2015 to 1.6 billion in 2019. In the process, the bottom line rose from substantial start-up losses to profit in 2017 and with a net profit of NOK 193 million in 2019, before the pandemic struck.

To the casual observer, Fjord Line and Color Line are fierce competitors across the Skagerrak. Color Line enjoys the benefit of well-established services from Larvik and Kristiansand, while Fjord Line covers the western Norway market more directly and is building up traffic from Langesund in eastern Norway.

In this context, Fjord Line’s high-speed ferry FJORD CAT, acquired in 2008, was an intrusion into Color Line’s territory, shaving the peak summer traffic between Kristiansand and Hirtshals from May to September. Since 2010, the traffic volume in the sector has been stagnant at around 1.3 million passengers and marginally slipping by 3-4 per cent. The FJORD CAT seasonal operation has historically taken 16-18 per cent of the total. Here is where FJORD FSTR comes into the story: a larger and more comfortable, flexible and efficient vessel for the 2-hour-15-minute crossing, offering the fastest link between Norway and continental Europe. FJORD FSTR is built with best-in-class technology, including an innovative hull design that reduces drag and fuel consumption. Replacing FJORD CAT, it boasts a considerably higher passenger

proved its viability with a high safety performance, including with the LNG-fuelled sisters STAVANGERFJORD and BERGENSFJORD on the triangular Bergen/Stavanger-Hirtshals-Langesund service.

Fjord Line entered high-speed operation in 2008 through the acquisition of Master Ferries and its Incat 91m wave piercing catamaran MASTER CAT – the subsequent FJORD CAT – on the summer service between Kristiansand and Hirtshals. Despite the seasonal service, a core crew is retained to maintain and operate a more demanding vessel. Transition to the new Austal-built FJORD FSTR with a new generation of technology has been prepared and supported with tests and extensive simulator training.

The new and enhanced capacity fits well into Brian Thorsted Hansen’s basic

“Competition leads to a constant focus on how we are working and how to maintain and improve standards and to be best-in-class when it comes to customer satisfaction.”

Brian Thorsted Hansen, CEO, Fjord Line

and car intake, with a 32 per cent cut in greenhouse gas emissions per passenger. It is indeed a costly investment for a greater share of the pie.

Operational issues

Although Fjord Line is a Norwegian company, much of the operations are carried out from Hirtshals under Danish flag and jurisdiction. This had the initial benefit of greater manning flexibility and access to a larger pool of ro-ro- and ferry experience that has

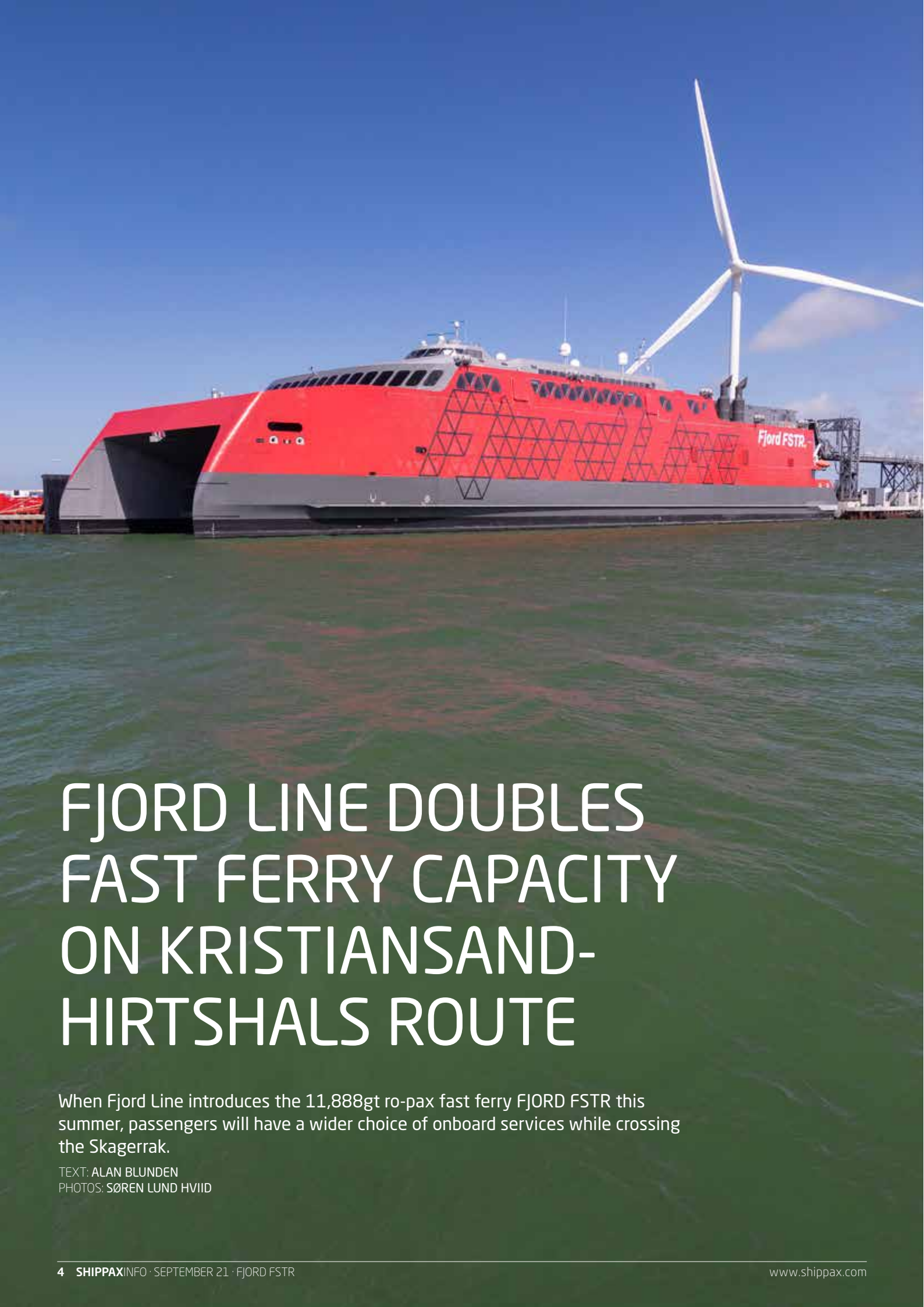
thinking. It will enable Fjord Line to embark upon further continued organic growth through products and services that make the customers wish to return. Happy and satisfied passengers above all result from their encounters with the ships’ staff and their friendliness, care and professionalism, and is greatly boosted by their impression of the shipboard experience.

Strategically, FJORD FSTR is a more robust and powerful vessel, enabling its owner to aspire to gain a larger share of the traffic flow. ■



PHOTO: DIETMAR HASENPUSCH

Fjord Line’s pioneering high-speed craft, the Incat 91m wave piercing catamaran FJORD CAT.



FJORD LINE DOUBLES FAST FERRY CAPACITY ON KRISTIANSAND- HIRTSHALS ROUTE

When Fjord Line introduces the 11,888gt ro-pax fast ferry FJORD FSTR this summer, passengers will have a wider choice of onboard services while crossing the Skagerrak.

TEXT: ALAN BLUNDEN
PHOTOS: SØREN LUND HVIID

carus



21 years as proud
supplier of Booking and
Check-In systems for
Fjord Line

One of the noticeable features about Fjord Line's new fast ferry, FJORD FSTR, is how little the design has changed since the order was announced in August 2017. Confirming a EUR 73 million contract for an Auto Express 109m catamaran, Austal reported, "The ferry will transport 1,200 passengers and features the company's largest ever vehicle carrying capacity, with a beam of 30.5 metres enabling 404 cars to be carried across two decks. The vessel encompasses several key design innovations

that enhance operating performance and passenger comfort, including a new, optimised hull form that will minimise fuel consumption and wake wash when operating on the Skagerrak between Kristiansand, Norway, and Hirtshals, Denmark."

Construction started at the Austal Philippines yard in Balamban, on the Filipino island of Cebu, during the spring of 2018. The catamaran was launched in February 2020 and was due to replace Incat 91m wave piercing catamaran FJORD CAT

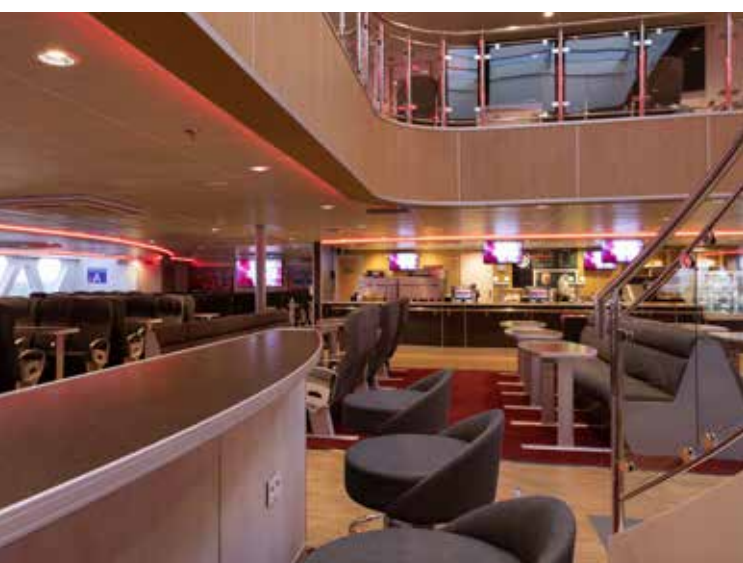
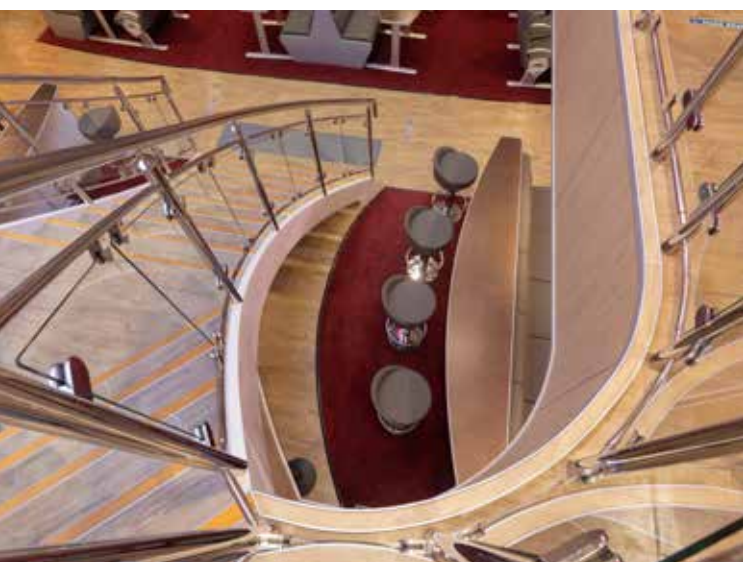
on the Kristiansand-Hirtshals route last summer. COVID-19 then intervened, delaying completion and delivery of FJORD FSTR until earlier this year. The catamaran finally left Balamban on its voyage to Denmark on 7 March and arrived in Hirtshals on 11 April, having been further delayed by a week when the Suez Canal was closed following the grounding of containership EVER GIVEN.

The design of FJORD FSTR has been developed from EXPRESS 4, an Austal



Aft saloon, midships saloon (bottom left) and bow saloon (bottom right) on main passenger deck.





Midships staircase and bar seating.

” The passenger capacity of FJORD FSTR is more than 75% greater than that of the 676-seat FJORD CAT.

Auto Express 109m catamaran that entered service two years ago with Molslinjen.

Although the length, beam and propulsion systems of the two vessels are the same, FJORD FSTR has a second passenger deck, the main engines have a marginally increased rating, there are deployable bow thrusters in each hull and the vessel has an upgraded ride control system featuring a T-foil forward on each hull and trim tabs aft.

Passenger decks

The passenger capacity of FJORD FSTR is more than 75% greater than that of the 676-seat FJORD CAT. The main passenger deck alone is fitted out for 870 passengers, with 184 seats in a forward business class saloon, 590 seats midships and 96 seats aft. A services block forward has two bars and male and female toilets. Aft are a bistro, tax-free shop, male/female toilets, children's play area, purser's office and a crew mess. Covering an area of 246m², the tax-free shop is double the size of the one on FJORD CAT. In addition to the usual tax-free offerings, the shop will stock both fresh and frozen food. The upper saloon of the catamaran has seating for 330 passengers, with male and female toilets at the rear. Located between the saloon and the wheel-house is a crew mess.



Quality Seating for Marine Industry



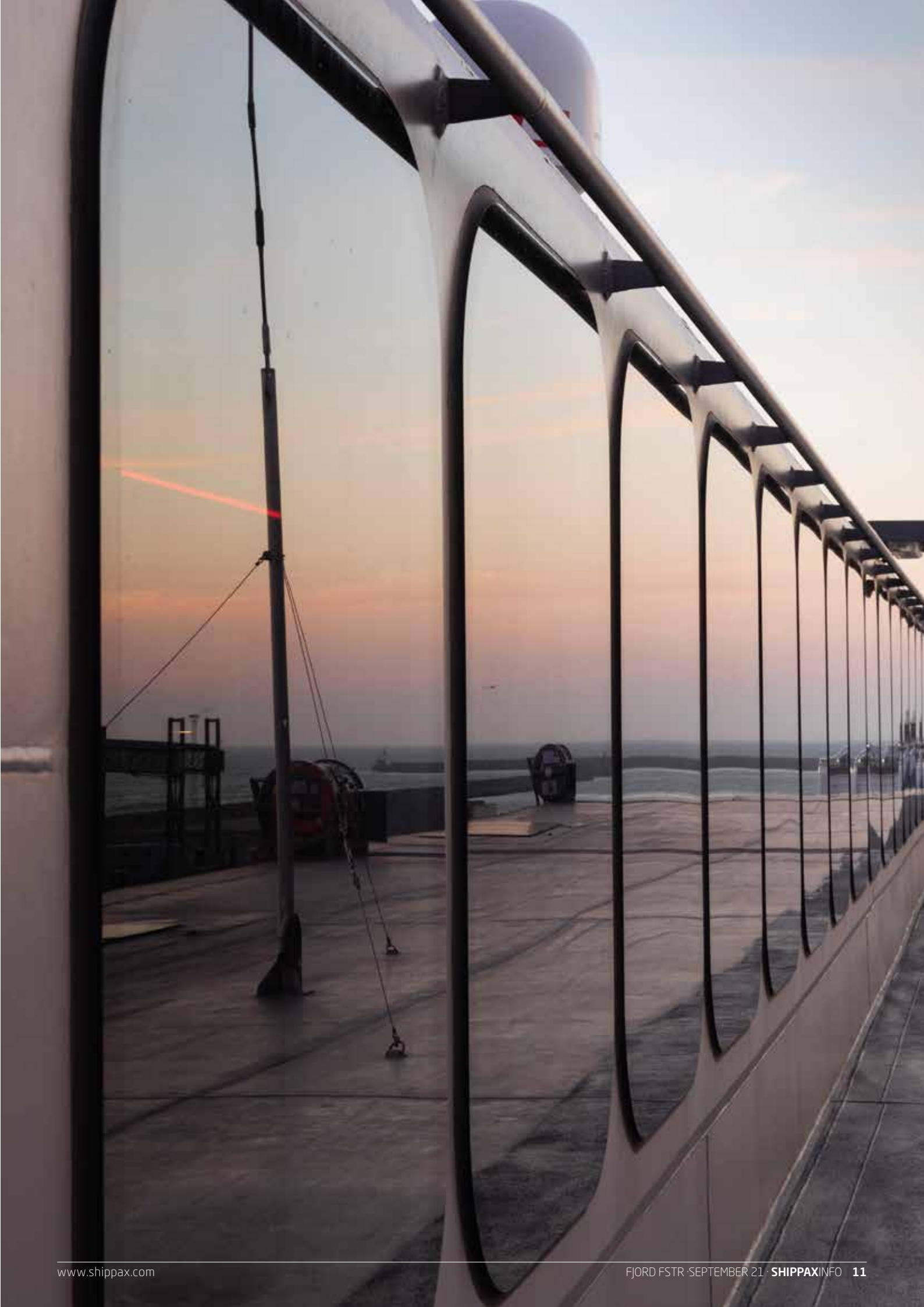
TRANSIT ATLANTIC
– In a Class of its own –

GEORG EKNES INDUSTRIER AS – NORWAY tel. +47 56 35 75 00 e-mail: transit@eknes.no www.eknes.no

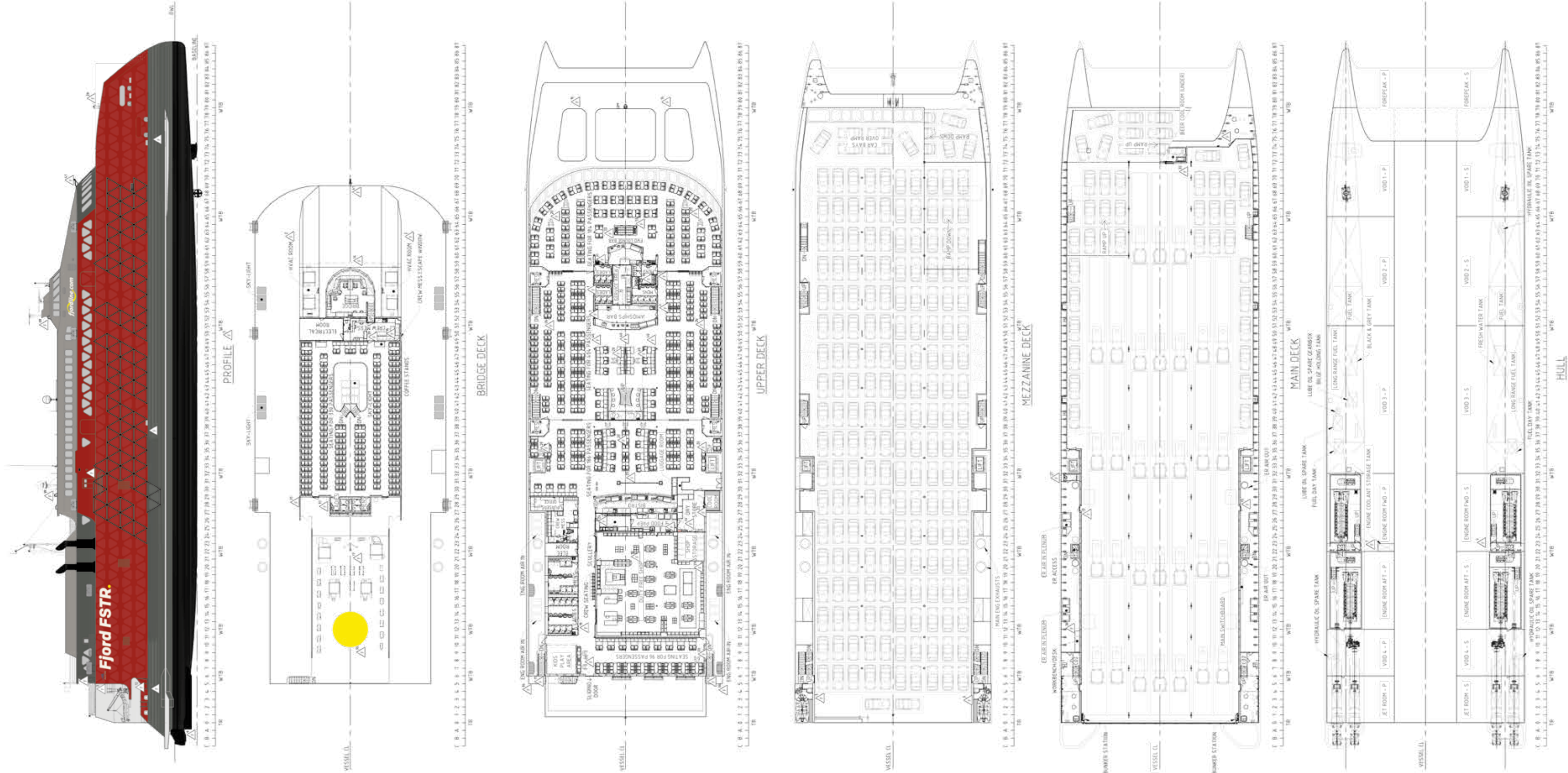
Solheim Designere AS



The well-stocked tax-free shop and bistro.



FJORD FSTR



Main details FJORD FSTR, IMO 9837339

Classification		Speed	
DNV R 1A HSLC R1 Ferry (B) E0		Trials speed	40.00
Dimensions		Service speed	37.00
Length o.a.	109.00 m	Vehicle deck	
Length w.l.	105.00 m	Mezzanine deck	Cars 202 @ 4.5 x 2.35m
Beam mid	30.50 m	Main deck	530 lanemetres trucks and 202 cars
Draught	3.42 m	Selection of suppliers	
Depth to main deck	7.60 m	Ceiling	Dampa
Gross tonnage	11,888	Digital signs	multIQ
TDM	1,019	Galley	Afrinox, Metros, Electroux
Max. passengers	1,200	Lighting	Glanox
Crew	35	Navigation	Furuno
Passenger saloons		Paint	PPG / Sigma
Bridge deck, seating	330	Seats	Beurteaux
Upper deck	870	Seats, lounge	Georg Etnes
Life Saving Equipment		Machinery	
Structural Fire protection	CBC Systems	Bow/Thrusters	Bowthrusters
MES	LSA - Life System Australia	Gearbox	ZF
Life rafts	LSA - Life System Australia	Generators	Scania 4 x 400 kW
Life rafts		Main Engines	MAN B&W 4 x 20V 280/30 35,990 kW
Waterjets		Waterjets	Wärtsilä 4 x UX 1,500 SRI

DAMPA®

Marine Ceiling Systems

We are proud to have delivered sustainable and acoustic metal ceilings for Fjord FSTR, Europe's biggest ferry-news of the year.



DAMPA®

QUIET DANISH DESIGN SINCE 1951

DAMPA, DK-5690 Tommerup, Tel.: +45 63 76 13 00, dampa@dampa.dk, www.dampa.com

Georg Eknes Industrier supplied the Transit Atlantic reclining seats in the forward saloon on the main deck. Elsewhere, the seats are Beurteaux Club seats, with either reclining or fixed backrests, or Ocean Freeboard Lounge sofas. Fourteen wheelchair positions are also located in the main deck passenger saloons.

FJORD FSTR is fitted out with three dining options on the main passenger

deck: Lounge, Café and Bistro. According to the company, "With inspiration from concepts in the aviation business, we are offering a Lounge area at the front of the ship. Passengers pay a little extra to choose their seats prior to booking and light dishes, snacks, sweets and drinks are included in the price. In Café, we offer a choice of coffees from Starbucks, other beverages, pastries and breakfast packages. Bistro is a dining

area for passengers wanting a solid meal, breakfast, lunch or dinner depending on the time of day."

To provide evacuation facilities for 1,400 passengers and crew, FJORD FSTR has four Lifteraft Systems Australia 22m inflatable slides with 100-person SOLAS B liferafts attached plus an additional ten 100-person liferafts that are linked to the marine evacuation systems.



Two marine evacuation systems with 22m slides are located to both port and starboard.



Four MAN 20V 28/33D STC diesels power Wärtsilä LJX 1500 SRI waterjets.

VEHICLE DECKS

Austal reports, “FJORD FSTR is the largest aluminium vessel ever constructed in the Philippines and is currently the largest ferry, by volume, to be constructed

at any of Austal’s yards.” Up to 404 cars can be carried on the two vehicle decks, almost double the maximum capacity of the vessel it is replacing. Fjord Line will also be able to carry trucks on its fast

ferry services for the first time, FJORD FSTR has 530 lanemetres for commercial vehicles, allowing up to 30 lorries plus 228 cars to be carried. Maximum deadweight is 1,000 dwt.



Up to 404 cars or 228 cars and 530 lanemetres of trucks can be carried on two vehicle decks.





Hirtshals Havn
PORT OF HIRTSHALS

LET'S CREATE NEW
BLUE OCEANS!

HIRTSHALS HAVN ØNSKER FJORD
LINE TILLYKKE MED "FJORD FSTR"
- MED ØNSKE OM GOD VIND
FREMOVER!

WWW.HIRTSHALSHAVN.DK

... because geography matters



Scania D 113 generator engine.



XXXXXX



MAN 20V 28/33D STC diesel.

Car bay sizes are 4.50m x 2.35m while truck lanes on the main vehicle deck are 3.10m wide and have a clear height of 4.6m. Maximum loads are 9 tonnes for single wheel axles or 13 tonnes for double wheel axles on the truck lanes and 2.0 tonnes per axle on the mezzanine lanes. Sixteen electric vehicle charging stations are located on the main deck.

Structural fire protection on the vehicle decks and in the engine rooms was manufactured and installed by CBG Systems. The company supplied Rapid Access Composite and Rapid Access Stainless A-60 class fire division panels.

MAIN ENGINES

Four MAN 20V 28/33D STC diesels rated at 9.1 MW each power a Wärtsilä LJX 1500 SRI waterjet via a ZF 60000 NR2H gearbox, giving FJORD FSTR a service speed of 37 knots at 90% maximum continuous rating.

SERVICE

This summer, Fjord Line's new fast ferry is due to operate a peak season frequency of three return crossings a day between Kristiansand and Hirtshals. The timetable is based on journey times of 2 hours 15 minutes and turnarounds of 1 hour or 1 hour 15 minutes.

The catamaran was due to enter service in 2021 in the middle of April and remain on the route until the middle of September. However, COVID-19 restrictions resulted in a delayed introduction and by mid-June this year Fjord Line had not operated any fast ferry services for ten months. As the company said, "Due to the authorities' efforts to maintain control over the COVID-19 situation, we are not able to maintain our normal route schedule." ■

Main particulars - FJORD FSTR

IMO	9837339
Class	DNV + 1A HSLC R1 Ferry (B) E0
Length oa	109.0m
Length wl	105.0m
Beam mld	30.5m
Draft hull	3.8m
GT	11,888
Dwt max	1,000t
Main engines	4 x MAN 20V 28/33D STC
MCR	36.4 MW
Waterjets	4 x Wärtsilä LJX 1500 SRI
Service speed	37 knots
Passengers	1,200
Crew	35
Cars	404
Cars + trucks	228 + 530 lanemetres



FJORD LINE RAISES CAPACITY ON FAST FERRY SERVICE WITH FJORD FSTR

Fjord Line, the Norwegian ferry company whose services link the southern part of the country with Denmark and Sweden, has recently taken delivery of FJORD FSTR, a catamaran fast ferry that is used on the 2-hour-15-minute crossing between Kristiansand in Norway and Hirtshals in Denmark.

TEXT: KARI REINIKAINEN

The new vessel has a significantly higher capacity than the 23-year-old FJORD CAT that it replaced and the additional capacity has been much needed. “Having a bigger vessel should also increase the comfort levels on the crossing,” says Morten Larsen who until October 2020 was technical director at Fjord Line and is now owner of his own consultancy ML Sea AB which has been contracted to finish the project for Fjord Line.

FJORD FSTR was built by Austal, the Australian fast ferry specialist, at its yard in Balamban, Cebu in the Philippines. The contract for the construction of the vessel was signed in the summer of 2017, construction started in the following year and the vessel was launched in February 2020 with Fjord Line taking delivery a year later. This schedule was delayed by one year due to COVID-19.

FJORD FSTR has a gross tonnage more than twice of

that of its predecessor, while its car and passenger capacities are also close to double those of FJORD CAT. FJORD FSTR is powered by four MAN diesel engines that deliver a total output of 36,400 kW and give the vessel a service speed of 37 knots. It also has T-foils – a feature lacking on FJORD CAT and

	FJORD FSTR	FJORD CAT	Change, %
Built	2021	1998	
GT	11,888	5,619	+111.5%
Pax	1,200	676	+77.5%
Cars	404	210	+92.5%
MCR	36,400 kW	28,320 kW	+28.5%
Speed	37 knots	41 knots	-9.7%
Length oa	109.0m	91.3m	+19.4%
Beam mld	30.5m	26.0m	+17.3%

Source: Shippax

one that should significantly improve its performance in rough weather conditions, Larsen pointed out.

SIXTEEN CHARGING STATIONS FOR ELECTRIC CARS

Passenger facilities on FJORD FSTR include three restaurants, a duty-free shop and an area reserved for children. Passengers can book a seat for their exclusive use at one of the restaurants that also serve as lounges, while a bistro and a café complete the catering offerings on board the vessel.

On the vehicle deck, there are 16 charging stations for electric vehicles, FJORD FSTR being the first Norwegian ferry to introduce this facility. Drivers who want to use them will have to pay a small charge to do so, the company says.

A forward-facing lounge offers sea views from large windows on three sides. Hot and cold drinks plus snacks are served during the crossing. The selection changes depending on the time of the day and season of the year. Passengers wishing to use the lounge have to pay NOK 199 in addition to their fare to have access to it and its offerings.

The Café offers sandwiches, breakfast packages, hot and cold drinks plus snacks. Starbucks coffee and other products of the American coffee shop chain are also available. Those passengers who wish to have a hot meal can find this at the Bistro, which serves breakfast, lunch and dinner. Both hot and cold food are available and there is also a selection dishes for children. The menu includes salads and sandwiches for vegetarians.

A duty-free shop offers a range of products that can be expected to be found in such a facility, for example spirits, tobacco and confectionery products plus cosmetics. In addition, there is a wide range of foodstuffs, both frozen and fresh, which is perhaps a more unusual element of duty-free shopping in many other parts of Europe. However, food prices are very high in Norway, which explains why including these products is an attractive option for the company and its customers.

Large fast ferries that can carry passengers, their cars and also lorries are a niche part of the ferry market, Larsen observes, but he also points out that some of the concerns that were raised in the early 1990s when the first such vessels started to enter service, have not materialised. "FJORD CAT was built in 1998, so it is old, but it has been sold for further trading. This shows that with good maintenance, this type

of vessel can have a long service life," he notes. However, the Fjord Line fast ferry service only operates from spring until autumn, so it is not year-round and it saves the vessel from exposure to the worst weather conditions that would put most stress on the hull. Operational restrictions in high wave conditions would in any case make a year-round service difficult to sustain. "You can expect fast ferries to provide about 30 years of service with good maintenance, which is about the same as with conventional tonnage. In the early 1990s, it was expected that about 20 years would be the ceiling," he points out, adding that good quality of construction has helped many conventional ferries from the 1980s to significantly exceed their anticipated service lives.

FAST FERRIES COULD BE INCLUDED IN FUTURE EEDI, CII LEGISLATION

Fast ferries have a much higher installed power than conventional vessels of the same size, which brings CO₂ emissions from them on to the agenda. Improvements in design have reduced the environmental impact of new vessels of this type compared to their older counterparts, a trend that also conventional ferries have exemplified. However, whereas new conventional ferries have been subject to the Energy Efficiency Design Index (EEDI) since 2015 and existing ships will have to comply with the forthcoming Energy Efficiency eXisting ship Index (EEXI) legislation, fast ferries are not subject to them. Larsen warns against a false sense of security by noting that fast ferries could be included in their own EEDI in the years to come. As they are a small segment of the overall ferry sector, they have so far not been included, but this might change and as it seems they will be a part of the new Carbon Intensity Indicator (CII) which enters into force in 2023.

As far as FJORD FSTR is concerned, the vessel will enter service at a time when the COVID-19 pandemic will still be considerably affecting business. "Ferry operators may not have a full capacity of passengers on board, there is a voluntary or forced limit of between 60 and 75 per cent to allow social distancing on board," he observes. While this will probably have a negative impact on the bottom line of the vessel's financial performance in its first year, the outlook beyond 2021 could be much better. "FJORD CAT was often fully booked, so Fjord Line clearly needed a lot of new capacity."

Meanwhile, Austal's then Chief Executive Officer, David Singleton, said at the launch of the Auto Express 109m catamaran FJORD FSTR, that the vessel was a significant milestone for Austal Philippines. It was the first vessel to be wholly constructed at the Balamban shipyard's expanded production facilities, which were opened in July 2019.

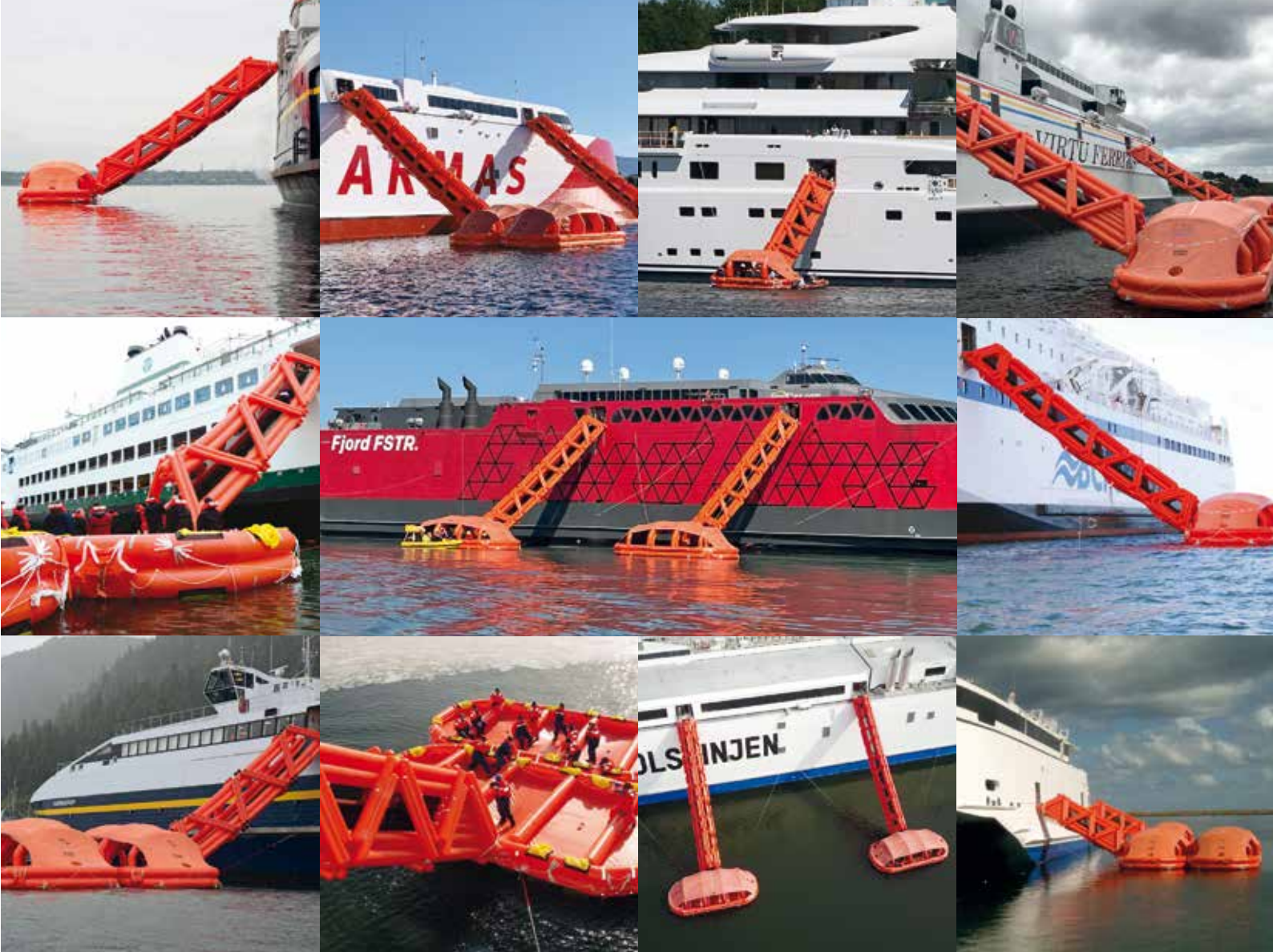
"This impressive new ship for Fjord Line of Norway is the first of many large, high-speed commercial ferries to be constructed at our newly expanded shipyard in the Philippines. After Hull 419, we have Hull 395, a 118-metre trimaran under construction, which will be the longest high-speed ferry to be constructed in the Philippines. We also have a 115-metre catamaran ferry scheduled for later this year – ensuring continuity of production at the Philippines shipyard well into the 2020s," Singleton explained.

THREE CROSSINGS PER DAY IN EACH DIRECTION AT PEAK SEASON

FJORD FSTR will in the company's prime high season provide up to three crossings a day in both directions. The vessel will depart Kristiansand at 06:45, 13:30 and 20:15 and from Hirtshals at 10:00, 17:00 and 23:30. In shoulder seasons the service is reduced to two crossings per day in either direction, the vessel departing Kristiansand at 08:30 and 15:00 and from Hirtshals at 11:45 and 18:00. The latter port is the Danish hub of Fjord Line's services as it also handles ro-pax connections from the south coast port of Langesund, plus from Bergen and Stavanger on the west coast of Norway.

In addition to Fjord Line, DFDS links northern Jutland with Norway as it has re-routed its Copenhagen-Oslo cruise ferry service to include a call at Fredrikshavn in either direction. Color Line, meanwhile, serves Hirtshals from Larvik and Kristiansand by using ro-pax tonnage. Stena Line, for its part, has ceased to offer direct sailings to Denmark from Norway.

Looking further into the future, if the trend of many people working from home at least part of the time, something that gathered momentum due to the pandemic, becomes a 'new normal', then perhaps the heavy seasonality that tends to characterise the ferry industry could make way for somewhat more even passenger volumes during a greater part of the year. ■



Simply a better system

Q: Why do the world's leading ship designers, builders and operators choose Liferaft Systems Australia Marine Evacuation Systems?

A: It is simply a better system.

Safe, reliable, cost effective to own. From the makers of the first direct entry MES, we are the pioneers of the MES industry with a product second to none. Now with nearly 1,000 systems in service, we haven't stopped improving since our very first MES was deployed way back in 1992.

Go with the leaders in the industry, reap the benefits and find out what our loyal customers have always known:

LSA MES is: **Simply the BEST system.**

WWW.LSAMES.COM



LIFERAFT SYSTEMS AUSTRALIA



AUSTAL INVESTS IN THE PHILIPPINES

Although FJORD FSTR is only the second ro-pax fast ferry built by Austal Philippines, the catamaran is the largest vessel by volume built to date by Austal and the largest aluminium vessel ever built in the Philippines. An impressive achievement for a yard that opened just nine years ago.

TEXT: ALAN BLUNDEN



FJORD FSTR outside the new 120m assembly hall at Austal Philippines' Balamban yard.

PHOTO: AUSTAL

than ten years until the Global Financial Crisis resulted in a decline in orders and the facility was closed in 2009.

The Balamban yard was acquired by Austal in November 2011 and 30 employees started work there two months later. The first vessel, a 27m trimaran for the offshore wind farm industry, was delivered in January 2013. The first ferry to be launched at the yard, in 2013, was an 80m medium-speed ro-pax. In 2015, the workforce had increased to over 300 and the first fast ferries, two 45m catamarans, were delivered. During 2017-2019, these were followed by eight more catamarans ranging in size from 30m to 56m, including an Auto Express 49m ro-pax catamaran.

MAJOR EXPANSION

Austal had introduced a refurbishment programme immediately after it moved into the yard but in 2018 the company announced a major expansion of the Balamban facility primarily focused on the large ferry market. The company confirmed, "Austal will invest circa USD 18 million to more than double the capacity of its existing Philippines shipyard. The upgrades to the facilities will include a new assembly hall that will be 120 metres long, 40 metres wide and 42 metres high. This will enable the shipyard to assemble the largest commercial vessels, based on Austal's existing order book and tender pipeline.

"The facility upgrades will also include additional assembly bays, material storage and accommodation facilities to allow the workload at the site to increase to more than twice its historic peak. These facilities are due for successive completion through 2018, with all construction complete by early 2019."

When the announcement was made, five catamarans were under construction in Balamban, including an Auto Express 109m catamaran that had been ordered by Fjord Line in August 2017.

FJORD FSTR

FJORD FSTR was launched in February 2020, by when the workforce in Balamban had grown to more than 900, 98% of whom were Filipinos. David Singleton, then Austal's chief executive officer, described the launch as "a significant milestone for Austal Philippines, as the Auto Express 109m was the first ship to be constructed in the yard's expanded production facilities".

Faced with increasing production costs in Australia, a decade ago Austal decided to transfer much of its commercial vessel production offshore. The location chosen was Balamban on the west coast

the vision to become Austal's global centre of excellence for commercial shipbuilding."

One advantage of the Balamban location was that there was already an

"Austal Philippines was established with the vision to become Austal's global centre of excellence for commercial shipbuilding."

of the island of Cebu in the Philippines and in 2012, as the company says, "Austal Philippines was established with

available yard there. Opened in 1997 by FBM Aboitiz Marine, this built and exported aluminium ferries for more



PHOTO: FJORD LINE

He added: “This impressive new ship for Fjord Line is the first of many large high-speed commercial ferries to be constructed at our newly expanded shipyard in the Philippines. We have a 118m trimaran under construction, which will be the longest high-speed ferry to be built in the Philippines. We also have a 115m catamaran ferry scheduled – ensuring continuity of production at the Philippines shipyard well into the 2020s.”

Since then, of course, the COVID-19 pandemic has intervened and Fjord Line’s Auto Express 109m did not leave Balam-

ban on its positioning voyage to Scandinavia until March this year. Commenting on the vessel’s departure, Austal’s recently appointed chief executive officer Paddy Gregg said, “The delivery of FJORD FSTR during the current COVID-19 pandemic is a significant achievement and a testament to the resilience, commitment, skills and safety of the Austal Philippines team. It is impressive to see a large high-speed ferry like this delivered at the best of times but for the team to deliver this new vessel during a global pandemic is simply outstanding.” ■



PHOTO: SØREN LUND HVIID

FSTR than ever before.

Fjord Line FSTR

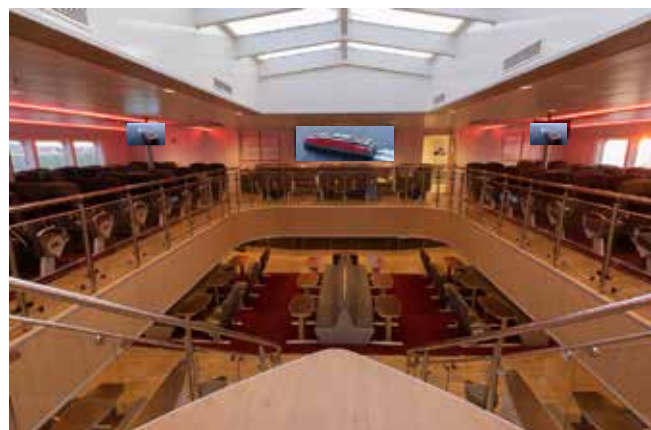


Austal's latest Auto Express Catamaran, Fjord Line's FSTR, is now the fastest ferry operating between Denmark and Norway.

Setting a new benchmark for performance, capacity and on-board experience, Austal's Auto Express 109 has created a new excitement for Fjord Line customers – with safe, fast and comfortable transportation available for more than 1,200 passengers and up to 410 cars (and 30 lorries) on every journey.

With a sleek, optimised-hull design capable of more than 40 knots, two full-width vehicle decks and a range of passenger deck configurations available, the Austal Auto Express 109 is the ideal solution for operators seeking a high speed craft that offers a unique customer experience.

To find out how an Austal Auto Express ferry can add greater value to your fleet, contact us directly at sales@austal.com or visit austal.com today.



FSTR has a high quality, bespoke fitout with ambient lighting that changes according to the time of day.





RAPID ACCESS COMPOSITE® (RAC)

CBG SYSTEMS



CBGSystems®

www.cbgsystems.com

SAFE, LIGHTWEIGHT,
PREMIUM AESTHETICS,
DELIVERING SUPERIOR VESSEL EFFICIENCY.

9 Bender Drive Derwent Park Tasmania, Australia 7009
Telephone +61 3 6272 6105 Facsimile +61 3 62731716 Email info@cbgsystems.com