



NewMax and HeyshamMax RoRo ships Stena Futura and Performance (Seatruck Performance) at Heysham 17-5-26

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A Bright

# Futura for an Irish Sea Freight Connecta

## New Tonnage for Stena Line Heysham-Belfast

In May 2023 Stena Line (UK) announced plans for a pair of bespoke Ro-Ro ships that would reflect the maximum footprint for the constraints of the port of Heysham in Lancashire, UK. Dubbed the NewMax Class, capacity was maximised for the size limitations with an impressive 2,854 lanemetres available across four decks. This capacity represents a 30% increase compared to the now CLdN-owned Heysham-max ships Performance and Progress. Built by Germany's FSG as the 19,722gt/2011 and 2012-built Seatruck Progress/Performance, they are 142m long with a 25m beam, 5.70m draught and capacity for 2,166 lanemetres of freight and 12 drivers. The ships were ordered by Seatruck, later served DFDS and then returned to Seatruck. The Clipper Group

company was taken over by CLdN (Compagnie Luxembourgeoise de Navigation) in November 2022. CLdN's Ro-Ro operation was previously known as Cobelfret until a reorganisation in 2022.

The NewMax ships ordered would replace the outgoing sisterships Stena Hibernia and Stena Scotia. The Stena Hibernia began life as the Maersk Importer, built by the Miho Shipyard in Japan in 1996, for the Felixstowe-Scheveningen service. From 2010-2011 the ship served as the Hibernia Seaways for DFDS before passing to Stena Line, still on the Heysham-Belfast route, in 2011. The Stena Scotia was delivered from the same shipbuilder, also in 1996. Built as the Maersk Exporter, she became Scotia Seaways in 2010 for DFDS and then passed to the control of Stena Line in 2011. Each 13,017gt ship is 142.5m long with a 23.47m beam, 5.41m draught, capacity for 12 drivers and a lanemetre capacity of

1,562lm. Both are now owned by Stena RoPax Ltd, operated on the Heysham-Belfast service for Stena Line and have since repositioned to the company's Dublin-Birkenhead link. This pair also have two 13,073gt sisters, the 2000-built Maersk Anglia and Maersk Flanders, delivered from the Guangzhou Wenchong Shipyard in China. They also served Felixstowe for Norfolkline B.V. and then operated for companies including DFDS. The 'Anglia was sold to Blue Star Ferries in 2019 as Blue Carrier 1 in Greece and the 'Flanders was sold to Mexican company Transportacion Maritima SA in 2015 as the San Jorge.

## A RO-RO EVOLUTION

A ferry service from Heysham to Belfast dates to 1956 so 2026 is the 70th anniversary of operations. British Railways (BR) introduced the 4,797gt/1956-built Duke of

Argyll, 4,450gt/1955-built Duke of Lancaster and 4,797gt/1956-built Duke of Rothesay when the service opened in 1956 with the passenger service surviving until 1975. BR then formed a partnership with a P&O-owned operator to continue a freight Ro-Ro service using the 1,951gt/1972-built ship Penda. P&O withdrew in 1978, and BR closed the container service that it also ran on the route before drafting in the 1,599gt/1971-built Ro-Ro ship Dalriada to join the Penda. In 1979 the 4,979gt/1970-built Ulidia took over from the Penda. The duo was replaced by the larger 7,750gt/1972-built Lagan Bridge and 6,040gt/1972-built Lune Bridge in 1980 but alas the route closed by the end of that year. In 1984 Belfast Freight Ferries opened a service using the 2,353gt/1974-built Stena Sailer and she was then replaced by the 5,254gt/1973-built Peveril (ex-Penda). The 7,171gt/1971-built Spheroid took over the sailings in 1986 with the 6,564gt/1984-built Saga Moon being added to the fleet. In 1991 the 6,041gt/1977-built Schiaffino boosted capacity for two years until the 7,765gt/1983-built River Lune replaced her, and the 9,088gt/1985-built Merle later replaced the Spheroid in the route's 40th anniversary year. In 1998 Merchant Ferries took over the freight sailings.

Sea Containers attempted to reopen a passenger service in 1999 using the 2,998gt/1991-built Seacat Danmark, 4,462gt/1997-built Superseacat Two, 3,003gt/1990-built Hoverspeed Great Britain and 4,112gt/1995-built Rapide over the period of 3 years. This was not a success with passenger services having not returned since 2002. The Ro-Ro operation became Norse Merchant Ferries in 2001 with the 9,368gt/1978-built Merchant Bravery and 9,368gt/1979-built Merchant Brilliant being subsequently deployed. The company passed to Norfolkline in 2006



Captain Andrius Pakenas

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Stena Line

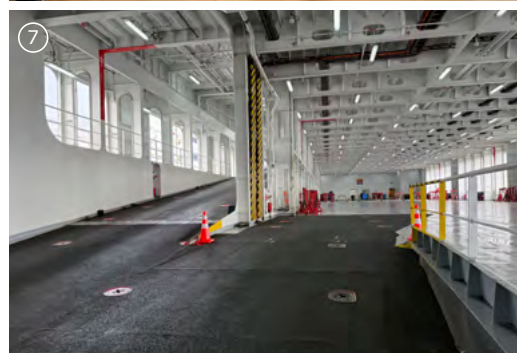
Stena Connecta Belfast | Stena Futura Maiden Arrival Belfast

and in 2009 the Maersk Exporter and Maersk Importer were transferred to Heysham and renamed. DFDS acquired Norfolkline in 2010 with DFDS' Irish Sea network being acquired by Stena Line the following year. Seatruck opened a service to Larne in 2010 using the 7,606gt/1998-built Arrow and 7,606gt/1998-built Clipper Ranger. This relocated to Belfast but ceased in 2012. That same year Stena Line chartered the 19,722gt/2012-built Seatruck Performance/Precision for Heysham-Belfast as Stena Performance/Precision. These ships replaced the Stena Hibernia/Scotia until 2018 when further fleet reorganisations saw the Stena Hibernia/Scotia back at the Lancashire port for Stena, where they remained until September 2025/January 2026.

#### FUTURA-READY

The new generation of Ro-Ro ship for Heysham, the largest to be able to handle the present-day restrictions of the port, were designed by NAOS Ship & Boat Design and the order for the two ships (Yard Nos. W0320/W0321) went to China

Merchants Industry (CMI) Jingling Shipyard in Weihai, China. This shipyard was already well advanced with Stena RoRo's E-Flexer series of newbuilds. The layout onboard the NewMax ships has been optimised with only a slight addition to the overall length and beam whilst the extra capacity still means a 4-hour turnaround at each port as before. This of course means that crossing times remain as economic as possible, an ever-important factor nowadays. The names bestowed upon the new ships were Stena Futura and Stena Connecta, a move away to the more localised names of the previous Stena Hibernia/Scotia. The length overall per ship is 147m compared to 142.50m for the old ferries with the beam and draught being 26.30m/23.47m and 5.40m/5.41m draught respectively. The NewMax design features four freight decks, namely the Tanktop lower hold (Deck 1) with a clear height of 5m plus Main Deck 3, Upper Deck 5 and Weather Deck 7, all with a clear height of 5.30m. Internal ramps link each level on the port side and the hold on Deck 1 is accessed via a hydraulic hatch on



Deck 3 and the access from ship to shore is via a full width (6 lanes wide) stern door. The layout permits two-way movement over the stern for the freight during a turn-around. The ramp to the weather deck incorporates a hydraulic door (closed at sea) at the upper opening from Deck 5. Deck 3 is 8 lanes wide, narrowing to 5 towards the stern due to the fixed ramps to the portside. The Deck 5 freight garage is 6 lanes wide, narrowing to 4 at the stern due to the fixed ramps and mooring decks. The weather deck is 6 lanes wide for its entire length with a 7th and 8th lane between the fixed ramp hatchway and funnel. The freight decks are notable for being uncluttered with the total lanemetre capacity being 2,854lm, a 650 lanemetre increase on the Heysham Max ships. The lower hold (Deck 1) offers 374lm with 851lm on the main deck (3), 651lm on the upper deck (5) and 832lm on the weather deck (7). The total also includes 146lm on the Deck 3-5 and Deck 5-7 fixed ramps. The accommodation is in the bow on Decks 5,6,7 and 8 with the navigation bridge being on Deck 9 with 360-degree visibility. The accommodations on the lower two decks also wrap around and go along the port side. This compact layout permits maximum trailer space on Decks 5 and 7. The funnel housing is at the stern on the port side, again to maximise space. Deck 5 forward has 7 crew cabins (portside) and stores, crew day room, laundry, gym etc in the bow. Above on Deck 6 are the 12 Driver's cabins plus mess room/day room on the port side and the officer and crew messroom, the galley, the officer's day room and 9 crew cabins overlooking the bow. Deck 7 has a row of 5 officer's cabins located forward with twin flume tanks located aft of this accommodation area. The décor in these areas is of the typical Stena Line Scandinavian style with blue clad walls, blue covered seating, wood clad walls and laminate floors. In total, the ship has a crew of 26 and capacity for 12 passengers. The Freight Driver cabins each have an LCD TV and coffee machine but, surprisingly, there is no outside deck space available except for an area on the bridge deck that is not for public use. Due to the differing installations on the two ships, the Stena Futura is shown as being 20,835gt whilst the Stena Connecta is 20,924gt. The air draught is 41.70m (from the keel), the displacement is 4,315m and the dead-weight figures for the two ships are 6,795dwt and 6,592dwt.

- 1 Deck 7 Weather Deck looking to Crew Accommodation and Bridge
- 2 Bridge Deck 9
- 3 Deck 6 Lifeboat access
- 4 Deck 6 Crews Mess
- 5 Deck 6 Drivers Mess
- 6 Deck 7 Weather Deck & Rotor Sail
- 7 Ramp Decks 3-7
- 8 Engine Control Room Deck 3

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The unique tidal systems prevailing in Heysham can be challenging so the Stena NewMax ships are fitted with a bespoke marine technology configuration making them more resilient to the prevailing weather conditions. Each ship has two L32M 9-cylinder and 5,200kW Wartsila dual fuel main engines providing a 10,400kW output. Onboard power requirements are handled by a trio of Wartsila 6L20 generators, each with a 1,100kW output. With twin controllable pitch propellers, driven by vertically offset Flender gearboxes, providing propulsion, part of the in-built weather resilience comes in the form of three Wartsila bow thrusters, consisting of two 1,200kW and 1,100kW examples. Perhaps unusually, the engine control room is located on Deck 3 in a void space rather than beside the machinery spaces. The ships are currently operating on Marine Gas Oil but can burn Biofuel, Methanol and are Ammonia-ready. Further future-proofing of these new-builds means that they can receive a 9MWh battery system and shore power connectivity.

One clear difference between the Stena Futura and Stena Connecta was announced on 18 March 2025 when Norsepower, the global leader in wind propulsion systems (established in 2012), and Stena Line signed an agreement for the delivery of two Norsepower Rotor Sails™ for the second ship, Stena Connecta. This fits perfectly with Stena's aim to cut CO<sub>2</sub> emissions by 30% by 2030.

The two 28m high and 4m diameter Norsepower Rotor Sails™ are projected to deliver up to 9% fuel savings on the intended route where wind conditions are very favourable for wind assisted propulsion.

The top of the rotor sails is 52.40m above the baseline of the ship. A Norsepower Rotor Sail (NPRS) is a modernised, automated version of the Flettner rotor, a tall, rotating cylinder that uses the Magnus effect to harness wind power and provide auxiliary propulsion for ships. When wind hits the spinning cylinder, air accelerates on one side and slows down on the other, creating a high-pressure zone that pushes

the ship forward, reducing fuel consumption and emissions. To minimise environmental impact during the project's execution phase, the NPRS were manufactured at Norsepower's new production facility in Yancheng, China, and delivered directly to the shipyard. Stena Line has a long history of embracing innovation, becoming the first ferry operator to run a vessel on methanol with the conversion of the Stena Germanica in 2015. The addition of Norsepower Rotor Sails further solidifies its position as an industry leader in decarbonisation. The rotor speed range for the rotor sails is 0-225rpm, each unit is fabricated from composite materials and has a maximum continuous thrust force of 205kN. The rotor sail units can operate in ambient conditions ranging from -20 to +50 degrees operational temperature with the survival wind speed limit being 70m/s. Each 36-tonne unit is mounted on a 2.5m high foundation weighing 15 tonnes and is driven by an 115kW electric motor (nominal power) with a variable speed 380-690V, 50/60Hz drive. As is commonplace throughout the Stena Line fleet, further energy savings are made including through the use of energy-efficient rudders to reduce drag and improve propulsion efficiency, leading to lower fuel consumption. Advanced rudder designs (e.g. twisted or flap rudders) improve flow around the propeller, enhancing steering response and reducing cavitation. This results in smoother and safer handling. Optimised hydrodynamic flow also reduces vibration and cavitation damage, extending the lifespan of both rudder and propeller components. Efficient propeller designs further reduce cavitation (formation of vapor bubbles which in time will shorten the life span of the blades) which lowers vibration and noise. This also reduces structural stress on the hull, helping to extend vessel lifespans. High efficiency LED lighting is installed for energy savings and improved lighting quality. The LED lights have a longer life span than the standard units, so this helps reduce the cost of lighting replacement and the quantity of man hours needed for maintenance on lighting systems. Silicon based hull coatings further reduce fuel consumption thus reducing CO<sub>2</sub> emissions and delivering a reduction in total energy used by the vessel. These coatings work by reducing the drag of the vessel as it moves through the water with the smooth 'non-stick' surface reducing the friction between the ship's hull and the water. This in turn means that less energy is required to push the ship through the water, meaning less fuel is needed by the main engines. These durable coatings also prove very efficient at preventing hull fouling by marine growth, reducing the need for hull cleaning and maintaining that smooth surface.



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Engine Room Deck 1 Main Engine | Engine Room Deck 2 Main Engine

## BUILDING ON SUCCESS

It was back in 2015 that Stena RoRo began working with the AVIC Weihai shipyard in China. Among others, to get the highly successful E-Flexer project underway. AVIC Weihai surpassed its competitors due to the yard's approach and experience with international clients, plus the fact that AVIC owned 80% of Stena's chosen naval architect, Deltamarin of Finland, so a working relationship was pre-existing. The Weihai shipyard was completed as recently as the end of 2008 when the company moved from an older site near the centre of Weihai. The new shipyard was built on land reclaimed for the purpose and boasts two large building docks as well as extensive shoreside facilities and a workforce of around 1,000 people. Before the E-Flexer contract began in earnest, the AVIC Weihai yard became China Merchants Jinling Shipbuilding (Weihai) Co. Ltd. with no impact on the process. So, it was no surprise that the Stena NewMax series would have the same birthplace as Yard Nos. W0320/W0321. The NewMax contract was signed in May 2023 with the steel cutting taking place for both ships from January 2024. The keel laying ceremonies were held on 28 June and 30 October 2024 respectively with the launches following on 21 October 2024 and 25 February 2025. Sea trials commenced for the first newbuild, the Stena Futura, on 29 May 2025 with delivery to Stena RoRo following on 18 July 2025. The ship began her delivery voyage on 23 July 2025, arriving in Belfast on the morning of 12 September 2025. The 'Futura undertook berthing trials at Birkenhead on 17 September 2025 followed by Heysham the next day. On 19 September the ship provided temporary cover on the Birkenhead-Belfast route in place of the 21,966gt/2016-built Stena Forwarder, making this her first revenue earning sailing. The inaugural voyage Heysham-Belfast followed on 22 September in place of Stena Scotia. Once the latter had completed refit, the Stena Hibernia was displaced from the route and later moved to Dublin-Birkenhead. The Stena Futura was christened on 20 November 2025 at Belfast by her Godmother, Dr. Madeleine Olsson Eriksson. Dr. Eriksson is the only daughter of Sten Allan Olsson, the founder of Stena Sphere, and grew up as the oldest child in the Olsson shipping family. She is the elder sister of Dan Sten Olsson and her professional life has been spent as a gynaecologist, businesswoman, and philanthropist. Over 200 guests, including Northern Ireland's Deputy First Minister, Emma Little-Pengelly MLA, attended the naming ceremony with the Stena Future being the first ship to be named in Belfast Harbour in over 20 years. The Stena Connecta was delivered and began the journey from the CMI Jinling Weihai shipyard in China



Stena Connecta Belfast | Stena Futura Belfast

shortly after being named and handed over on 19 November 2025. The ship's Godmother was Tina Mårtensson, wife of Stena Line CEO, Niclas Mårtensson. The Stena Connecta's delivery voyage concluded in Belfast on 20 January 2026, and she entered service three days later, replacing the Stena Scotia. Both ships operate 12 sailings a week and layover in port on a Monday, alternating between Heysham and Belfast each week. The voyage time across the Irish Sea from Heysham in Lancashire to Belfast in County Antrim is approximately 8 hours.

No sooner had the Stena NewMax ships, an investment of over £100m, taken their places in the Stena Line fleet, Stena RoRo announced an order for the next generation of Ro-Ro ships in the form of the C-Flexer on 28 January 2026. The first two C-Flexer ships may be followed by options for an additional four. The deal marked an important step in the company's long-term strategy to offer flexible and future-proof Ro-Ro ships to the global market. The new

class of ship has been developed by Stena RoRo in close cooperation with the Italian design company NAOS Ship and Boat Design.

The C-Flexer design offers a high degree of flexibility, enabling Stena RoRo to provide customers with vessels tailored to their specific operational needs. A highly developed hull form, multi-fuel engines and a scalable battery-hybrid system ensures that the vessels are future-proofed and can progressively be made to perform more eco-friendly in line with both technological advances and regulatory developments. In the future the C-Flexer will be able to operate entirely on batteries but, until then, the installed diesel-battery hybrid system will provide the necessary flexibility and redundancy for many years to come. The C-Flexer design is 200m long with a 31m beam, a 15,000 deadweight, 7.5m draught and a speed of 21 knots. The 3-deck and 4-deck versions of the C-Flexer will have capacity for 3,400 and 4,750 lanemetres of freight respectively.

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