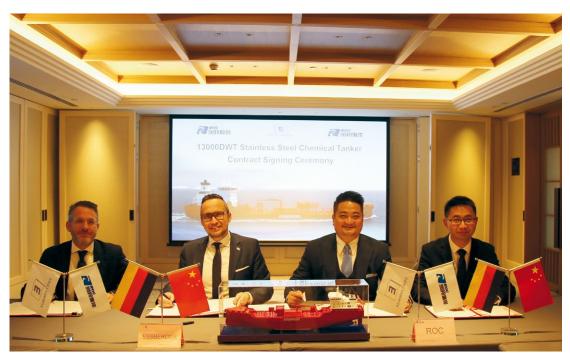


# news

April/2025 The Group's In-House Magazine www.rantzau.de



Contract signing in Shanghai: Dr Ricardo Alvarez and Johan Isaksen, DAL Executive Board, with Vice General Manager John Ren and Executive Vice General Manager Roy Wei, Rainbow Shipyard (left to right)

# John T. Essberger takes option of two more 13,000 dwt chemical tankers

Nantong Rainbow Shipyard in Shanghai is building a series of now four vessels to be employed by E&S Tankers for delivery as of 2027

ollowing the signing of two 13,000 dwt, 1A ice-class, stainless steel chemical tankers in September 2024 with Nantong Rainbow Offshore & Engineering Equipment Co., Ltd, the DAL / Essberger group of companies announced on 4 March 2025 the addition of two optional vessels from this series. This brings the total number of firm orders in this series to four.

The contract signing ceremony was held in Shanghai and attended by Johan Isaksen, Ricardo Alvarez, Safa Ismail, Link Marine, Danny Ren, and Rainbow Group President Martin Wu, Rainbow Offshore General Manager Shao Xiwu, Executive Vice General Manager Fang Ruyi, and Vice General Manager Ren Wei.

The vessels are designed by the Swedish design company FKAB in close collaboration with John T. Essberger and will be classified by DNV. The four tankers will be built with robust technical specifications and a comprehensive makers list, highlighting best practices from our extensive experience.

Fuel efficiency, ensuring the lowest possible consumption, is crucial today and will be even more so in the future, regardless of the fuel used over the next 25 years. Lower emissions mean a

reduced environmental footprint from the first day of operation. The vessels will also be able to run on methanol once environmentally friendly versions will become widely available.

During an earlier project phase, we defined the main operating range, prioritising key conditions and draughts while also considering other draughts, such as ballast (continued on page 2)



Rendering of the latest 13,000 dwt Essberger chemical tanker type



The world is in a state of political and economic upheaval, and it is currently difficult to predict what lies ahead. We are troubled by the wars in Ukraine and the Middle East, but also by the USA's departure as our protective power and trusted economic partner. Europe is in the process of reshaping itself. However, there are also shortcomings in our own country, which must now be made up for quickly.

In these turbulent times, E&S Tankers has so far managed to steer a successful course in line with the targets we have set ourselves. The order for a total of now four 13,000 dwt chemical tankers in China, which were developed according to our customers' specifications and are due to enter service as of 2027, is a clear sign of our confidence in the future.

At the same time, we are making considerable investments in 15 of the older ships in our fleet to ensure that they can be used by E&S Tankers not only safely, but also more economically and in a more environmentally friendly way, even after 20 or even 25 years. It is very important for us to involve our customers in this process and to find understanding for the fact that these ships are by no means old hat, but fulfil all prescribed standards and clearly exceed them.

In keeping with the quality and reliability of our fleet, we have experienced, highly motivated crews. In addition, we are delighted about the many initiatives on board, which we honour by selecting the three best "Ships of the Year". We present the winners for 2024 in this issue.

So, there is also good news this spring. Let's keep a cool head and wish those who rule the world the same.

Yours Heinrich von Rantzau

# Storm in a teacup – towing tank tests are a key to ship design optimisation

(continued from page 1)

draught. The design speed is 12.5 knots, and the design draught is 8.5 meters. While the vessels will be able to go faster and load more, they are primarily optimised around this range. After FKAB had developed the hull lines, HSVA in Hamburg optimised the hull lines to ensure maximum performance within the defined parameters. Computational fluid dynamics (CFD) calculations were performed to analyse and predict fluid flow, ensuring optimal hull design and efficiency. Once the owner and designer had approved the hull lines the model was made by HSVA.

This image shows the model tank test performed in Hamburg on 6 and 7 March 2025.

The scope included resistance tests and propulsion tests. The resistance test measured the hull's efficiency, while the propulsion test estimated the required power at various speeds with the model running under its own power.

The accuracy of model test results compared to a full-sized ship is highly reliable. The results confirmed that the changes in the hull lines met the expected result. A very efficient hull! Around May this year, propulsion tests will be carried out again with the design propeller and we expect even better results.

We also had a group of customers, along with E&S representatives from Chartering and Operations, visiting the tank test facility. They received an introduction to the process, from the creation of hull lines and computational fluid dynamics (CFD) calculations to witnessing a part of the model testing.

#### Essberger is a longterm partner of HSVA

From the founding of our shipping company in the 1920s until the beginning of the new millennium, John T. Essberger almost exclusively awarded its new tanker construction contracts to shipyards in northern Germany. This was followed by a number of newbuildings from Turkey and most recently from the Far East. Many of these ship types were tested at Hamburg's Hamburgische Schiffbau Versuchsanstalt (HSVA) with the aim of optimising the hulls and propellers not only in theory but also in practice. For this purpose, true-to-scale wooden models were built and tested in a towing tank under conditions as close to reality as possible.

The HSVA in Hamburg has eight test tanks, with workshops for manufacturing the models and a scientific research centre with around 100 employees. The institute was founded by shipyards and shipowners as early as 1913. In the 1930s and 40s, the HSVA was forced to work primarily for the navy. In 1945, the HSVA was largely dismantled and destroyed. Operations were resumed in 1953. The focus is on the 300-metre

artificial basin with a width of 18 metres and a depth of 5.6 metres. The models are attached to a trolley with measuring instruments, which rolls on tracks on both sides of the canal. The towing runs are repeated more than 50 times and at different speeds. The test series show that even the smallest changes to the shape of the hull and the propeller system can significantly improve performance behaviour, such as fuel consumption and speed under load distributions.

When the lightvessel "Elbe 1" capsized in a North Sea hurricane in October 1936 and sank with its crew of 16 men, the HSVA responded by installing a wave machine that can simulate a swell height of 0.45 metres in the tank. This allows values to be determined in the towing tank that show the behaviour of ships in heavy seas. The models can now also simulate the behaviour in icy conditions: a maximum ice cover of 7 cm can be achieved in the ice tank at minus 25 degrees



Hullmodel of 13,000 dwt Essberger chemical tanker type in the towing tank of Hamburgische Schiffbau-Versuchsanstalt (HSVA)



And the winner is "Philipp Essberger", congratulations to the crew: B Tarasiuk, electrician, T V Popov, C/E, L B Laudenio, AB, V Dorofeev, C/O, A B Rosete, PMP, M M Alandra, 2/O, Captain Mareks Satkovskis with winners plaque, J J Espinosa, OS, E H R Rothe, D/CDT, A L Endolina, cook, P L Salon MTM, D A Vistar, 3/E (left to right). Please also see page 7

## "Philipp Essberger" named vessel of the year 2024

ohan Isaksen, Managing Director of Essberger Shipmangement and Speaker of the Executive Board John T. Essberger announced the winner of the "Vessel of the Year" award for 2024. The award goes to "Philipp Essberger" (5,738 dwt, built in 2003).

The competition was tough, but "Philipp Essberger" stood out as the best-performing vessel of the year. Her performance has been robust and consistent, thanks to excellent management and seamless cooperation between the ship and shore teams. No incidents were recorded in 2024.

"Philipp Essberger" has delivered exceptional results in all aspects, and we are immensely proud of the teams for her achievement. We extend our heartfelt thanks to the officers, crew and shore team for their outstanding performance. As a token of our appreciation, the vessel is awarded €2,500 to the welfare fund, and a plaque will also be presented to the vessel," says Johan Isaasen.

2nd place of the "Vessel of the Year 2024" competition is "Nordic Sund." (4,054 dwt, built in 2008). The team has managed her busy programmes in a safe and efficient manner, with only a few hours off-hire throughout the year. Impressively, there have been no injuries, and vettings have been managed excellently. Despite the vessel getting older, she appears to be in better condition than a few years ago. This reflects the crew's dedi-

cation and the robust safety culture on board. Johan Isaksen: "We extend our heartfelt thanks to the entire team for their outstanding performance in delivering operational excellence. As a token of our appreciation, the vessel is awarded €1.500 to the welfare fund."

3rd place in the "Vessel of the Year 2024" competition was split. Third place was awarded to both "Cuno Essberger" (9,156 dwt, built in 2012) and "Heinrich Essberger" (7,130 dwt, built in 2024). Both vessels delivered an outstanding performance in 2024. This includes our latest newbuild and one of the three second-hand vessels we took over a few years ago. Both vessels, new and secondhand, have faced their challenges, which the ship crew and shore teams have managed exceptionally well.

"Heinrich Essberger's" performance has been very good since her delivery in 2024, demonstrating safe and efficient operation

and strong shipboard management. She has only had one day off-hire. The crew has shown exceptional professionalism, and the E&S team has highlighted the cooperation with the vessel throughout 2024 as outstanding.

'Cuno Essberger' and her sister vessels have excelled in performance and made remarkable improvements in their condition since take-over. Johan Isaksen: "We are deeply grateful for the efforts of all crew members who have worked tirelessly to bring the vessel up to a high standard. "Cuno Essberger" has also performed well in terms of off-hire, with only a few days recorded. This distinguishes her from her sister vessels in 2024, despite the issues faced by her sisters being beyond the crew's control. We believe that with the substantial work invested in these vessels, they will deliver great performance in the future. We thank the teams for their solid contribution in 2024 and, to show our appreciation, both vessels are awarded with €750 to the welfare fund."

In 2021, "Birthe Essberger" (6,203 dwt, built in 2005), in 2022, "Christian Essberger" (4,795 dwt, built in 2000) and, in 2023, "Wilhelmine Essberger" (8,631 dwt, built in 2005) were awarded the JTE "Vessel of the Year" award. 'This competition is always tough as John T. Essberger strives daily to achieve the highest performance," says Johan Isaksen. He adds: "Our strong history comes from our longterm approach to business. Our focus on quality ship operations and continuous improvements are key to our long-term partnerships with customers. We aim to be the best in the segments we serve. Each year, we learn from our experiences and take steps to improve. In 2024, we faced setbacks and challenges in ship operations, but overall our performance remained strong. Moreover, it is hard to distinguish between our vessels, which is a positive sign of our goal of operational excellence. This also means that excellently performing vessels is not reaching all the way up to the top. The 'Vessel of the Year' celebration focuses on key drivers that significantly impact our overall performance: safety, customer acceptance, technical reliability, and cost control. Alongside key performance indicators (KPIs), feedback from internal and external stakeholders plays a crucial role in the selection process."



The winner is "Philipp Essberger" (5,738 dwt): 22 years of age and shipshape as new

## **Right fleet composition** makes the difference

Variety in size, variety in age but all excellent in performance/ By Malte Willer Managing Director E&S Tankers

ast June, we proudly celebrated the 100-year anniversary of John T. Essberger here in Hamburg and we had the great opportunity to combine this with the christening of two vessels from a series of four 7,100 dwt StSt Ice Class 1A chemical tankers, propelled by LNG. These four vessels, delivered in 2023 and 2024, marked the beginning of our gradual fleet renewal ambition, laying the grounds for the next 100 years.

The renewal ambition successfully continued in September 2024 with the signing of two newbuilding contracts for 13,000 dwt StSt Ice Class 1A chemical tankers. These tankers have the class notation "methanol-ready", meaning there is an existing main engine conversion package from engine maker MAN, enabling us to run these vessels on green methanol when it becomes economically available in sufficient amounts. Other provisions, for example methanol bunker tanks and other equipment, have been taken into consideration too, making it truly "methanol-ready" and not just a marketing phrase we sometimes come across. Further, in March this year, we opted to sign two additional vessels of this class, bringing this 13,000 dwt series to four vessels as well.

#### New tankers are methanol-ready

These new ships will gradually replace the older ones that will stop trading because they will have reached our customers' age limits, even though they've been looked after well. The 13,000 dwt vessels are especially versatile, and they are future-proof for trading because we can use them in our Baltic and/or Mediterranean business alike, meaning they are less vulnerable to certain trade route seasonality and can follow stronger markets.

By signing these state-of-theart, energy-efficient vessels, we will ensure that our customers can still count on us and have access to

efficient and reliable tonnage for transporting their goods in the future. This comes at a time when, according to shipping industry forecasts and our own analyses, the overall European tonnage will shrink in the next few years.

#### Not enough newbuilding activity

This is mostly because there wasn't enough newbuilding activity after the financial crisis in 2008/2009, and there were a lot of vessel orders just before that collapse, which was partly speculative. This led to a market that was, from a tonnage supply side, firstly oversupplied and later saturated for many years. However, now we see that this vessel supply is decreasing, and markets have changed.

Despite the market uptick during the last three years, the high newbuilding prices and long delivery times at the yards do not make it easy to build up a large chemical tanker order book, especially in the small tanker segment, which competes with larger shipping sectors for the same yard capacity. In that respect, it is not only our customers, like chemical producers, who face reduced margins; owners also face increased voyage operating costs and very elevated newbuilding costs to sustain the business. Overall, we see that the gap of aging vessels is currently not filled by the newbuildings on order, resulting in an owners' supply-driven market.

But not only are we investing in building our own specialised vessels, we have also continuously considered second-hand tonnage. However, the right candidate has not been presented yet. We have seen several simpler designs from the Far East for sale, which we looked at since the pricing seemed initially attractive. However, after careful evaluation, we deemed them not suitable for our complex business in terms of capabilities, energy efficiency and future fuel readiness.

Therefore, and again, we are very happy to have managed the order of vessels based on our own requirements, incorporating the experience and learning from the entire fleet, and eventually designed by FKAB. With this, we are taking an important step forward in our sustainability ambitions. And these ships are clearly one of the building blocks of our path to net zero.



But innovation does not stop with our newbuilds. As part of our commitment to energy efficiency and decarbonisation, we are also investing in our existing fleet. In 2025, we will continue to upgrade several vessels with advanced technology to significantly decrease energy consumption.

In addition to newbuilding and upgrading our existing fleet in terms of energy efficiency, another important aspect to remain able to service our customers is the conditional life extension of certain vessels. This allows us to trade the vessels after they have passed their fifth special class survey, when turning 25 years old, so we intend to continue trading some vessels until they turn 30. This is only possible because of several quality factors and because some of our good customers support that con-

CONTRACTOR OF THE PARTY OF THE Malte Willer: Managing Director of E&S Tankers and member of the

John T. Essberger Executive Board

(continued on page 5)

### **Work Safe - Home Safe: Officers Conference in Manila**



"We are making steady progress and enhancing collaboration between ship and shore," says Johan Isaksen. At John T. Essberger, we uphold a zero-incident vision, working together daily to strengthen our performance. The session was engaging, with good interaction and alignment of priorities moving forward. Capt. Leonardus Kanters and Capt. Deniss Tatarinovs, from our European crew pools, attended the conference and shared best practices on manpower utilisation on board, a crucial aspect of short-sea chemical transportation. The central theme throughout the conference was safe and efficient ship operation. Among the participants of the Officers conference office staff representatives of JTE (N. Mushet, R. Hogrefe, A. Baardsen, J. Isaksen), E&S Tankers (Jakub Drobnik), TOS (D. Reyes, D. Delgado, L. Bautista, M. Mendros, S. Sta Rita) and PTC (P. Lugue, M. Macalintal, E. Lozada).

(continued from page 4) ditional assessment (see page 8). Firstly, we have long-term ownership of the vessels we operate. We own, know and take good care of them for a long time. Secondly, we have a voluntary CAP rating by the vessels' class society when each vessel turns 15 years old and continuously thereafter, attesting outstanding hull, machinery, and cargo equipment condition. Additionally, we have a good inspec-

tion history from external parties, both under the SIRE (Oil Companies International Marine Forum) and CDI (Chemical Distribution) regimes. Our vessels shall have no major port state control remarks, and our office is subject to safety management audits (TMSA) validated by customers.

In this respect, once we satisfy all these points and comply with a few more customer-specific measures, the trust from our customers is backed up by data, showing that we take very good care of the older vessels and keep them wellmaintained at all stages of their trading life.

In that respect, we successfully collaborated with a few good clients to conditionally accept older vessels from us beyond their initial age restrictions. This has turned out to be a great win-win story, as we can continue to operate mainly European-built quality

tonnage for longer, and our customers retain access to a larger fleet, offering greater flexibility and keeping access to shipping capacity whilst the total European fleet is contracting.

We invite other customers to learn more about our newbuildings and the other great initiatives. Our dynamic and highly motivated team will be happy to share more information on these subjects.

Ship name	Master	First Mate	Chief Engineer
Agnes Essberger	Takhir Biazitov	Viacheslav Leonov	Piotr Popiel
Amalie Essberger	Jakub Nadaj	Marcin Zietek	Artem Glushko
Anneliese Essberger	Albertus Linthorst	Pawel Pawlik	Pieter Pasterkamp
Annette Essberger	Koen Ghysels	John Christopher Domingo	Marian Cornea
Birthe Essberger	Jacek Borysiuk	Robert Halicki	Ruslans Lesciks
Caroline Essberger	Chris De Boer	Marcus Klein	Arnoldus Eland
Charlotte Essberger	Andrey Grzhibovskiy	Carl Marx Cidro	Lukasz Zeromski
Christian Essberger	Robert Szmaj	Szymon Stalica	Miroslaw Jaworski
Coral Essberger	Dawid Sadecki	Dariusz Podsiadly	Jan Niewierowski
Cuno Essberger	Dariusz Swierkosz	Krzysztof Brandalski	Marek Ptasznik
Dutch Aquamarine	Nicky Nicolaas Petrus Burger	Patryk Szymanski	Steven Van Royen
Dutch Emerald	Stephanus Frerichs	Sjoerd Rijndorp	Sipke Steenbergen
Eberhart Essberger	Andrei Malenkov	Antons Paulausks	Stefan Tudorache
Ellen Essberger	Arkady Khramushin	Pawel Czarnacki	Roman Kulish
Elsa Essberger	Boguslaw Giedziewicz	Jaroslaw Krok	Sergey Varakin
Georg Essberger	Anton Radtsig	Adrian Mariak	Florin Chirpac
Gisela Essberger	Lars Gronlund	Filip Rajner	Pavel Semyonov
Heinrich Essberger	Enrique Lopez	Roman Rybin	Volodymyr Yurkevych
Helga Essberger	Daniel Szarzynski	Igor Batakov	Pavel Kuzma
Iohann Essberger	Marcin Harasim	Artem Zatsarnyy	Piotr Trusinski
John Augustus Essberger	Boguslaw Gajdowski	Bartosz Kutko	Valeriy Bashkurov
John T. Essberger	Maxim Klementevsky	Piotr Adamski	Dmytro Polyavka
Liesel Essberger	Ivo Rubenis	Farits Jambajevs	Miroslaw Szylobryt
Lisa Essberger	Cornelis Lodder	Paul Gene Galotera	Johan De Jong
Liselotte Essberger	Grzegorz Kakol	Blazej Czapiewski	Andrzej Sullik
Nordic Saga	Menard Responde	Ronald Jr. Llanos	Vladimir Shapovalov
Nordic Sira	Einar Bjoerkavaag	Russel Derequito	Mark Angelo Villaronte
Nordic Sola	Lorentz Lorentzen	Michael Mabunay	Zygmunt Dobrzyniewski
Nordic Sund	Leif Arneback Moller	Richard Calingacion	Alexey Zimenkov
Patricia Essberger	Daniel Kubacki	Evgeniy Buzyrev	Zoran Zambata
Philipp Essberger	Mareks Satkovskis	Valeriy Dorofeev	Taras Popov
Roland Essberger	Marcin Madry	Adrian Kuzmicz	Tomasz Kozlowski
Theodor Essberger	Ali Ayara	Andrei Rosu	Dmitry Shcherbov
Ubena	Jaroslaw Maciuk	Marek Kajdasz	Costica Tuca
Ulanga	Cezary Trzeciakiewicz	Yevgeniy Konstantynov	Romeo Roman
Ursula Essberger	Jeroen De Koster	Michal Pietryka	Stefan Kluijfhout
Wilhelmine Essberger	Marco Boshuijzen	Koen Stroomberg	Hendrik Van Schoonhoven

### **Aus der Reederei-Familie**

#### Jubiläen

#### 10 Jahre

Sascha Hagemann, *Accounting*, 01.01.2015

#### 25 Jahre

Ines Huemer, *Accounting*, 01.12.1999

Capt. Albert Ten Wolde, 16.04.2000

#### **Besondere Geburtstage**

#### 90 Jahre

Klaus-Peter Adler, *Pensionär*, 31.03.1935

#### 85 Jahre

Sieglinde Bohlmann, *Pensionärin*, 12.04.1940

Wolf Wessel, *Pensionär*, 23.04.1940

#### 80 Jahre

Werner Arendt, *Pensionär*, 22.02.1945

Renate Schmahl, *Pensionärin*, 15.03.1945

#### 75 Jahre

Brigitte Nowak, *Pensionärin*, 18.04.1950

#### 70 Jahre

Georg Fröhlich, *Pensionär*, 21.03.1955

Vladimirs Smirnovs, *Pensionär*, 14.04.1955

Dr. Ulrich Wehrmeyer, *Pensionär*, 25.04.1955

#### 65 Jahre

Wilfried Fuhrmann, *Pensionär*, 21.03.1960

#### 60 Jahre

Capt. Andrei Malenkov, 16.02.1965

AB Aquino Catandijan, 20.02.1965

André Rimmel, *Ship Management*, 01.04.1965

Capt. Boguslaw Giedziewicz, 14.04.1965

#### **Neue Mitarbeiter an Land**

Pasquale Patruno, Facility Management Pavlo Polishchuk, Ship Management Oleksandr Yastuk, E&S Tankers Operations Réka Dávid, HR Shore Andre Nagel, Facility Management Fotios Manos, E&S Tankers Operations (Versetzung) Feryat Dalioglu, Ship Management Jihan Saab, Crewing

#### **Wir gratulieren zur Geburt**

Pavlo Polishchuk, Tochter Polina, 08.01.2025

#### Wir gedenken

Hans Peter Sommerhoff (90 Jahre) Januar 2025

> Gerd Nagel (81 Jahre) Januar 2025

Eleonore Pipping (87 Jahre) Januar 2025

Karl-Heinz Bahmann (87 Jahre) März 2025

### Vessels of the year: congratulations to the crews



Congratulations to "Nordic Sund" crew. 1st row: J R G Carias/OS, M C Tayoba/AB, D M Demetelio/ AB, C R B Costales/ AB. 2nd row: Captain Orjan Arneback Moller, R P Calingacion/ C/O, A A M Mulato 2/O, F B Fabrolina 3/O, A Zimenkov C/E, B A Young 2/E, E O Garillo CCK



Congratulations to "Heinrich Essberger": Captain Enrique Lopez, C/O Rybin, AB Costin, 3/E Pagcaliwagan, AB Bueno, PMP Vecina, OS Marmol, 2/O Figiel, MTM Corro, D/C Tomagan, 3/O Regner, cook Salazar, AB Santiago, 2/E Kosierkiewicz, C/E Yurkevych (left to right)



Congratulations to "Cuno Essberger". Front row: J P Pakingan, 2/E, J G Alvear, 3/E, A I Ventura, wiper, A M Rodas, cadet, R F Montero, MTM, F C Cosino, AB, L J Jagoda, fitter, R O Erena, pumpman. Back row: I J Fernandez, AB, R D Baltazar, cook, R G Buzgaro, ETO, M Ptasznik, C/E, P Czajkoeski, C/O, Y Skutarenko. 2/O, F Zawrot, cadet, Captain Dariusz Swierkosz, G R Redona, 3/O, M L J Castillo, AB, M Tocitu, JO, F L Granadino, OS (all left to right)

## **Extending the operational life of vessels**

In theory our tankers could be operated indefinitely/ Proper care and maintenance versus life limitations imposed by customers. An interview with Essberger Fleet Manager André Rimmel on the current refit programme



André Rimmel, Fleet Manager of John T. Essberger chemical tankers

## AL/JTE News: The Essberger Tankers refit programme for 2025 is a rather ambitious undertaking. What is the general aim?

André Rimmel: Because of the advanced age of our chemical tanker fleet, we are facing several challenges in maintaining the high standard and quality of our vessels. The main focus lies on maintenance activities, which tend to increase in scope as operating hours accumulate. In order to optimise this – i.e. to reduce maintenance costs and effort to an acceptable level - we aim, whenever possible, to apply condition-based maintenance. This approach is pursued where it is reasonable and feasible. We must also keep in mind that our customers audit us frequently - for example, we have had six TMSA audits in 2024 - and questioned the basis of our decisions.

## We are not only talking about maintenance but also about retrofitting, right? Motto "forever young"?

Yes indeed. Another challenge lies in retrofits, which are also a result of the fleet's age. These become necessary when system suppliers discontinue products such as engine monitoring systems, controllable pitch propeller systems, parts of the switchboard, etc. As such retrofits

require considerable financial and time investment, it is crucial to carefully balance the remaining service life of the vessel in our fleet against the available alternative solutions. Additional potential for optimisation lies in system harmonisation – as demonstrated with the implementation of a standardised ECDIS system across our chemical tanker fleet. Not only – we have selected a single supplier, but also ensured identical hardware and configuration, which bring added operational and training benefits.

All these activities require a highly committed and proactive ship management team. There is no alternative to solving these challenges in full alignment with the rules, regulations and customer expectations, as non-compliance would jeopardise vessel operations.

#### Can you give us some examples of what is part of the refit and optimisation respectively?

The advanced age of our vessels does not primarily manifest in an increasing scope of yard-related repair work, as the value preservation of our ships (for example, through repairs and maintenance) is a continuous process that cannot be postponed due to safety requirements, class regulations and customer expectations. In theory, our vessels could be operated indefi-

nitely with proper care and maintenance, were it not for the service life limitations imposed by our customers. The real challenges lie in the discontinuation of key systems and equipment, such as CPP controls, engine control systems, fire detection systems, and many others. These cases force us into major retrofitting projects, involving significant planning, implementation time and costs. Improper planning - for example, failing to consider compatibility between new and existing equipment - can lead to serious operational issues, including follow-up costs and even offhire periods.

## Does this programme also include economic and environmental issues?

Certainly. We have undertaken various measures in the past to reduce fuel consumption. A more recent example is the conversion of onboard lighting to LED.

This not only reduced the fire risk, but also led to lower energy consumption.

We have implemented several other initiatives to reduce fuel consumption, especially for the main propulsion. These include:

- Full blasting of the hull after a maximum of 10 years
- Application of low-friction paint
- Upgrade of CPP control systems

- for optimised combinator mode
- Retrofit of engine control units on fixed pitch propeller vessels to enable constant power mode
- Installation of Mewis Ducts, boss cap fins

The goal of all these optimisation efforts is to contribute to environmental protection through the reduction of fuel consumption on board our vessels.

#### What about communication systems?

There are few areas on board that have experienced as much change recently as communication. The possibilities for data transmission between ship and shore have expanded significantly, to the point where we can almost speak of unlimited and continuous data exchange. We continuously monitor these developments and adapt our systems accordingly to ensure we have the best possible setup for our operations. Our crew also benefits from these advancements, as they will increasingly be able to enjoy Internet access and digital habits similar to those they are used to at home, even while at sea. Naturally, these technological advancements also impact and improve operational areas of ship management, enabling processes and activities that were previously not possible.



switchboard, etc. As such retrofits | Proper ship, healthy environment. Chemical tanker "John T. Essberger" (7,135 dwt) coming up the River Elbe