

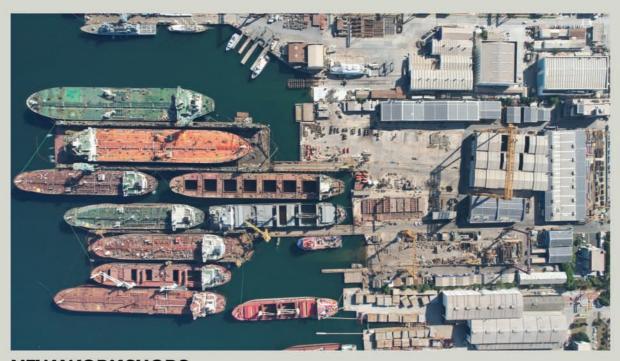


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### INDEX

6 PMA Exceeds Expectations in Flag
Registry and Reinforce its Fleet Growth
Strategies

The Panama Ship Registry Launches its Digitized Service for Responding to user Oueries

- 10 MARE Clean in the Maritime Industry: A Leading Company in Ship Salvage and Marine Pollution Control
- 18 Eriş Propeller: Over 50 Years of Experience in a Journey Full of Challenges and Success
- 25 Atty. Cem CONGAR Esq.
  In the Context of Houthi Attacks
  Interaction of General Average and
  War/Terror Coverage
- 28 Emesco Marine Committed to Providing Value-Added Solutions for the Maritime Industry
- 30 Prof. Dr. Adnan Parlak
  How to Choose the Right Strategy for
  Fuel and Engine Selection in Accordance
  with the Fuel EU Maritime Directive?
- 34 Umur UĞURLU When a Vessel Reaches the End of Her Useful Life?
- 36 Pioneering Sustainable and Innovative Solutions in Maritime Electrical Systems
- 40 Success Rooted in Years of Experience: GNG Valve
- 43 Sabri Çağrı SEZGİN Maritime Traditions



Arsenio DOMINGUEZ

"Our Goal is to Develop a Healthy
Regulatory Framework for the Industry"



13 David LOOSLEY
"We Will Continue to Be the Practical Voice of the Maritime Industry"



21 Gökhan TÜRKHAN

"Making a Difference in the Industry with Our Innovative Projects."



38 Haluk ÇOBAN

Product Certificates Used in the Maritime
Industry





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### PMA Exceeds Expectations in Flag Registry and Reinforce its Fleet Growth Strategies

The renewal of the Panama marchant fleet is one of the quality objectives of the Panama Maritime Authority (PMA), which is why the entry of vessels under 15 years of age to the Panama Ship Registry is being prioritized. As a result, 57% of ships registered in 2024 have an average age of four years. These vessels come mainly from the Asian market, a region in which the Panamanian Registry has technical offices (Japan, Singapore, South Korea, China,

Among the strategies to improve the PMA indicators is also the recruitment of newly built vessels. The latest figures reveal indicators of 105% in compliance with this

Hong Kong and the Philippines).



goal, meaning that Panama has exceeded its own expectations at the end of the first week of July 2024.

The fleet debugging process is also part of the PMA's plan to continue positioning itself worldwide. This consists of ensuring that the vessels of the Panama Ship Registry comply with current international regulations, which is why this year more than 5 million tons of gross registration has been cancelled ex officio.

The PMA, through the General Directorate of Merchant Marine, carried out 771 new flag registries this year, which translates into 16.8 million gross tonnages (GT).

The Panama Ship Registry has 8,606 vessels, which represent

more than 247.7 million of GT, according to IHS Markit international platform. In addition, Panama accounts for 15% of the world's tonnage, as seen in the "World Fleet Monitor" report, published at the end of June 2024 by Clarkson Research.

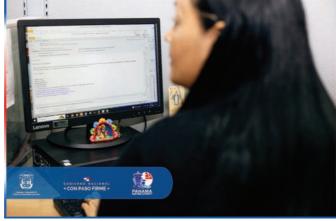
### The Panama Ship Registry Launches its Digitized Service for Responding to user Queries

Since Monday, July 8, the General Directorate of the Public Registry of Ship Ownership (DGRPN) of the Panama Maritime Authority of (PMA) implemented an exclusive email address to monitor and resolve, uninterruptedly, all user queries.

The email address consultadgrpn@amp.gob.pa is attended by a group of specialists who will respond as soon as possible to queries, which will be documented and monitored until users see their questions resolved.

The director of the DGRPN, MSMB Marta Aparicio González, indicated that this service marks the beginning of a chain of digital changes proposed by the new administration of the PMA and aimed at improving interaction with our users at all times and from anywhere in the world.

The Panamanian Registry documents and certifies property titles, mortgages and



other liens related to ships of the National Merchant Marine. Our registries are made in Spanish and English, guaranteeing accessibility and understanding within the international maritime sphere.

The commitment of our Registry responds to the need to meet the demands of a non-stop operating sector, covering the multiple time zones in which global maritime traffic operates.

The DGRPN was transferred to the Maritime Authority of Panama since De-

cember 31, 2010, in compliance with Law 33 of 2010, in order to simplify and centralize the procedures related to the Registry of Ships in Panama, thus consolidating the services offered in one single public entity.

Efficiency in attention and agility in procedures are fundamental pillars in the mission and vision of the DGRPN.

Communication channels and procedures have been established to achieve this purpose,

allowing the registration of contracts related to ships expeditiously and without setbacks. This service extends internationally, facilitating registration matters from anywhere in the world through the Private Consulates of the Merchant Marine and the Economic and Commercial Offices of Panama abroad.

The DGRPN guarantees the legality and safety of transactions related to ships, contributing to the development and strengthening of maritime trade worldwide.



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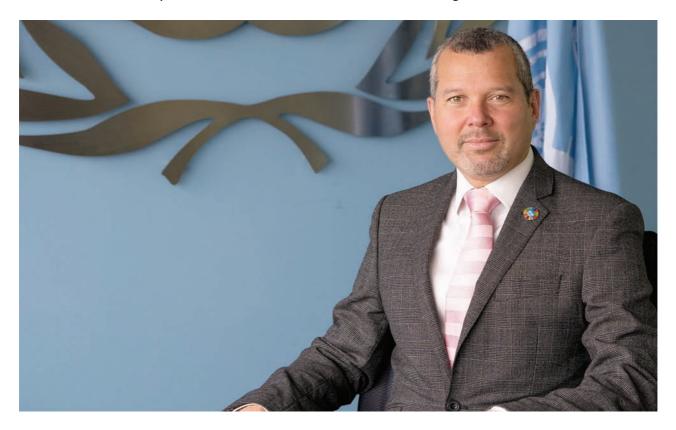
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### **INTERVIEW**

### **ARSENIO DOMINGUEZ**

Secretary-General of the International Maritime Organization (IMO)



### "Our Goal is to Develop a Healthy Regulatory Framework for the Industry"

As the Secretary General of IMO, Arsenio Dominguez takes on a huge responsibility at a challenging time for the world's maritime industry. At a time shaped by attacks on ships in the Red Sea, rising geopolitical tensions and ever more imposing global carbon emissions reduction targets, Dominguez's priority is to build a strong and sustainable regulatory framework for the international maritime community. Dominguez, who is working hard for the sector to reach its decarbonization target, aims to increase the participation of young people and emphasize the protection of the oceans, provided an exclusive statement to Deniz Endüstri.

First of all, congratulations on your new assignment. As Secretary-General, you are responsible for providing leadership during a challenging period for the global maritime community. Could you provide an overview of the current situation? What were your aspirations

### for the role of Secretary-General during your tenure?

We are currently witnessing the dire impacts of geopolitical tensions as deplorable attacks on ships continue in the Red Sea. Concurrently, the industry is faced with the huge challenge of decarbonizing

international shipping by or around 2050. All this is unfolding in a rapidly changing world, marked by the rise of digitalization, automation and artificial intelligence. The maritime sector must keep up.

In the face of these challenges, my

aspiration is to ensure that IMO delivers on its responsibility to provide a robust regulatory framework for the industry, taking into account the current landscape. Member States must be well-supported with targeted programmes that address their needs, particularly Least Developed Countries (LDCs) and Small Island Developing States (SIDS). And we must work to enhance IMO's public image and invest in our people.

I am excited for the coming year when we will spotlight IMO work on ocean protection and focus more on engaging young people.

In light of recent events such as the Red Sea attacks on ships, it is clear that security is of paramount importance in the maritime sector. What measures are you taking to enhance safety within the maritime community?

IMO continues to call for the end of the illegal and unjustifiable attacks on ships in the Red Sea and the immediate and unconditional release of the MV Galaxy Leader and its crew, which has been detained for over eight months and counting.

I advocate incessantly for the wellbeing of our seafarers at every opportunity I get, in dialogues and discussions with all stakeholders. Our hope is for peaceful dialogue and diplomacy to resolve the crisis. The Maritime Safety Committee (MSC) has urged any party that may have influence with the Houthis, to use that influence to seek an end to the attacks.

IMO provides technical support to build the capacity of regional and national bodies to strengthen maritime security in the Red Sea, through legislation drafting, maritime security training, developing regional strategies and information-sharing networks.

A significant transformation is occurring within the maritime industry in terms of decarbonization. What are some of the initiatives and objectives you have set to reduce carbon emissions within the sector? Will the world be able to reach the goal of net-zero emissions by 2050?



We need "early movers" in the industry as well as forward-looking policy makers to take the necessary risks and secure the right investments that will stimulate long-term solutions for the sector.

The decarbonization of shipping is an ambition for all IMO Member States. The 2023 IMO Strategy on Reduction of GHG Emissions from Ships, provides a clear course of direction. Decarbonization presents new opportunities for developing countries, including LDCs and SIDS, to take part in the value chain of the production of zero and near-zero GHG emission fuels.

That said, decarbonization is a significant challenge, but all parties are working together to achieve net-zero shipping by or around, i.e. close to 2050. To help achieve this goal, the IMO is set to adopt a basket of binding "mid-term" measures, a "net zero framework", which includes:

- a technical element: a goal-based marine fuel standard regulating the phased reduction of marine fuel's GHG intensity; and
- an economic element: a maritime GHG emissions pricing mechanism.

These measures are in addition to "short-term" technical and operational measures

adopted in 2021 to enhance energy efficiency of ships and monitor ships' carbon intensity, which themselves built on the first mandatory energy efficiency measures for ships adopted back in 2011.

Compliance with the aforementioned standards will undoubtedly result in additional costs such as higher carbon fees, increased port expenses, a reduction in the number of cargo opportunities, and the depreciation of inefficient vessels. How can these factors be balanced?

The green transition towards net zero shipping is happening, and it is encouraging to see the various innovations and developments towards alternative fuels. These developments may in fact provide new opportunities for transport of cargoes.

Of course, we must consider issues such as safety, pricing, infrastructural availability to deliver new fuels, lifecycle emissions, supply chain constraints, barriers to adoption and more. Seafarers will require training to be able to operate new technology safely and handle new fuels.

We need "early movers" in the industry as well as forward-looking policy makers to take the necessary risks and secure the right investments that will stimulate long-term solutions for the sector. Ultimately, the planet and ocean depend on everyone making the right decisions and taking the steps to beat climate change.

### **MARE Clean in the Maritime Industry:**

### A Leading Company in Ship Salvage and Marine Pollution Control

MARE Clean is a marine cleaning services company established in 2006 by an experienced team operating in the ship salvage and marine pollution response sector both in Turkey and international waters. However, the company's roots trace back to the experience gained by its team members since 1986. This team, with a combined experience of 40 years, came together with the goal of providing more professional and large-scale services in the maritime industry, leading to the founding of the company.

#### Areas of Service and Expertise

MARE Clean is recognized as one of Turkey's most competent companies in combating marine pollution. The company's services include coastal facility emergency response services, response to marine and land-based spill incidents, emergency response risk assessment and planning, training and drills, equipment manufacturing and sales, tank cleaning, as well as diving and underwater services. The company's General Manager, Emra Kızılay, emphasizes that MARE provides a wide range of services in responding to oil pollution and incidents involving other hazardous substances in its operations.

#### **Training and Drills**

MARE holds an authorization certificate as specified in the directive on "The Procedures and Principles of Training Seminars and Drill Programs on Preparedness and Response to Pollution Caused by Oil and Other Hazardous Substances," according to Law No. 5312. Under this authorization, the training and drill programs organized by MARE are led by expert instructors with field experience. These programs are enriched with response scenarios and videos compiled from real incidents and are conducted periodically on a regional and international basis, as well as twice a year as coastal facility drills.

### International Operations and Innovation

In addition to its activities in Turkey, MARE has successfully carried out numerous operations in international waters. The company provides support to Turkish shipowners and anyone in need, particularly in matters related to maritime accidents and marine pollution in international waters. Moreover, MARE manufactures marine pollution



response equipment at its factory in Pendik Kurtköy, designing and producing this equipment in-house. The products manufactured include marine barriers, oil skimmers, oil absorbent products, floating and temporary storage tanks, barrier reels, and hydraulic power units. Although MARE initially began producing equipment to meet its own needs, it has now gained recognition for exporting these products to countries around the world.

### Regional Services and Ship Salvage

MARE possesses the capacity and competence to handle first, second, and third-level pollution incidents along Turkey's extensive coastline. The company is actively providing services in key areas including the Gulf of İzmit, Yalova, Bandırma, Çanakkale, Ereğli, Zonguldak, İskenderun, İzmir Aliağa, and the Nemrut Gulf. Collaborating closely with its sister company, Solar Ship Salvage Inc., MARE also plays a significant role in ship salvage and wreck removal operations.

Solar Ship Salvage, recognized as one of the top companies in Turkey in this field, has successfully undertaken numerous national and international operations with its expert team.

#### **R&D** and Publishing Activities

MARE emphasizes the importance of swift and effective response in combating marine and land-based spill incidents. The company places significant importance on research and development activities, and shares the findings obtained in this context through various publications. By documenting the experiences gained from response operations, MARE aims to contribute to Turkey's knowledge base in this field. To this end, the company has published six books that include the findings and experiences from field response operations.

MARE Clean's motto has always been: "Effective oil spill response requires broad horizons and preparedness for every situation."

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### **INTERVIEW**

### DAVID LOOSLEY

Secretary General and CEO of BIMCO

### "We Will Continue to Be the Practical Voice of the Maritime Industry"

Founded in 1905 to ensure sustainable freight rates, BIMCO has evolved over the decades to become the practical voice of the maritime industry, playing an important role as an organization. Secretary General and CEO David Loosley reflects on the critical role BIMCO plays in the maritime world in areas such as standards development, carbon emission reduction and digitalization. Answering Deniz Endüstri's guestions, Loosley shares details on how BIMCO is shaping the future of the maritime industry with the projects it leads on issues such as sectoral sustainability and environmental protection.

### Could you tell us about the founding story of BIMCO and its role throughout this process?

BIMCO evolved after its foundation in 1905 when shipowners decided to collaborate to try and achieve sustainable freight rates which were mostly for lumber trade between the Gulf of Bothnia and The White Sea, primarily to the UK. At that time, the freight rates were at levels threatening to drive many shipowners into bankruptcy and the meeting in 1905 was based on the belief that shipowners were better positioned if they worked together rather than against each other. In the end, the minimum freight rates initiative did not work but BIMCO saw that there was tremendous potential in establishing common standards and promoting the unique maritime culture and trade. This role, together with our role as the practical voice of shipping, is still important today.

Can you provide information about the standard contracts and clauses you have developed? What role do these documents play in the maritime industry? Our current portfolio contains more than 300 contracts and clauses that support a wide spectrum of the shipping and





maritime industries. To name a few, our contracts and clauses range from shipbuilding to standard operations, decarbonisation and ship recycling. The work of our documentary committee and the many subcommittees is crucial. In a constantly changing regulatory environment, we keep the industry supplied with the contracts and clauses needed to operate, minimise conflicts and strive for compliance with IMO and EU regulations, not least when it comes to decarbonisation. We, naturally, have much focus on decarbonisation which is a major challenge. For this, we have developed a portfolio of carbon clauses to support the industry and help our members navigate and comply with very complex regulations such as the CII and EU ETS regulations.

### How does BIMCO collaborate with international regulatory bodies? Specifically, what are your relations and contributions with the IMO?

At the IMO and other international regulatory bodies we provide regulators with information to better understand an issue from the perspective of those who will have to implement any regulation stemming from it. Maritime safety and security are also high on our agenda as we drive the development of guidelines and standards that improve safety, security, and efficiency of shipping. At the IMO, BIMCO has special consultative status and in addition, we have observer status at the London Convention/



London protocol, the United Nations Framework Convention on Climate Change (UNFCCC) and the International Oil Pollution Compensation (IOPC) Funds. We thereby use our technical voice in the international policy making arena and we provide expert advice in pursuit of feasible and practicable solutions.

### Could you share details about the training programs and courses you offer? What impact do these courses have on maritime professionals?

Our training programs help people in the industry make sense of new and complex regulations and be better equipped to operate and work in shipping in general. Our courses are constantly evolving and updated to stay relevant at any given time because the regulatory landscape, to take an example, changes constantly. Over the ye-

ars, we have naturally seen a growing need for training that addresses decarbonisation and the use of the contracts and clauses in our carbon portfolio. This will continue as we all work towards cutting shipping's carbon footprint. In terms of geographics, we deliver many courses online which means people can access from anywhere in the world. We also offer bespoke in-house training courses at our client's offices, as well as face-to-face training courses in various locations around the world.

### What are BIMCO's initiatives regarding sustainability and environmental protection in the maritime industry?

The energy transition is probably the biggest task shipping has ever faced. At BIMCO, we support our industry by offering the contracts and clauses need to navigate the constantly changing regulations and

by offering support and advice. We hold webinars and offer courses to help the industry make sense of new regulations, clauses, fuel types, operational efficiency measures etc. which will be crucial components as our industry decarbonises. In addition, we are focused on campaigns supporting the implementation of the Hong Kong Convention to ensure safe and environmentally responsible ship recycling and campaigns aiming to help reduce the amount of plastics in the oceans. Also, we are very engaged with the IMO to support global regulation for a truly global industry. All these projects and campaigns are examples of how BIMCO contributes to support the sustainability and environmental protection agenda.

### What are your views on digitalization and the integration of new technologies in the maritime sector? What innovations are emerging in this area?

One of the biggest challenges we face as an industry is decarbonisation. To succeed, the world fleet will need to replace the fuel currently used, but in the meantime there is a lot that can be done today if we all support digitalisation and work on becoming a more efficient industry. I am particularly referring to operational efficiency which holds tremendous potential for cutting our emissions without delay. We strongly support initiatives such as those launched by the Blue Visby Consortium which focuses on reducing the practice of "sail fast then wait". Helping our industry in taking such initiatives on board is crucial and so is the co-operation of other parts of the supply chain, including the ports. In terms of digitalisation, we have launched the "25 by 25" campaign. The campaign works as a committment by some of the world's biggest shippers in the bulk sector to target moving 25% of their annual seaborne trade volume for at least one commodity using eBLs by 2025.

### Can you provide information about the market and industry reports you publish? How do these reports impact the sector?

Our market reports are available throughout the industry and beyond to help our members, the media and actors outside of shipping stay informed and up to date on



As we work towards a future of decarbonised ships, BIMCO will continue to support our members with the contractual backbone and advice that they need. And we will continue to support the IMO and other international regulatory bodies with expert insight to help prepare for a greener future.

important developments across the container, dry bulk and tanker segments. We publish a weekly "Shipping number of the week" as well as a monthly overview and outlook for the three segments in rotation.

### What are BIMCO's strategic goals for the future? Which projects do you plan to focus on in the coming years?

We will continue to be the practical voice of shipping. What this means is that we will continue to provide our members with advice, support and tools that work in practice, not just on paper. Right now, shipping is facing an increasingly complicated commercial and regulatory landscape, as well as rapid technological breakthroughs and digitalisation. The shipping industry is facing disruption and is digitising fast, together with the rest of the world. This area is a high priority for

BIMCO and one of the reasons why we have established a Standards, Innovation & Research function at BIMCO. So, overall, BIMCO's goals and objectives are to be at the forefront of global developments in shipping so our members can thrive while decarbonising our industry.

### How do you see the future of the maritime industry shaping up? How is BIMCO preparing for these changes?

In July last year the IMO agreed on an updated IMO GHG Strategy, and with this the urgency to decarbonise our industry increased. What we see for the future of the shipping industry is a greener industry. We believe the IMO GHG strategy is groundbreaking. It translates into the world fleet reducing its total GHG emissions by more than 70% compared to 2008 and we fully support the IMO's strategy. We believe the 2040 check point is possible, but it will mean profound changes in the way ships must be built, operated and fueled. It will impact every shipowner on the planet and investment decisions will need to be reassessed, designs will need to be changed and business models will be forever impacted. As we work towards a future of decarbonised ships, BIMCO will continue to support our members with the contractual backbone and advice that they need. And we will continue to support the IMO and other international regulatory bodies with expert insight to help prepare for a greener future.

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### **Eriş Propeller:**

### Over 50 Years of Experience in a Journey Full of Challenges and Success

The story of Eriş Propeller starts with Turcan Eriş's career that began in 1965 in the foundries at Karaköy Perşembe Pazarı. Based on that foundation, the company took its first steps in a small foundry in Dudullu IMES Industrial Park and grew over time to become one of the largest propeller manufacturers in Turkey, operating in an area of 4,000 square meters. According to Şener Eriş, one of the biggest challenges encountered in this process was the small scale of the foundries operated, and the fact that the workforce was not familiar with foundry technology. Still, these challenges did not prevent Eriş Propeller from growing. Today, as Turkey's largest propeller manufacturer, the company is a pioneer in the production of propellers and related marine equipment.

### **Quality and Technology** in the Production Process

Eriş Propeller follows a meticulous process in propeller production. Şener Eriş states that the process of manufacturing a certified propeller starts with thinking about the machine and the hull of the vessel when as part of the engineering project. Then comes the CAD designs and approvals from the regulatory authorities. Material analyses and tests support the whole process with invaluable insights. Eriş underlines that all production stages require great care and experience, and that every step of the propeller is completed in compliance with strict quality standards.

#### **Success with Technological Innovations**

The demand for sustainability and innovative products is on the rise in the marine propeller market. Adapting well to these innovations, Eriş Propeller utilizes its 50 years of experience in the production process supported by propeller analysis and design software. The company develops projects especially for fishing boats, ferries, tugboats, sailboats and yachts. After moving to the new factory, it has also increased its propeller production capacity for bigger and heavier vessels.



### The Contributions of AMD and CAD-CAM Technologies

Eriş Propeller employs AMD and CAD-CAM technologies in its production processes for custom-designed models. Şener Eriş draws attention to the importance of modelling in propeller casting and states that CAD-CAM technologies enable more precise and efficient production. These technologies increase production efficiency and make significant contributions to product quality.

#### Eriş Propeller in the Global Markets

Turkey occupies an important position in the global shipbuilding industry. Eriş Pervane aims to maintain this position and establish a strong presence in the international competition. Şener Eriş states that Turkish shipyards are in an attractive position thanks to low-cost labor and proximity to Europe, and that Eriş Propeller continues to benefit from these advantages. He adds that Turkish shipyards have played an important part in Norway's endeavors of modernizing its fleet with electric propulsion systems.











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### **INTERVIEW**

### GÖKHAN TÜRKHAN

Kuzey Star Shipyard / Marketing Manager

### "Making a Difference in the Industry with Our Innovative Projects."

Since its establishment in 2010, Kuzey Star Shipyard has proven itself as an innovative and pioneering player in the Turkish maritime industry. Kuzey Star Shipyard, which quickly distinguished itself among strong competitors in the sector, continues to grow by undertaking high-value-added projects. We discussed ship conversion and modernization projects, the "All-in-One" service model, and sustainability-focused investments with Gökhan Türkhan.

### How would you assess the journey of Kuzey Star Shipyard, which started in 2010, and the position it has reached today?

At the outset of our enterprise, our objective was to establish ourselves as a leading shipyard within our sector. The existence of phenomenally successful shipyards provided motivation for the pursuit of even more favourable outcomes. By making investments that were aligned with this goal, we were able to reach our objective in a relatively brief period of time. We continue to move forward by setting new goals for ourselves. In the highly competitive Turkish shipyard industry, we sought to distinguish ourselves by attaining pioneering achievements and delivering high-valueadded projects. We successfully completed and delivered a number of notable initiatives, including the first comprehensive LNG ship maintenance project, the conversion of an offshore support vessel to a live fish carrier vessel, the largest exhaust gas cleaning system (EGCS) ever installed on a ship in Turkey, and the largest ballast water treatment system (BWTS) ever installed on a ship in Turkey.

### What factors have been the most significant in facilitating the growth of your shipyard in recent years?

The value placed on employees and the





team spirit fostered, along with on-site investments, have constituted significant factors contributing to growth. Following the commencement of operations at our Greendock (Suezmax) dock, we have been able to serve fleets of all sizes from a multitude of customers, thereby expanding our customer portfolio. This has resulted in an increase in Türkiye's share of the global repair market. Furthermore, the GTT certification enabled the shipyard to undertake repairs on LNG vessels in Türkiye, with numerous successful LNG projects completed to date.

The ongoing investment in our shipyard, exemplified by the recent addition of new repair workshops, has enhanced the service and quality we offer to ship owners, thereby contributing to our growth. These new facilities have facilitated more efficient repair periods for both contractor firms operating at our shipyard and ship owners.

### How does the "All-in-One" service model you offer create a difference in the sector?

A considerable proportion of the repair tasks are conducted by our own team, particularly those related to technical work on the vessels, such as main engines, auxiliary machines, electrical motors, deck equipment, pumps, valves, hydraulic and pneumatic systems. Our ability to perform these tasks internally allows our customers' superintendents to complete the majority of their work on site, thereby saving time and

benefiting from the quality control guarantees provided by our shipyard.

### Can you elaborate on your approach to ship conversion and modernization projects?

From the outset of our engagement with ship conversions, we have been at the vanguard of our industry. We have successfully completed a number of projects, including the conversion of container ships to livestock carriers, lengthening, and shortening projects, the conversion of PSVs to live fish carriers, the conversion of OSVs to seismic and research vessels, and similar projects. We have delivered these projects to our customers. We provide substantial assistance to ship owners in the planning of projects. Such projects frequently undergo numerous alterations during the construction phase. Our experience enables us to provide on-site solutions without causing delays for the ship owners. We endeavour to offer comprehensive turnkey solutions, including planning and project management, for modernisation projects. Motivating the team is crucial in these long-term projects, and achieving this leads to success. Our shipyard was the first to receive EGCS approval for a Turkishflagged vessel, with the project managed and implemented by us.

### What are Kuzey Star Shipyard's upcoming projects and strategic objectives? Are there any new investments on the horizon?

The recent acquisition of an Aframax-si-

zed floating dock represents the inaugural stage of investment in our Yalova branch. The objective is to provide the same standard of quality and speed of service at the Yalova branch. There are ongoing new construction projects approaching the signing stage, and a modernisation project in Turkey is also in progress. This is expected to be the first of its kind in Türkiye. Furthermore, solar panels are being installed to achieve zero carbon emissions, with approximately 6,000 solar panels already installed on the roofs of our facilities, thereby covering a significant portion of our energy consumption. Additionally, we have commenced the process of updating our company vehicles to electric models.

### What are your perspectives on the current state of the Turkish maritime sector, and what are your expectations for the future?

The Turkish maritime sector operates within a dynamic regional context, characterised by a complex interplay of challenges and opportunities. Technological advancement and the pursuit of sustainable practices will prove pivotal in determining the trajectory of the sector in the years to come. The necessity for continuous innovation and adaptation on the part of industry players is driven by a combination of factors, including technological advancements, environmental regulations, and global competition. By transforming these challenges into opportunities, the Turkish maritime sector can progress towards a sustainable and competitive future.



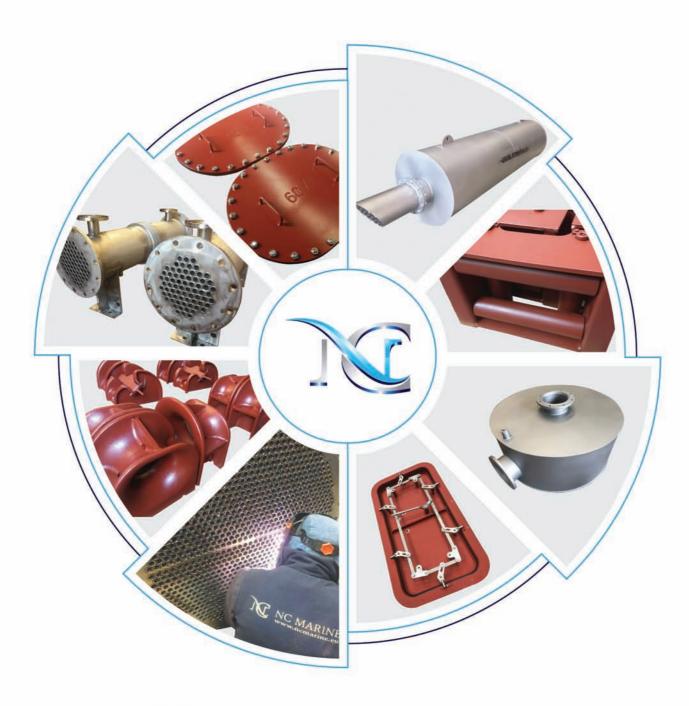
SCAFFOLDING, ANCHORING AND MOORING EQUIPMENT

DECK VENTILATION EQUIPMENT

SHIP DECK EQUIPMENT

MARINE EXHAUST SYSTEMS

REPAIR, MAINTENANCE AND SERVICE





### FACTORY / CENTER:





### In the Context of Houthi Attacks Interaction of General Average and War/Terror Coverage

#### What is General Average?

Joint Average is a principle of maritime law whereby the ship and cargo owners jointly bear the extraordinary expenses and damages incurred in order to ensure that the ship reaches a safe harbour. This principle requires that damages to the ship and cargo be apportioned proportionately between the parties, if necessary for the safety of the ship. General Average arises when, in the face of a danger threatening a General maritime enterprise, sacrifices or expenditures are made for the protection of the interests endangered.

The York-Antwerp Rules (YAR) are used as the legal basis. These rules are incorporated into the contract of carriage and provide the right to declare General Average. Unless otherwise agreed, the allocation of damages and costs is governed by the 1994 York-Antwerp Rules. YAR Rule A determines when General Average arises: A ship incurs a General Average when an extraordinary sacrifice or expenditure is made to protect the ship from danger.

### War Coverage and War Exception Clause

War Coverage is a different type of insurance than standard ship or cargo insurance, which covers damages caused by extraordinary circumstances such as war, civil war and rebellion. This cover is usually offered as an additional policy since such risks are usually excluded in standard policies. The War Exclusion Clause contains a special clause stating that

damages occurring in situations such as war, civil war and revolution are excluded from the insurance coverage. This clause clearly states that if the relevant war coverage policy is not available, such losses will not be covered by the insurance.

The expenses incurred for the safety of the ship and which can be considered within the scope of the General aviation clause in the insurance policy. In this context, regardless of whether the damage is caused by acts of war or not, the expenses incurred within the framework of General average can be covered by the insurance. Such measures taken in the face of war and other hazards provide critical assurance for ship and cargo owners.

The Application of Institute Strikes Clause (Cargo) 1.2 and 1.3 is a special insurance clause that covers losses arising from strikes, labour movements, terrorism and popular movements. Clause 1.2 covers losses arising out of strikes and labour movements, while Clause 1.3 covers losses arising out of wider events such as terrorism or civil commotion. These clauses increase the flexibility and scope of insurance policies by ensuring that cargo is covered against such events.

### **Evaluation in terms of Piracy:**

Acts of piracy have been most clearly clarified in the context of maritime law by the "Peter Wessel" arbitration award (ND 1990/140). This case dealt with an important legal dispute as to whether costs incurred as a result of a bomb threat should be covered by a marine or war insurer. The Court held that a war risk in-

surer would not be liable if the intention behind the act could not be established. However, it was stated that if the act had a political or social character, this could be considered as a war risk. This decision shows that the motive behind the action may be a determining factor in the assessment of war risk.

In cases of general average, the ship and cargo owners contribute proportionately to the expenses incurred for the salvage of the ship or for the minimisation of damages. The costs of such measures taken in the event of war are expected to be borne by the war insurer. Piracy is recognised as an act of war; therefore, hull and loss of hire insurers are liable in the event of a General general average arising from piracy. War insurance becomes directly liable for the contribution to the general average caused by piracy. Although cargo insurance policies do not contain specific rules on the organisation of General general average contributions, widely used policies such as the Norwegian Cargo Clauses of 1995 (CICG) and the Institute Cargo Clauses of 1982 (ICC) cover this situation.

The 1995 CICG is based on the York-Antwerp Rules and considers acts of piracy as efforts to prevent or minimise loss and does not exclude such acts from insurance coverage. The 1982 ICC, on the other hand, generally accepts the application of the York-Antwerp Rules, but coverage for piracy is provided only under the terms of ICC (A). With a similar approach, the English insurance

system categorises the perils of war and perils of the sea as separate perils and insurance policies are issued in line with these principles.

### Piracy and Recognition as a Danger of War:

Piracy is recognised as a peril of war in the context of marine insurance and is included in the insurance coverage in this context. According to Article 101 of the United Nations Convention on the Law of the Sea (UNCLOS), piracy is defined as unlawful acts of violence, detention or plunder committed by the crew of private ships or aircraft for private purposes. From a maritime insurance perspective, piracy is considered to be an unlawful use of force at sea involving violence, theft or damage, and such acts are generally not politically motivated.

According to the International Maritime Bureau (IMB) Piracy Reporting Centre, acts of piracy are defined as armed robberies, mostly occurring in ports or territorial waters. This broad definition covers any attack on a ship. However, the motive behind the attack plays a critical role in determining whether an act of piracy falls within the scope of war risk. In the "Peter Wessel" case, the court held that the war risk insurer would not be liable if the motive behind the attack could not be established. However, if the motive behind the act is of a political or social nature, this may qualify the act as a war risk.

Piracy has also been defined in English case law through various cases. In particular, the "R. v. Dawson" case dated 1696 defines piracy as "a nautical term for robbery" and emphasises that the element of "robbery" must be present for the act of piracy to occur. In this context, piracy is generally seen as an act committed for economic gain. The "private ends" criterion makes it easier to distinguish between piracy and terrorism and measures taken by state power. Pirates usually seize property or persons by force for personal gain, whereas terrorists act with a political motivation. This distinction is of great importance for the applicability of insu-



rance policies and the legality of ransom payments.

### Collective Idling in the Event of Missile Attack

It is difficult to provide a universal definition of terrorism; this difficulty is particularly acute when it comes to more specific issues such as 'maritime terrorism'. The main difference between piracy and terrorism lies in the motives behind these acts. Piracy is usually carried out with selfish motivations (animus furandi), whereas terrorism is an act carried out for a larger purpose and is often recognised as a form of armed insurgency. Terrorism can also be understood as a strategy combining political struggle, guerrilla warfare and acts of terrorism.

In the event of a missile attack on a ship and the damage caused by this attack is not covered by the war cover, the principle of general average may come into play. General general average provides for the proportionate sharing of the expenses incurred for the salvage of the ship and cargo, regardless of the cause of the damage. However, in such a case, whether

the damage can be considered within the scope of general average depends on the relevant general average rules and policy provisions.

If a ship is damaged as a result of a missile attack and there is no valid war coverage policy for this ship, this damage may not be covered by the war exception clause. However, within the scope of general average, the principle that the expenses incurred to ensure the safety of the ship are borne jointly by the ship and cargo owners is valid.

If the missile attack is considered to be an event attributable to strikes or civil commotion, or if it is treated as terrorism, insurance cover may be provided under the relevant clauses of the Institute Strikes Clause. In this case, it should be carefully examined whether the damage falls within the scope of these clauses.

The question of whether the damage to the cargo caused by a terrorist attack can be considered within the scope of general average depends on the characteristics of the incident and the nature of the damage. What is essential is that the

expenditures made or the damage suffered must have been made for the purpose of ensuring the safety of the ship and the cargo. If, as a result of a terrorist attack, extraordinary expenditures are necessary for the ship to reach a safe harbour or for the cargo to be rescued, such expenditures may be considered within the scope of general average.

Participation in joint and several liability is based on the "joint" nature of the damage and expenses incurred, i.e., the expenses incurred and damages suffered to ensure the safety of the ship and cargo must be apportioned proportionately between the ship and cargo owners. Most insurance policies cover losses incurred as a result of terrorist attacks. However, the relationship between the participation in the General average and the insurance indemnity may vary according to the terms of the policy and the characteristics of the event.

### Exceptions to the obligation to contribute - the defence of negligence

Certain safety regulations must be complied with during sea voyages. According to English maritime law, a ship must be "seaworthy" before starting a voyage. In this context, cases where shipowners fail to make the ship seaworthy in waters under the threat of piracy are considered as negligent behaviour. Such omissions give rise to a claim that the shipowners failed to exercise due diligence in the face of piracy attacks. This is referred to as the "actionable negligence defence" and Article D of the York-Antwerp Rules is the legal basis for this defence.

Article D of the York-Antwerp Rules provides that the claim for contribution in cases of joint average shall not be affected by fault arising out of the course of the incident. However, such fault may invalidate the claim of the party claiming contribution. This rule means that the party committing the fault cannot claim contribution from other parties, but this only applies where the fault is actionable. That is, if one party is at fault, that party cannot claim contribution from other injured parties, provided that the fault is of



such a nature that it can be the subject of a legal action.

In this framework, failure to take the necessary security measures to prevent a piracy attack raises the question of whether the shipowner has breached its contractual obligations or norms of international law. In the event of a breach of security regulations, the insurer is usually exempted from liability. However, the insurer may be liable if it is proved that the damage was not a consequence of the breach or that the insured was not responsible for the breach. In this case, the burden of proof lies with the shipowner, who must prove that the damage was not caused by his fault or negligence. Insurers may tend to avoid liability in the event of a piracy attack, arguing that security arrangements have been breached.

Consequently, if the damage caused by a missile attack on a ship is not covered by the war cover, the principle of general average comes into play. General average is a principle of maritime law whereby

the ship and cargo owners jointly bear the extraordinary expenses incurred in getting the ship to a safe harbour or salvaging the cargo. Comprehensive cargo insurance policies, such as the Institute Cargo Clauses (A), provide cover for general average and such insurance policies are widely favoured in the maritime industry as they cover most causes of loss or damage. General average covers expenses arising from events that cause damage to the ship or cargo; these may include events such as mutinies, sabotage and acts of terrorism. The assessment of loss as a General average, including acts of war, depends on the relevant policy provisions and the rules of General average. The differences in motivation between piracy and terrorism play a critical role in determining which insurance policy applies. If, as a result of a terrorist attack, extraordinary expenditures are required for the ship to reach a safe harbour or for the salvage of the cargo, these expenditures may be considered as General avarage. What is essential is that the expenditures are made for the purpose of ensuring the safety of the ship and cargo.

### **Emesco Marine Committed to Providing Value-Added Solutions for the Maritime Industry**

Emesco Marine was founded to carry Emesco's experience in industrial fire extinguishing systems to the maritime sector. Murat Sağır, General Manager, summarizes the company's goal as "to be a pioneering company that offers value-added solutions with advanced technologies in the sector and maximizes customer satisfaction." He states that, in order to achieve these goals, they aim to offer the most effective products by staying abreast of current technological developments.

Innovative Approaches in Fire Extinguishing and Detection Systems
The systems used by Emesco Marine, which specializes in mobile fire prevention and extinguishing systems, stand out with their low maintenance costs, ability to extinguish different types of fires, and instant refill ability. The water mist technology, in turn, enables effective response to electrical and electric vehicle fires. Murat Sağır, General Manager of the company, adds that they are working on detection systems that detect fire before it breaks out.

### Customer Satisfaction and Quality Policy

Working meticulously to keep customer satisfaction at the highest level, Emesco Marine pays close attention to customer feedback and continuously improves its processes. "We apply strict quality control procedures at every stage of the production process and have a flexible structure to provide fast and effective solutions to meet our customers' needs," says Sağır. He states that they aim to establish long-term business relationships by offering customized solutions through project-based work.

### Product Design and Development Processes

Operating in a manufacturing plant with an indoors space of 8000 m<sup>2</sup> in Kocaeli, Emesco Marine offers products to meet the demands of customers in the maritime and industrial sectors. Sağır states that, during the product design phase they carry out 3D modeling using state-of-the-art technologies, and offer solutions compliant with high and strict security requirements. He underlines that, thanks to their experienced team and state-of-the-art facilities, they have overcome many trying challenges such as cost optimization.



#### **Fire Monitors and Towers**

Fire monitors and towers provide effective monitoring and response in industrial complexes with high fire risk, such as ports, chemical plants and refineries. General Manager Sağır states that these products boast substantial water and foam capacity and guarantee durability in harsh industrial environments. These systems, which increase personnel safety with their remote control feature, offer fast and effective intervention in case of fire.

### **Targets regarding** the International Markets

Aiming to reinforce its presence in the international markets with the office opened in London in 2024, Emesco Marine focuses on European, Asian and American markets. "We conduct a rigorous analysis process to adapt to local market dynamics, taking into account the unique needs of each region," says Murat Sağır, General Manager. Committed to providing customers with the highest quality products and services, the company aims

to increase brand awareness in the global markets through investments in innovative technologies.

### **Innovative Solutions** and Plans for the Future

Emesco Marine is working on special fire extinguishing systems for electric vehicle fires. Noting that they attach great importance to the mobility of these systems and develop environmentally friendly technologies that provide maximum efficiency with minimal water consumption, Sağır adds that they aim to raise fire safety standards in the future and reinforce their leading position in the global market.

#### **Social Responsibility Projects**

Emesco Marine also actively participates in social responsibility projects. Stating that they have built two water wells in regions in need of water abroad and implemented six library projects in Turkey, Sağır added that they have contributed to the education of children with a library of 2000 books established at Mahmut Bıçakçı Secondary School in Trabzon Sürmene.

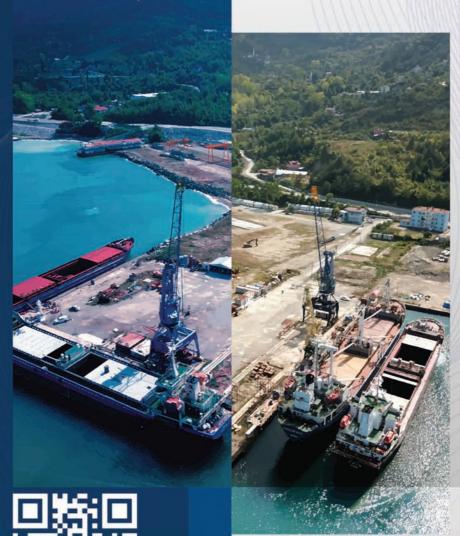




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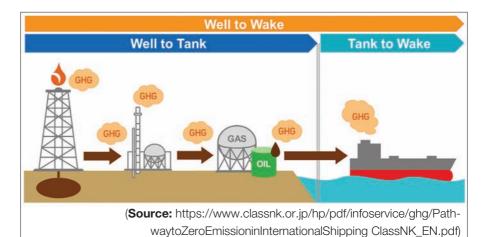
## How to Choose the Right Strategy for Fuel and Engine Selection in Accordance with the Fuel EU Maritime Directive?

In the previous article, we discussed how ships sailing to the EU will be affected by the Fuel EU Directive in order to achieve the 2050 carbon neutral target. It was also mentioned that especially for companies operating intensively to the EU ports, the Fuel EU Directive will bring a much higher financial burden compared to the EU ETS. In this article today, I will focus on how alternative fuels will provide the target value according to Fuel EU Directive 2023/1805.

As it is known, both the Fuel EU and IMO MEPC 81 regulations necessitate the use of low-carbon fuels and/or fuels that use renewable energy sources in the production and supply process, using the same methodology. The Fuel EU Directive covers ships of **5000** GT and above.

To summarize briefly:

- In the calculation of target value of carbon emissions, it takes into account not the CO<sub>2</sub> emissions per MT, unlike the CII calculation, but the equivalent CO<sub>2</sub> emissions per MJ. Equivalent CO<sub>2</sub> emission per MJ is specified as GHG Intensity (gCO2eq/MJ).
- Target GHG Intensity changes every 5 years, and shipping companies are expected to meet these target values. The base value is 91.16 gCO2eq/MJ. The target values to be determined for the target value decrease aggressively in the coming



years. The table-1 below shows that the annual reduction targets will become more ambitious up to 2050.

- Equivalent CO<sub>2</sub> values consist of the sum of CH<sub>4</sub> (Methane) and N<sub>2</sub>O (Nitrous oxide) components in addition to CO<sub>2</sub>.
- The calorific values of fuels are also important in the calculations.
- Unlike the CII calculation, it does not only take into account the CO<sub>2</sub> emissions released into the atmosphere by combustion in ship engines (TtW-Tank to Wake), but also the equivalent CO<sub>2</sub> emissions released into the atmosphere during the production and supply chain processes (WtT-Well to Tank). It covers all equivalent CO<sub>2</sub> values in the fuel's life cycle (WtW-Well to Wake). In summary, the equivalent CO<sub>2</sub> value released to the environment throughout the fuel's life cycle (WtW)

 $GHG_e [gCO_{2eq}] = W tT$ (fuel, electricity)+TtW (Combustion, slip)

The difference between CII rate and Fuel EU-MEPC 81 calculations for vessels of 5000 GT and above within the scope of 2050 targets also contains a contradiction. This contradiction needs to be eliminated especially when the MEPC 81 enters into force. Let's try to explain this contradiction as follows:

Let's consider a company that has made the necessary conversion to burn hydrogen on its ships in accordance with the Fuel EU Directive. The cheapest alternative for the hydrogen used will be the fuel type obtained by carbon capture from natural gas. In the case of hydrogen use, zero carbon emission is released according to the CII rate calculation. In this case, what is the situation of hydrogen, which we define as clean energy, according to the

2025	2030	2035	2040	2045	2050
-2%	-6%	-14,5%	-31%	-62%	-80%

Table-1. The target GHG Intensity values for every five-year period starting from 2025

Table-2. WtT equivalance CO2 and TtW emissions factors for per ton fuel consumption

Fuel type	LCV (MJ/g	CO <sub>2eq, WtT</sub> (gCO2eq/MJ)	C <sub>f, CO2</sub>	C f, CH4	C <sub>f,N20</sub>	C slip, %
Fossil HFO	0,0405	13,5	3,114	0,00005	0,00018	
Fossil MDO_MGO	0,0427	14,4	3,206	0,00005	0,00018	
Fossil H <sub>2</sub> (natural gas)	0,1200	132	0	0	0	
Fossil Methanol	0,0199	31,3	1,375	0	0	

Fuel Type	Actual GHG Intensity (gCO <sub>2eq</sub> /MJ)			
Fossil HFO	91,7			
Fossil MDO_MGO	90,8			
Fossil H <sub>2</sub> (natural gas)	132			
Fossil Methanol	103,2			

Table-3. Comparison of GHG Intensity values of methanol fuel with fossil fuels used intensively by ships

Fuel EU application? The table-2 shows the WtT ( $CO_{2eq^2\ WtT}$ ) and Equivalent  $CO_2$  values of different fuels at the WtT stage. It should be noted that Fossil Hydrogen (gray Hydrogen) has the highest WtT emissions. Gray Methanol has the second highest WtT emissions.

If we look at the table-3, according to Fuel EU directive, the WtT GHG density of HFO, Fossil methanol and Fossil H2 is as follows:

Let's calculate the ship Compliance Balance and the reward-penalty status according to the calculated GHG Intensity values. The target GHG intensity in 2025 is 89.3 gCO2eq/MJ. The table-4 shows fuel penalties of different fossil Fuels

According to the CII calculation, a ship with an efficiency class of "A", when calling at EU ports and using the same fuel, suddenly becomes the fuel type that pollutes the environment the most and is subject to the highest penalties according to the "Fuel EU Directive". If the IMO and the EU want to combat global warming effectively, they will have to harmonize the CII and Fuel EU metrics instead of allowing them to contradict each other.

The same applies to ships over 400 GT. Let's assume that a ship using hydrogen obtained from natural gas generates electricity with a fuel cell and transfers this energy the propulsion sytem via PTI or to an directly electric propulsion system. In this case, since the Fuel EU application covers 5000GT and above, a company that decides on a structural transformation in new construction ships of 400 GT and above is seen to have built an environmentally friendly ship, while according to the WtT method used in the Fuel EU directive, it releases about 10 times more carbon into the atmosphere than MDO although it is shown to be more environmentally friendly according to AER metric. While bio or e-hydrogen seems like a solution, these fuels are not feasible in the medium term as their total cost is much higher than MGO and HFO fuel cost including fuel penalty.

A similar situation applies to methanol obtained from coal or natural gas. Engine manufacturers create the perception that gray methanol is more environmentally friendly by calculating only on the basis of carbon emissions per MT, regardless of the calorific value of the fuel. However, when

the fuel consumption is taken into account according to the equivalent energy value of HFO or MGO, the carbon factor, which is seen as 1.375, increases to 3.20. As a result, even the WtT CO, emission reaches the MGO level. The methanol price equivalent to MGO also reaches from the level of about 300\$ to the level of 700\$. In the case of using gray methanol, more fuel penalty is paid than HFO, LFO and MGO, and when fuel prices are calculated according to equivalent MGO or HFO, they reach the same price level as fossil fuels or even slightly higher. In case of switching to bio methanol, the ship, which sails without paying any penalty between 2025-2030, is penalized again after 2030.

Among alternative fuels, it is understood that the appropriate starting point is Gray LNG. Here, the question of which main engine type should be chosen is important. Let's assume for a moment that we convert a 4-stroke diesel engine to LNG and choose a DF (dual fuel) main engine operating on a four-stroke diesel cycle in the first construction. In this case, unfortunately, the company will have made the wrong choice. However, when the company chooses a DF LNG engine operating on a 2-stroke dual-

Fuel Type	Actual GHG Intensity [gCO2e/MJ]	Complience Balance	Fuel Penalty per tonne [€]		
Fossil HFO	91,7	-972000	€	620,48	
Fossil MDO MGO	90,8	-640500	€	412,92	
Fossil H <sub>2</sub> (natural gas)	132	-51240000	€	22.722,80	
Fossil Methanol	103,2	-2766100	€	1.568,97	

Table-4. Fuel penalties of different fossil fuels

Table-5. Different DF engines and their penalty status

	Attained GHG Intensity [gCO <sub>2eq</sub> /MJ]	Reward/ Penalty	2025-2030	Reward/ Penalty	2030-2035	Reward/ Penalty	2035-2040
GRAY_LNG_DF_OTTO MEDIUM SPEED	91,02	PENALTY	€ 459.964	PENALTY	€ 1.420.884	PENALTY	€ 3.502.878
GRAY_LNG_DF_OTTO SLOW SPEED	83,93	REWARD	€ 1.584.762	REWARD	€ 541.411	PENALTY	€ 1.279.181
GRAY_LNG_DF_DIESEL SLOW SPEED	76,13	REWARD	€ 4.204.226	REWARD	€ 3.055.275	REWARD	€ 565.882
GRAY_METHANOL DF ENGINES	100,4	PENALTY	€ 2.685.152	PENALTY	€ 3.556.367	PENALTY	€ 5.444.000

fuel diesel cycle, it makes the right choice. Due to the high methane slip in four-stroke engines, GHG intensity cannot meet target values. Due to the relatively high methane slip value in 2-stroke low Speed DF LNG engines operating on the Otto cycle, they will be penalized after 2035.

It is understood that Gray LNG is the appropriate starting point among alternative fuels for ships that frequently sailed EU ports for the 2050 carbon neutral target. Here, the question of which main engine type should be chosen is of great importance. Let's assume for a moment that we convert a 4-stroke diesel engine to LNG and choose a DF (dual fuel) main engine operating on a 4-stroke diesel cycle engine during initial construction. In this case, unfortunately, the company will have made the wrong choice. However, if the choice is made in favor of a DF LNG engine operating on a 2-stroke diesel cycle, the correct choice will have been made. Since the methane slip is high in four-stroke engines, the GHG intensity target values cannot be achieved. Due to the relatively high methane slip value in 2-stroke slow Speed DF LNG engines operating on the Otto cycle, they will be subject to penalties after 2035. The table below shows the penalty and reward statuses of different fuels.

When LNG is used as a fuel, it will result in a positive balance in the account instead of a penalty. As a result, a newly built ship using an LNG-burning main engine will be able to continue its commercial activities without any problems until 2040. Assuming that prices will fall to a more reasonable level in 2040 and beyond, it seems possible to continue using Bio LNG or e-diesel with low WtT emissions. The table below shows the tank capacity requirement, penalty-reward status, and total LNG cost for a ship using Gray LNG, depending on the range. The calculation assumes a Ro-Ro ship traveling from a non-EU country to

an EU country at a speed of 16 knots and consuming 39 MT per day.

The EU AFIR Regulation (Alternative Fuels Infrastructure Regulation) mandates EU Member States to establish LNG bunkering points in TEN-T ports (Figure-2). This regulation makes the use of LNG fuel more attractive for ships that frequently sail to the EU ports. LNG bunkering points are facilities where ships can refuel with LNG.

#### Conclusion

Key Points for Ship Operators Trading Frequently to the EU

- Shipping companies that frequently trade to the EU should avoid making incorrect strategic decisions based on projects supported by EU and national funds.
- In the short term, grey methanol is not feasible as it will result in higher penalties compared to HFO, LFO, and MGO.
- Bio-methanol and e-methanol prices are expected to be significantly higher than HFO-VLSFO prices in the medium term, making them less viable.

- The EU and IMO need to address the inconsistencies between CII calculations and Fuel EU calculation metrics. At the very least, a correction factor should be added to the Attained CII formula for fuels produced according to the RED directive to align it with the Fuel EU metric.
- Considering the AFIR regulation, shipping companies that frequently trade to the EU should focus on LNG-fueled vessels in the medium term. However, careful consideration should be given to the type of engine used.

### Additional Considerations

- The availability of LNG bunkering infrastructure is crucial for the widespread adoption of LNG as a marine fuel.
- The cost of LNG fuel and the availability of incentives for LNG-fueled vessels will also impact the adoption of this technology.
- Ship operators should carefully evaluate the specific requirements of their operations and the regulatory landscape before making investment decisions.

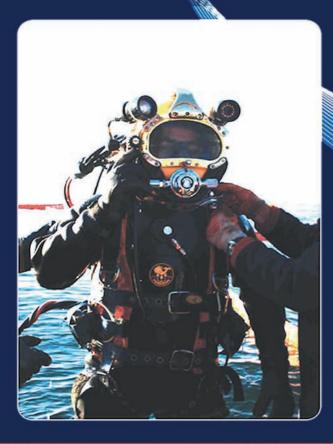


**Figure-2.** AB TEN-T Main Port and Routes. (Source: https://www.portnews.it/en/european-observatory/radar/trans-european-transport-network/)





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### When a Vessel Reaches the End of Her Useful Life?

The lifespan of a container ship can vary based on several factors such as maintenance, technological advancements, and operational demands. Typically, container ships are built to have a service life ranging from 20 to 30 years, but some vessels can operate for longer periods with proper maintenance and refurbishment.<sup>1</sup>

When a vessel reaches the end of her useful life, it undergoes a process called ship recycling or ship scrapping. This involves dismantling the ship to recover materials such as steel, iron, aluminum, and plastics, which can be recycled and used to create new products. The process begins with the ship being beached on the coast in large ship-breaking yards, like Aliaga in Türkiye or Alang in India.

The ship is then stripped of its machinery and other valuable components that can be reused or sold. The remaining structure is broken down into pieces, and the materials are processed for recycling. This method is not only economical but also environmentally beneficial as it reduces the need for new raw materials and energy consumption in steel production.<sup>2</sup>

In some cases, ships may be sunk to create artificial reefs after removing hazardous materials, or they may be repurposed as floating hotels or museums. However, the most common fate for retired ships is to be scrapped in ship-breaking yards.

Looking for alternative revenue streams, to counter the global decrease in container shipping demand, carriers have been looking at investing in the car and truck market. The container



shipping sector, by contrast, is under pressure to respond to a huge injection of capacity introduced "in almost the blink of an eye". Because of that capacity enterence, available space now is running ahead of demand, which is reducing vessel utilization and depressing freight rates.

### What are the advantaged / disadvantages for "Owning Older Ships"?

There are some advantages for shipping lines using older vessels, although these advantages need to be balanced against potential drawbacks.

Owning older ships can have both advantages and disadvantages. Here's a summary of the key points:<sup>3</sup>

#### Advantages:

• Cost Savings: Older ships can be more cost-effective to operate and maintain compared to newer vessels.

- Versatility: Older vessels might be more versatile and suitable for certain routes or cargo that do not require the latest technology or high speeds. They can be employed in less demanding trade lanes or niche markets where the demand for shipping services might not necessitate the use of newer, more advanced vessels.
- Unique Features: Older ships may offer unique features that are not found on newer ships, such as grand dining rooms and a sense of tradition.
- Incorporation of New Features: During refurbishments, older ships can incorporate new features, enhancing the onboard experience.

#### Disadvantages:

- Maintenance Costs: Older ships may require more frequent and costly maintenance due to wear and tear.
  - Modern Amenities: They may lack

modern amenities and technology found in newer ships.

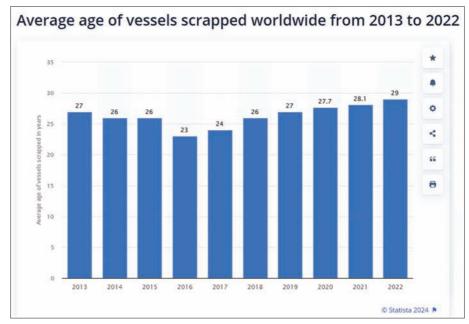
- Environmental Regulations: Older ships might not meet current environmental regulations, leading to potential fines or restrictions.
- Safety Concerns: There could be safety concerns due to outdated design or equipment. It's important to weigh these factors carefully when considering the ownership of an older ship. Each situation will have its own set of circumstances that could influence the decision.

Ultimately, while older vessels might offer initial cost advantages, shipping lines need to carefully consider the trade-offs between cost savings and potential higher operating expenses and regulatory compliance issues when using older ships in their fleets.

If a ship were to be considered as a human, the average age of a ship in the world merchant fleet would be over 20 years around 28 years<sup>4</sup>. This is similar to the average age of a young adult. However, it's important to note that ships, unlike humans, do not age biologically but rather through wear and tear from use and the marine environment. The concept of a ship having an "average age" is more about the typical lifespan and service period of vessels in the fleet.

Of course, the following points should be taken into consideration in order to extend the life of the ship.

Quality Materials: The use of highquality materials in both construction and repairs is crucial. This approach ensures greater durability and resilience against



harsh marine conditions.

Operational Best Practices: Efficient operational practices, including the use of modern navigation systems and balanced cargo-loading techniques, are fundamental. These practices not only prolong the ship's life but also enhance safety and efficiency.

A ship's construction materials will eventually be recycled in large part. Materials can be reused, including those the company or ship owner removes in the early days before a ship is retired and the last hull plates at the ship breaking yard. Metals will be further purified and melted down to create new hull plates and other materials that may eventually be used to construct larger, more advanced ships.

In contrast, sentimental and commemorative things may continue, especially in cruise company offices. Salvaged items may be displayed aboard newer ships or as souvenirs in museums or private collections. Many other materials also find other industrial uses. Depending on the ship's size and the scrapyard's work schedule, scrapping a vessel could take just a few weeks, several months, or even years until the last traces of the hull finally disappear.

During the route, many individuals are engaged, and for those with close ties to a vessel, it may be an emotional voyage. But the scrapped ship will ultimately continue to exist in the memories and hearts of the hundreds of millions of people who sailed on her, not just in the recycled or reused items or souvenirs.

Wishing Calms Seas All the Mariners.

### Sources:

- (1) PFE Express Ltd
- (2) 2024 Martide Pte. Ltd Seatrade Maritime News
  - (3) https://maritime-union.org/
- (4) World merchant fleet age by vessel type 2022 | Statista



# Pioneering Sustainable and Innovative Solutions in Maritime Electrical Systems

Bilim Marine Technology, established in 2022, has rapidly established itself as a significant presence within the maritime industry. Drawing on four decades of industry experience, General Manager Bozan Karataş underscores the company's dedication to providing high-quality, sustainable technologies with a keen emphasis on customer satisfaction. This customer-centric approach has rapidly enhanced the company's reputation for reliability and innovation within the sector.

# Integration of Cutting-edge Technologies and Emerging Trends

In recent years, the maritime industry has placed a significant emphasis on energy efficiency and environmental sustainability. Bilim Marine Technology has demonstrated a proactive approach to the integration of these innovations into their projects. Karataş outlines the company's product range, which includes smart ship systems, hybrid and battery technologies, and the ongoing development of methanol control systems with the objective of enhancing energy efficiency.

# **Electrical Systems Services in Shipbuilding and Maintenance**

The electrical systems services provided



by Bilim Marine Technology offer significant advantages to shipowners, including enhanced operational efficiency, enhanced system reliability, and long-term performance during new ship construction and maintenance processes. Karataş emphasises the company's commitment to achieving 100% customer satisfaction by providing bespoke solutions that are specifically designed to meet the individual requirements of each client.

# **Innovative Electrical System Integration Solutions**

Bilim Marine Technology has established a reputation for excellence in the field of electrical system integration. The company provides solutions that enhance the efficiency of main and distribution panels, automation control systems, and remote monitoring services, thereby improving the operational efficiency and safety of ship operators. Karataş states that these solutions optimise energy consumption and facilitate rapid intervention in the event of faults.

# Commitment to Energy Efficiency and Sustainability

The maritime sector places the utmost importance on energy quality and efficiency. The innovations developed by Bilim Marine Technology have been demonstrated to be effective in reducing energy consumption, lowering operational costs and enhancing energy quality, thereby minimising the potential for electrical system failures. Karataş posits that these services facilitate more sustainable and efficient operations for shipowners.

### **Ensuring the Safety of Electrical Systems**

The safety of personnel and the protection of assets are of paramount importance to Bilim Marine Technology. The company provides secure and informed services through the implementation of advanced protection systems, regular field inspections, and comprehensive





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# **Product Certificates Used in the Maritime Industry**

The List of Products to be Certified and Certification requests, which is the document in which the classification societies define their demands for the equipment to be used on the ship in the renovation and reconstruction processes, are forwarded to the shipyards and shipbuilders at the beginning of the project.

These lists are derived from the experience of the classification society in a similar project or, in very rare cases, are presented to its customers in a completely harmonized manner to the ship for which the classification contract is being made.

This document, which includes certification requests, should be carefully examined by the shipyard and shipowners at the very beginning of the process, and the classification society criteria should be correctly transferred to the relevant departments in the selection of products to be purchased.

Incorrect product supply and incorrect evaluation of certification processes negatively affect the project timeline and shipbuilding quality, as well as cause work duplication and financial losses in all processes.

Let's elaborate below what the requested Type approval, MED certificate, Product certificate, Test certificate published by the classification societies means.

### **Type Approval Certificate**

It is a process that certifies that the products, equipment or system produced by a manufacturer that has a certificate in accordance with ISO 9001 and a derivative quality management system or that fully carries this systematic in its own production processes comply with the Classification rules and international

maritime standards. This process requires manufacturers to inspect and certify their products by an independent and competent organization before placing them on the market. Classification societies, through technical examinations, tests and certification, guarantee the reliability and durability of materials and equipment used in marine vessels. The fact that a product has a Type Approval Certificate means that the product will be produced with a constant quality and in the qualifications determined by the auditor bodies.

According to the type of product, production plans are subject to approval within the scope of rules and standards. It takes only one or a group of products according to the type of product in mass production and performs the tests required by the rules and standards and verifies them.

If the audits carried out for the company's quality management system and the acceptance tests of the product are deemed appropriate, a certificate is issued by the classification societies and this certificate is published on the website of the relevant institution. This document is published for a product model.

Classification societies give full authority to the companies to which they give type approval certificates, whose quality management system they find robust, according to the class of the product, and approve the authorized personnel of the manufacturer to carry out partial or all tests. This type of authorization is granted to companies engaged in mass production.

### **Product Certification**

Certificates issued by IACS member societies are essential for ensuring the sa-

fety, reliability, and compliance of esential products used in the maritime industry. These certificates serve as formal attestations that a product, equipment, or system has been rigorously tested and meets the class rules, flags state requirements and international standards identified by the society. Products such as engines, navigation systems, and safety equipment are typically subject to certification to guarantee their performance in the challenging conditions of maritime operations.

IACS member societies are independent organizations that provide technical standards for the design, construction, and maintenance of ships and offshore structures. When these societies issue certificates, they confirm that the products comply with their rules and standards, which are often based on or exceed international regulations. The certification process includes thorough inspections, testing, and documentation to verify that the products are safe, reliable, and fit for their intended purpose. Certified products are essential for the smooth and safe operation of maritime vessels and structures.

The certification of essential products by IACS member societies also plays a critical role in the global maritime industry by facilitating trade and ensuring regulatory compliance across different jurisdictions. Without these certifications, products may face restrictions or be deemed unsuitable for use, leading to operational risks and potential legal liabilities. Therefore, obtaining and maintaining certification from a recognized society is not only a regulatory requirement but also a mark of quality and safety assurance that is recognized and trusted worldwide in the maritime industry.

### **Test Certificate**

The product or products used in the maritime industry must be approved by a manufacturer by classification societies. It is a certificate showing that it meets the standards set by the party organizations (such as classification society rules, national or international standards or flag state regulations).

According to the type of product and the manufacturing process, the tests required by the rules and standards of the product to be certified are carried out and verified. Product-specific information and test results are reflected in the certificate.

# MED (Marine Equipment Directive) Certificate

MED certification is a safety and quality standard that is required by the European Union (EU) and is required for equipment used in the maritime industry to be sold in the EU market. This certificate indicates that the equipment complies with the essential requirements specified in the MED and ensures its suitability for use in marine applications. The MED certificate may be issued for products listed in the Annexes to the Directive, such as lifesaving devices, fire protection equipment and navigation systems used on ships sailing in EU waters. MED certification is issued by independent approval bodies that require manufacturers to have their products tested and approved, and this certification ensures that products are accepted in the maritime market both within and outside the EU. MED certificate products carry the rudder mark symbol on their labels.

These certificates are published up-todate both on the websites of the publishing classification society and on the https:// portal.med.emsa.europa.eu/ address of the European Union.

In the MED directive, it is stated that the product will be offered to the market in accordance with the certification modules according to its class. Certification modules are characterized as follows. Certification modules in EU directives are standardized procedures that outline the steps manufacturers must follow to demonstrate that their products comply with EU regulations. The modules vary



depending on the level of risk associated with the product and range from self-declaration by the manufacturer to more rigorous third-party assessments.

These modules provide flexibility, allowing manufacturers to choose the most appropriate conformity assessment procedure based on the nature of their products and the associated risks. The combination of different modules ensures that products entering the EU market are safe, reliable, and comply with relevant legislation.

### **Module A (Internal Production**

**Control):** This is the most basic module, where the manufacturer is responsible for ensuring and declaring that the product complies with the relevant EU directives. No involvement from a third-party body is required.

Module B (EU-Type Examination): In this module, a Notified Body examines the technical design of the product and verifies that it meets the applicable requirements. Module B must be followed by another module (e.g., C, D, E, or F) to complete the certification process.

Module C (Conformity to Type Based on Internal Production Control): After Module B, the manufacturer declares that the product remains in conformity with the type described in the EU-type examination certificate.

Module D (Conformity to Type Based on Quality Assurance of the Production Process): This module involves a Notified Body approving and monitoring the manufacturer's quality assurance system for production, inspection, and testing.

Module E (Conformity to Type Based on Quality Assurance of the Final Product): Similar to Module D, but focused on the final product inspection and testing process.

Module F (Conformity to Type Based on Product Verification): A Notified Body carries out product verification through inspection and testing of every product or of a sample.

Module G (Conformity Based on Unit Verification): This module is used for custom-made products or small-scale production, where each product is individually examined by a Notified Body.

Module H (Conformity Based on Full Quality Assurance): The manufacturer's quality system for design, production, and final inspection/testing is assessed and approved by a Notified Body.

■

# Success Rooted in Years of Experience: GNG Valve

GNG Valve has been in business for 33 years and has become a prominent figure in the industry, facing and overcoming significant challenges along the way. Gözgeç, in turn, attributes the company's rapid ascension to its accumulated experience, which he deems instrumental in propelling the company to an almost unassailable position within just two and a half years. He underscores the fact that challenges are inherent to every aspect of business, and that experience is instrumental in surmounting these challenges, frequently serving as pivotal moments on the path to success.

### **Maintaining Quality Standards**

GNG Valve employs a meticulous methodology to guarantee the maintenance of quality standards throughout the production process. Gezginci asserts that forming alliances with internationally certified foundries was the indispensable preliminary step in establishing these standards. Notwithstanding the increase in costs, the company remains unwavering in its commitment to this standard, with the entire process overseen by the most experienced professionals and utilising cutting-edge technology within the company's expertise in the production and stocking of specialty items, including gray iron, ductile iron, bronze, steel, and stainless steel cast valves, reflects a commitment to maintaining the highest standards of quality.

# **Exporting to Over 40 Countries in the Global Market**

GNG Valve's growth strategy in the global market is based on the export of its products. Gezginci draws attention to the company's participation in esteemed trade fairs and its unwavering commitment to



entering new markets on a global scale. In light of the challenges posed by the prevailing global circumstances, he emphasises the company's resolve to expand its customer base and reach a greater number of countries on a daily basis. Additionally, he notes that, as of July 2024, the company has relocated to a new 4,000-square-metre facility, with the objective of manufacturing superior-quality and value-added products, targeting exports to every accessible country.

# Customer-Centric Approach and "Zero Defect" Goal

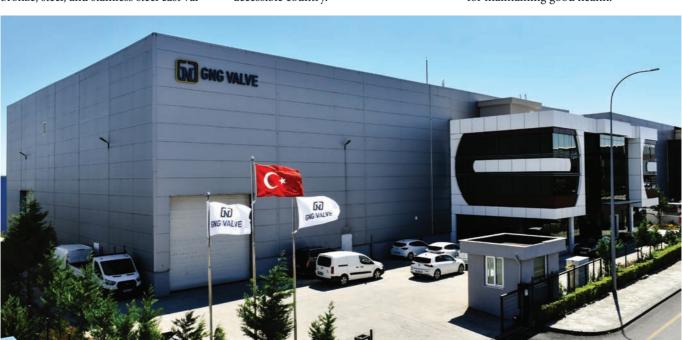
GNG Valve's customer-centric work philosophy and "Zero Defect" goal serve as the foundation for the company's cultural identity. Gezginci posits that attaining this objective necessitates collaboration with seasoned managerial and operational personnel across the entire organisational spectrum, from production to sales. Furt-

hermore, he states that investments in technology have enabled the achievement of these objectives, emphasising the significance of continuous processes and innovations in maintaining customer satisfaction.

# Gezginci's Multifaceted Background and Transition to Business

Necmettin Gezginci has a multifaceted

background that encompasses a career in music, proficiency in martial arts, and experience in maritime navigation. In reflecting on his transition into the business world, Gezginci notes that his musical abilities and expertise in conducting orchestras have played a pivotal role in his professional advancement, both within his own company and in broader business contexts. His enthusiasm for martial arts and seafaring has fostered a sense of discipline in his life, and he emphasises the importance of physical activity for maintaining good health.







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# **Maritime Traditions**

The origins of customs common among seafarers are as old as human history and vary from culture to culture. Of course, the maritime backgrounds and local cultures of different peoples living in different regions have a great influence on this diversity. Still, there are certain shared traditions among the sailors all over the world...

Some of these can be traced back to ancient times, such as the sea shanties the sailors would sing in concert to encourage each other as they pulled a rope, rowed a boat, or unfurled and extended a sheet... In ancient times, sailors doing hard labor requiring physical strength, and the galley slaves who were sentenced to rowing on the ships, would shout in unison to encourage each other, just as the seafarers of today do. The emergence of modern maritime traditions that are still relevant today dates back to the centuries to follow the age of discoveries. In this piece, we have explored the origins of a number of traditions that are more common in the navy and the sailing world:

Let's begin with a brief look at the history of saluting at sea. Today, it is customary for two ships to salute each other at sea as a sign of respect and courtesy. In ancient times, however, it was more a gesture of war or peace than a sign of courtesy. After declaring its sovereignty over the four seas in the 1320s, England demanded that all ships entering its territorial waters recognize its sovereignty by lowering their top sails. England did not tax any ship passing through the English Channel but insisted on saluting. For example, when the admiral of a Dutch warship crossing the English Channel refused to salute an English ship, war broke out between England and the Netherlands.

In the age of sail, ships greeted each other by hoisting the sails, banding the



spinnaker ropes and firing guns. The custom of saluting with gun fire first originated in the British Royal Navy and was more a gesture of goodwill than respect. When a ship entering the harbor fired its guns, it became partially disarmed for a time, which meant that it was not hostile. The main problem was who would salute first; usually the British and other powerful maritime powers forced the ships of weaker nations to fire the first salute.

In peacetime, it soon became customary for ships entering and leaving a foreign port to salute their host country with gun fire. When entering the harbor, the foreward top sail was hoisted at the first round, followed by the lowering of the jibs. Once the ceremony was completed, the sails were reefed and collected. When leaving the harbor, the opposite

was done: the top sail and the jib were hoisted with the gun shot, followed by the furling of all sails. When any naval officer or admiral in the harbor was being saluted, it was customary to raise the top sail or the gallant sail if the sails were unfurled, a privilege denied to high-ranking non-naval officers. As the tradition spread, the number of guns fired would increase in proportion to the rank of the saluted official.

Usually an odd number of guns were fired. 7 guns were the most common choice. This was probably due to superstitions common among sailors, as the number 7 was associated with luck and mysterious powers. In 1818, when the American president visited a warship, he was greeted with a 21-gun salute; the 21-gun salute symbolized the then 21 states.

In the past, ships entering the territorial waters of a foreign country used to lower their national ensigns and hoist the ensigns of other countries instead, in order to avoid recognition by or to deceive the enemy.

In the past, firing guns meant a very wasteful expenditure of ammunition, so initially gun salutes were only used on very special occasions. For example, when the fleet anchored at the Downs was informed of King Charles' death sentence, the fleet commander ordered all the guns on the flagship to be fired, and all the other commanders ostentatiously followed suit. Later, it became a tradition to fire guns of ships on important occasions and national ceremonies.

The entire crew would also participate in the ceremony alongside the firing of the guns. In this special saluting ceremony called "Manning the Rails", the entire crew would salute in a regular formation along the ship or on the spars. The origins of this tradition are actually based on a practice that was intended to regulate the entry and exit of the crew to and from the deck and not to obstruct the passage of senior officers. Since the jacob's ladder was

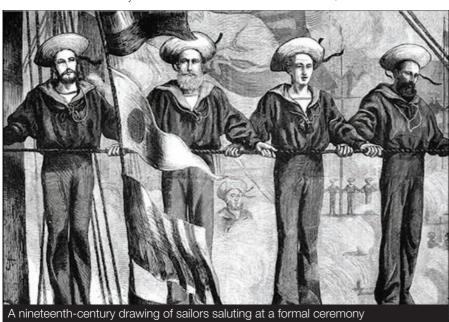


the only means of ascending to the deck of a sailing ship in the old times, when a high-ranking officer wanted to ascend to the deck, the crew would line up on either side of the steps and hang on the ropes to give way. The custom of manning ships, which is still practiced in the navies of all countries, dates back to the reign of Queen Elizabeth I.

So what is the origin of the sailors' custom of saluting? The salute of raising the fingers of the right hand to the forehead is borrowed from the army. In the Middle Ages, when knights met on horseback, they used to lift the visors of their helmets to see each other's faces and to indicate that they were not holding weapons in their hands. In time, this move evolved

into the military salute. After the age of great discoveries, when mutinies frequently broke out on ships, this salute caught on in the navy and it became customary for the crew to show the officers that they had no weapons. The salute, which was initially performed by showing the palm of the hand, was transformed into the modern sailor salute, in which the palm is pressed to the forehead at 45 degrees, since it was thought that it would be inappropriate for sailors to show the officers the tar and oil stains that were smeared on their hands from the spinnakers and other equipment.

The custom of decorating ships with flags from stem to stern on special occasions is as old as manning the ship... Today, ships are equipped with signal pennants arranged in a special order based on their colors. Although it is only recently that international signal pennants have taken their modern form, their use dates back to ancient times... From ancient times until the late Middle Ages, primitive pennants were used for communication between ships. One of the earliest examples of signal flags was the black flag of pirates known as the "Jolly Roger" ... Each privateer had a unique flag to identify them and this flag was only raised when a warning shot was fired to give the target ship within firing range a chance to surrender without a fight. If the ship refused to surrender, the black flag was lowered and replaced by a red battle flag called the "Bloody Flag".



In maritime tradition, the red flag was a common signal used in naval battles since antiquity and meant that the ship would be seized by force, with no mercy.

In the past, ships entering the territorial waters of a foreign country used to lower their national ensigns and hoist the ensigns of other countries instead, in order to avoid recognition by or to deceive the enemy. What happened to the USS George Washington, the first American ship to sail through the Strait of Gibraltar and enter the Mediterranean in September 1800, provides a rather unusual example of the custom of carrying the flag of the host country in foreign waters... The ship which sailed to Algiers to deliver the American government's annual tax to the Algerian Dey, the ship was also used to bring a special envoy and valuable gifts to Sultan Selim III at the request of the Dey of Algiers. The American flag on the main mast of the ship was lowered and the Turkish flag was hoisted in its place, whereupon the USS George Washington set sail for Istanbul after the firing of a 7-gun salute. It should be noted that the Americans grudgingly agreed to this request, mostly out of fear of Turkish pirates.

The roots of the tradition of saluting with a banner are much more recent, dating back to the mid-19th century. In the 1850s, warships entering foreign ports

Ship launching ceremonies are a tradition as old as human history. Different cultures have different traditions for launching ships into the sea, but they all have one thing in common: The ceremonies are dedicated to the gods.

would raise their flags to salute the countries they were visiting, expecting the same gesture from the port authorities in return. Although this was not an official practice, it was considered disrespectful not to return the salute. In December 1857, when the salute paid by a British warship in the Persian Gulf by hoisting its flag, without any response from the port, a diplomatic crisis broke out and Iranian officials apologized, saying that it was not in their tradition to hoist a flag in such a situation.

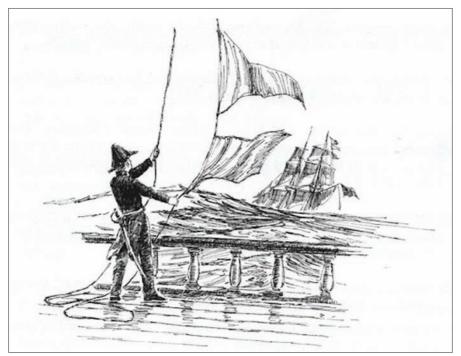
The practice of affixing the flag of a foreign country to the starboard crosstree of the foremast in the territorial waters of a foreign country as a courtesy started in the 1950s and took a long time to become a yachting tradition. Today, it is an international custom to hoist the flag of the host country after receiving a pratique in foreign waters. Incidentally, it is important not to confuse the ensign with the national

flag, as the national flags of some countries, such as the United Kingdom, are different from the flags used on civilian ships and the navy.

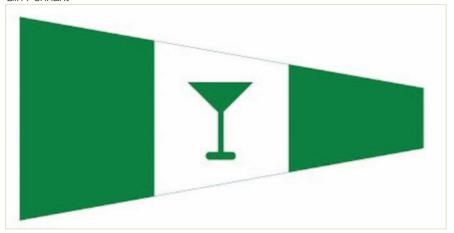
It is not known when and how the custom of lowering the ensigns half-mast on national days of mourning or on the death of a member of the ship's crew first began, but the earliest recorded incident dates from 1612... When the captain of the British ship "Heart's Ease", which was looking for a northern passage between the Atlantic and Pacific Oceans, was killed by a native, the crew lowered their ensign by one flag length as a sign of mourning, and when they returned, other sailors immediately realized that someone had died on board. This incident shows that at the time, it was a common practice among sailors to lower the ensign; the origin of the custom was the symbolic lowering of the ensign by one flag-length to make room for the invisible flag of death.

It is another maritime tradition that every ship passing through the territorial waters of a foreign country or entering its port must hoist a solid yellow Quarantine (O) pennant... The origin of this tradition dates back to the black death plague of the Middle Ages, when yellow or black colored pennants were used on ships when there was an epidemic such as plague or cholera on board. These two colors are still used today as the Lima (L) pennant to indicate that the ship is in quarantine, while the yellow flag now symbolically indicates that there is no epidemic on board and permission is requested to enter the port. In fact, according to international maritime traditions, the flag of the host country should not be hoisted instead of the yellow quarantine flag until the health and customs procedures have been completed and the ship has been declared clean, but it has become a common custom to hoist only the courtesy flag during transit.

Ship launching ceremonies are a tradition as old as human history. Different cultures have different traditions for launching ships into the sea, but they all have one thing in common: The ceremonies are dedicated to the gods. Babylonians



Gin Pennant



and Egyptians made offerings to the gods when launching a ship; ancient Greeks and Romans drank wine in honor of their gods and poured the rest overboard from the bow. The naming of the ship was also part of the launching ceremony. The traditions of antiquity survived into later ages. In medieval Europe, when a ship was about to be launched, the master of ceremonies would take a sip of wine from a gold or silver goblet and pour the rest on the bow or deck. After the ceremony, the empty goblet was thrown into the sea and belonged to whoever found it. As the number of ships built in the shipyards increased, shipbuilders began to use nets to retrieve the goblets thrown overboard, for use in the next ceremony. By the end of the 17th century, the custom of pouring wine from the goblet was replaced by the practice of breaking a champagne bottle on the bow.

Finally, let's wrap up this article by talking a little bit about the interesting

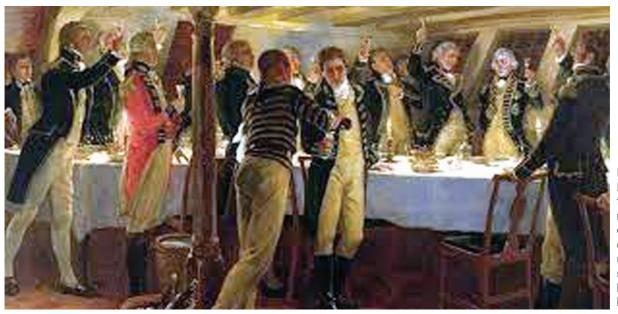
maritime traditions of different countries:

An interesting practice the British Royal Navy still maintains is the tradition of royal warships in port asking each other for entertainment on special occasions and anniversaries... At the end of the shift, a special signal pennant called the "Gin Pennant" is hoisted and the crew gather together to drink gin and tonic. The origins of this practice, however, are a bit unexpected today: To fight malaria. The tonic contains a large amount of quinine, a substance used in the treatment of malaria, which, when taken regularly, prevents the development of the parasite that causes malaria. For this reason, such a practice has been developed so that the crew who will travel to a malaria-ridden region will regularly take quinine.

Another practice of the Royal Navy is the tradition of toasting after dinner in the ship's officers' lounge every day of the week... The officers of the British Royal Navy drink to their ships at sea on Monday, to their crews on Tuesday, to themselves on Wednesday, to a bloody battle or a foul season on Thursday, to an eager enemy on Friday, to their lovers and wives on Saturday, and finally on Sunday, to their friends who are not with them. As for why a toast is made in honor of an event such as a bloody battle or a disease, the answer is that, after such times when many lives are lost, officers have a better chance of promotion...

In some countries in Europe, the tradition of hiding money under the main mast of private yachts has been going on for centuries, originating from the ancient belief in the afterlife. The ancient Greeks believed that, once they died, they had to pay a boatman named Kharon to cross the river Styx. Souls that were not buried with money in their mouths could not reach the land of Hades. So sailors always carried some money with them to give to the boatman when they drowned.

There used to be celebrations when sailors crossed the 30th Parallel and at the entrance to the Strait of Gibraltar. Today, the first equatorial crossings of sailors serving in the British and Dutch merchant fleets, the British Royal Navy, the Russian and American Navies, as well as civilian and military ships of many other countries, are celebrated with ceremonies called the "Crossing the Border Ceremony".



In the British Royal Navy, toasts are now practiced sitting down, because standing sailors risk hitting their heads.



# GNG VALVE

PROFESSIONAL VALVE MANUFACTURER "GNG VALVE" VG STANDARD, JIS STANDARD, DIN STANDARD















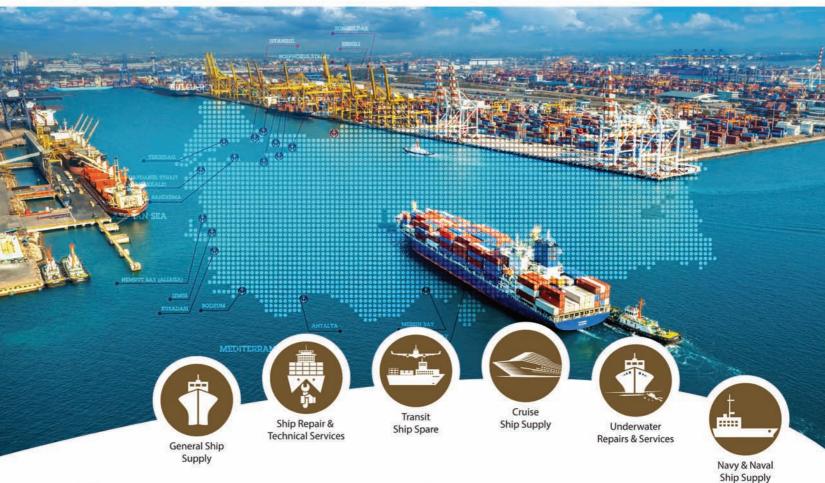






















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