

# DAILY NEWS

No 3 | Thursday 9 November 2017



Zero-emission vessels were in focus at yesterday's Masterclass

Image: Wärtsilä

The energy efficiency of vessels and sustainable business models are a concern for all players of the maritime industry. Yesterday's Masterclass "How energy management can save costs and support MRV compliance" dealt with various ways of reducing greenhouse gas emissions and ensuring profitable and environmentally friendly operations of ships.

Chaired by Sander den Heijer, sector manager for Netherlands Maritime Technology, the 2.5-hour session provided insights into the optimum use of energy and how this can help shipping companies perform more effectively.

Each Masterclass starts with an inspiring vision, offering a unique perspective for the maritime sector. Yesterday, Teus van Beek, general manager Market Innovation of the Marine Solutions division of Wärtsilä, shared the company's vision of a future with zero-emission vessels.

Like many other events of the accompanying programme of Europort, Wednesday's Masterclass once again demonstrated in its presentations that the show's core topics Big Data, The New Environmental Age and The Human Factor may

not be considered separately but need to be combined by everyone involved in order to remain competitive. "We believe that shipping is at a turning point and we need to explore new trends and concepts to meet the new challenges," van Beek said.

Nick Lurkin, staff member, Environmental Affairs at the Royal Association of Netherlands Shipowners (KVNR) then gave an overview of the regulatory framework covering the monitoring, reporting and verification (MRV) of CO<sub>2</sub> emissions in the European Union as well as the IMO data collection system (DCS).

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	IMO DCS	EU MRV	
Scope	Vessels ≥ 5,000gt calling <u>all</u> ports worldwide are included	Vessels ≥ 5,000gt carrying goods and/or passengers and calling EEA ports are included. Tugs, offshore and marine contracting vessels ≥ 5,000gt are excluded	
Monitoring plan	New obligatory part of the SEEMP	Template or THETIS MRV	
Data monitored	Annually	Per voyage	
Data of cargo carried	Design deadweight	Actual amount of cargo (depending on ship type by volume, mass or deadweight carried)	
Verification	Practical verification of the data by flag state or RO	Based on ISO 14064 done by accredited verifiers	
Centralised database	Managed by IMO	THETIS MRV is operated by EMSA	
Publication of data	Anonymised data is only available to IMO and flag states	After verification of annual emissions reports, information is made available to the public	

Differences between IMO's DCS and the EU's MRV were explained

Source: KVNR

Since the shipping industry was neither included in the Kyoto Protocol nor in the Paris Agreement, Lurkin said that it was the responsibility of every shipowner to mitigate emissions accordingly. As a  $\mathrm{CO}_2$  target for the Dutch fleet, Lurkin named the

ambitious goal of a 50% reduction by 2050 compared with the 2008 levels.

Lurkin was followed by Sebastian Sala, head of Innovation and Energy Management at Carnival Maritime. He presented some best practice examples from the cruise company, specifying five major impacts on fuel efficiency: deployment of the vessel, navigation, operation, design and maintenance. For improving efficiency, he referred to measures as hull cleaning, propeller polishing, trim optimisation and specific fuel oil consumption measurement. However, to help increase the efficiency of a vessel even more, a data awareness, which is not yet fully present within the maritime industry, was also necessary, Sala said.

The last presentation dealt with improving the overall energy efficiency of passenger vessels. Guiseppe Stranieri from CETENA SpA (a Fincantieri company) introduced a dedicated decision support system for ship energy management within the LeanShip project. LeanShip is part of the Horizon 2020 European Innovation project that aims to demonstrate the effectiveness and reliability of energy-saving and emission-reduction technologies at full scale.

While this second Masterclass only showed a few examples of innovative and sustainable ways to improve the efficiency of the maritime industries, numerous further examples of companies that invigorate future thinking can be found on the floors of this year's 38th edition of Europort.

#### > IMPRINT

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## Innovative technologies

Steinbach Ingenieurtechnik (SI-Technik) is the exclusive representative of Norway's Brunvoll and the ballast water management (BWM) supplier MMC Green Technology AS in Germany, Belgium, the Netherlands and Luxembourg.

Brunvoll has recently acquired Scana Volda and Scana Mar-El, expanding Brunvoll's portfolio and making the company a single-source supplier for the full scope of maritime propulsion systems with associated control systems. The entire product range is on display in Rotterdam.

Meanwhile, MMC Green Technology has won several contracts for its compact BWM system.



SI-Technik represents Brunvoll and MMC Green Technology in Rotterdam

One of the last retrofit projects was delivered as a turnkey solution. There was no need for docking and the project was successfully completed as the ship lay alongside. The vessel will soon be trading in US waters and MMC is currently running tests for USCG and revised IMO G8 type approvals. The company is aiming to achieve these approvals within the next year.

Steinbach Ingenieurtechnik at Europort: Stand 7210



Handover of the certificate

#### ABC receives type approval

Anglo Belgian Corporation (ABC), a leading European manufacturer of medium-speed engines, who is presenting its range of propulsion and power generation solutions at Europort, has received the Bureau Veritas (BV) approval and notations for its hybrid solutions.

It enables ABC to offer serial hybrid propulsion systems for workboats and, in collaboration with selected industrial partners, the company can serve as a one-stop shop for complete propulsion systems for its customers.

The approval incorporates the new BV notation 'Electric-Hybrid' released by the classification society in July.

Tim Berckmoes, CEO of ABC, said: "This ABC hybrid technology offers our clients an extra technologic advantage leading to zero emissions, higher performance and more flexibility. The Bureau Veritas Electric-Hybrid certificate confirms that the ABC hybrid system is solid and reliable with sufficient redundancies."

ABC at Europort: Stand 1201



## 5 Questions For...

#### Tjerk-Johan de Vries

Executive Vice President, Regional Manager West Europe & Africa, DNV GL – Maritime

#### Jeroen van der Veer

Area Manager Benelux, DNV GL – Maritime

**1** What does Europort 2017 mean to you? de Vries: Due to the rapid digital transformation, industry practices today are much different from how we worked before the recession. At DNV GL, we have developed several applications to give our customers greater insights into vessel and fleet performance and become more efficient. Europort gives us the opportunity to present these solutions to a major industry audience as well as take the temperature of the market. Of course, business still relies on good personal relations, and Europort is a perfect place to meet old friends and make new contacts.

### What are your expectations of the show?

van der Veer: As Tjerk said, DNV GL is much more than only a class society today. On top of class services, we're also providing advisory and technical support and industry outlooks. It is about drawing on the deep well of expertise we have in house, as well as the information we have access to – drawing insights and sharing this knowledge with our clients and partners.

### 3 What challenges does your company currently face?

**de Vries**: Everybody knows the market today is more competitive than ever – and this goes for the classification business as well. We are working hard to make sure that our offerings are delivering what our customers need. Part of this is providing support to help them deal with a regulatory environment that is changing faster and becoming more rigorous – for example the recent implementation of the BWM Convention and the EU MRV scheme. The global implementation of the new emissions limits on SOx and NOx in 2020 is the next challenge for the industry.

#### 4 What role does digitalisation play in your daily work?

van der Veer: It's extremely important. The quality and speed of information flow as well as extracting the knowledge that lays in the combination of different data sets is the key to competitiveness in tomorrow's maritime industry. We have streamlined our tools and interfaces to provide better communication and easier access both internally and for our customers as they interact with class. We



Tjerk-Johan de Vries and Jeroen van der Veer

have also started using machine learning to speed up the approval processes and assist clients with their technical challenges – as part of our DATE service (direct access to technical experts). Digitalisation has become a new strategy pillar of our organisation.

## 5 What do you think does the future hold for the maritime industry in general?

de Vries: As we have said, a lot of the changes in the industry will revolve around digitalisation and capturing and making the most of data. In a preview of things to come, we will see the first autonomous ships touching the water shortly, a project that we are involved in with Yara and Kongsberg. On the technology and design side, I think we will see a continuing push for greater efficiency and new tools that help model and simulate energy use, such as our virtual trial application for example, will help continue the industry's improvement in this area. Furthermore, we expect there will be significant growth in alternative propulsion (hybrid/electric and fuel cells) and alternative fuels (LNG, methanol, etc.) as emissions regulations continue to tighten.



## Significant fuel savings

Global paints and coatings manufacturer Hempel is displaying its Hempaguard fouling defence coating in Rotterdam, which it says, delivers fuel savings of up to 6% compared with best-in-class antifoulings over the entire service interval.

When fouling organisms such as algae and barnacles attach to a vessel's hull, they create extra drag requiring more fuel to propel the vessel, significantly increasing fuel costs and CO<sub>2</sub> emissions, Hempel notes. By investing in a high-performance hull coating such as Hempaguard that delivers protection against fouling, a ship's movement through the water is streamlined and drag is reduced.

Hempaguard is the only hull coating to combine the low surface friction of silicone with efficient fouling preventing biocides in a single coat – this is Hempel's innovative Actiguard technology. Unlike other hull coatings that are usually specified according to the vessel's speed and activity level, Hempaguard coatings retain effectiveness when switching between slow and fast steaming – so a vessel can change sailing routes and trading patterns without losing performance. What's more, it also remains effective in waters of varying temperatures and during idle periods of up to 120 days. Hempel at Europort:

**Stand 3403** 



Hempel presents its coating systems in Rotterdam

#### Product portfolio on display



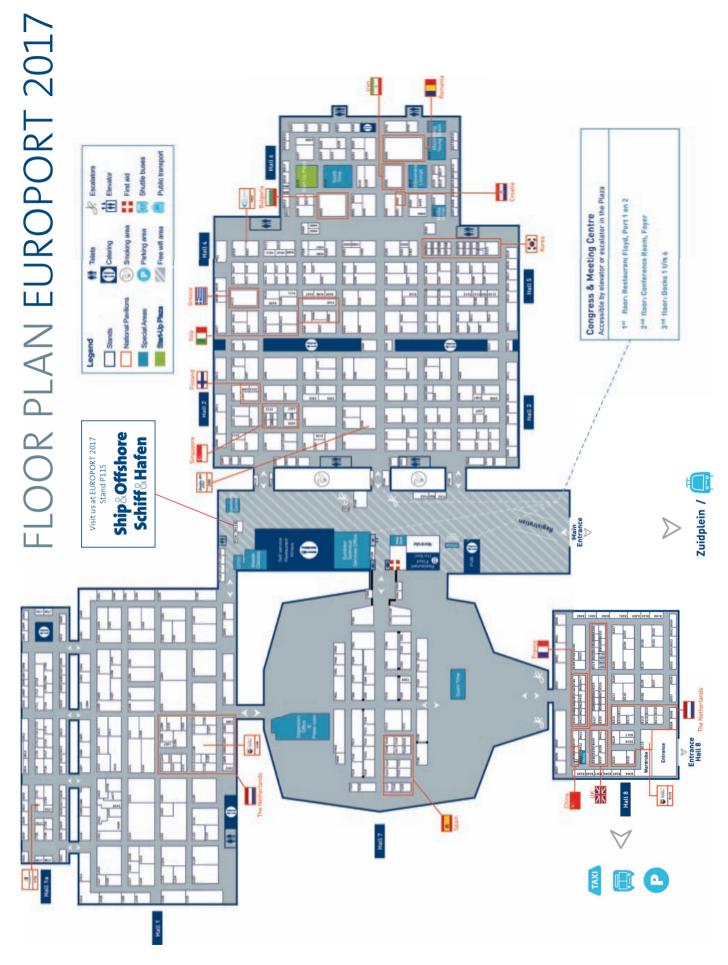
Kelvion's booth at Europort

Kelvion, a manufacturer of industrial heat exchangers for a diversified range of market segments, presents its extensive product portfolio in Rotterdam.

With plate heat exchangers, shell and tube heat exchangers, finned-tube heat exchangers, modular cooling towers, and refrigeration heat exchangers, the company is a specialist in providing customer-specific products and services and serves its clients through a global sales and production network.

Kelvion at Europort: Stand 1426





#### Thursday 9 November 2017

TOPIC	LOCATION	TIME	ORGANISATION	REGISTRATION	
Exhibition					
Europort Exhibition	Ahoy Venue	10.00 - 22.00	Rotterdam Ahoy	Registration required	
Conferences					
CEDA Dredging Days 2017	Conference Room	09:30 - 17:30	CEDA	Registration required	
Masterclasses					
How Big Data Can Improve Operational Performance	Port 2	10:00 - 13:30	Rotterdam Ahoy / NMT	Registration required	
Matchmaking					
MariMatch Europort 2017	Dock 3	10:00 - 17:30	Enterprise Europe Network	Registration required	
Start-up Plaza	Hall 6	Continuous	Rotterdam Ahoy		
Seminars and Meetings					
Speakers' Corner	Plaza	Continuous	Rotterdam Ahoy	Registration not required	
Activities and Social Events					
CEDA Netherlands Reception	Conference Room	09:00 - 11:00	CEDA	Registration required	
Shipowners Lounge	Hall 6	11:00 - 20:00	KVNR		
Kick-off Event Urk Maritime	Hall 2, booth 2406	16:00 - 18:00	Urk Maritime		
Holland Networking Reception	Hall 1	18:00 - 21:00	NMT		
Social Event	Hall 7, booth 7209	19:00 - 22:00	C-Job Naval Architects		
Job Route	(Entrances) Exhibition Floor	Continuous	Navingo		
Student exposition: Maximising Young Talent	Hall 6, booth 6615	Continuous	Maritime Delta/ Da Vinci College / TU Delft / STC / Rot- terdam Mainport University		

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