

seatec

International Maritime Review

Cleaning the Waves

Curbing ship emissions is rising on the agenda



seatec.fi/magazine

Super Size Me

The super-sized ships are ruling the seven seas



www.seatrade-med.com

Seatrade med

CRUISE CONVENTION

30 November – 2 December 2010
Palais des Festivals et des Congrès, Cannes

THE MEDITERRANEAN'S LARGEST CRUISE EVENT

- ◆ International exhibition showcasing the whole range of cruise products from marine equipment & technical services to hotel & leisure supplies plus the greatest collection of Mediterranean ports and global destinations
- ◆ Wide-ranging conference programme with key industry speakers debating the expansion of the Mediterranean market as well as port development, cruise shipbuilding & refurbishment, the dining revolution at sea, itinerary expansion & more
- ◆ Travel agent training in association with Top Cruise by Marseille Provence Cruise Club, celebrating the 10th anniversary of their specialist cruise training programme
- ◆ An exceptional social programme for relaxed business networking, including an evening of music at the Opéra de Nice, incorporating the presentation of the **Seatrade Insider CRUISE AWARDS 2010**

Seatrade Insider
CRUISE AWARDS 2010

Principal Sponsor **FIDELIO**
Cruise



Seatrade®
in Print in Online in Events

Organised in association with

**CONSEIL GÉNÉRAL
ALPES-MARITIMES**

**French
Riviera**
CRUISE CLUB

CCI
NICE CÔTE D'AZUR

**COMITÉ RÉGIONAL DU TOURISME
RIVIERA CÔTE D'AZUR**
www.cotedazur-tourisme.com

Principal sponsors

**NICE
CÔTE
AZUR**

PALAIS DES FESTIVALS ET DES CONGRÈS
Cannes

RIVIERA PORTS AUTHORITY
FRENCH RIVIERA CHAMBER OF COMMERCE

Sponsored by
Club Croisière Var Provence • Fidelio Cruise Software GmbH • STX Europe

Principal supporter
MedCruise

Supported by
Association Française des Compagnies de Croisières (AFCC) • Association of Cruise Experts (ACE) • European Cruise Council (ECC) • Passenger Shipping Association (PSA)



YOUR PASSPORT TO SUCCESS CRUISE SHIPPING MIAMI

Today's voyage of doing business could offer some unexpected twists and turns. Navigate smoothly by making Cruise Shipping Miami, the world's largest and most important cruise industry event, your point of embarkation. Upon arrival you will make important and valuable connections with the international cruise market that will set your business on a profitable journey.

Cruise Shipping Miami, Homeport of the Cruise Industry.

March 14-17, 2011 • Miami Beach Convention Center, Miami, Florida

www.cruiseshippingmiami.com



PUBLISHER

PubliCo Oy
Pätkäneentie 19 A
FI-00510 Helsinki
Finland
Phone +358 9 686 6250
Fax +358 9 685 2940
info@publico.com
www.publico.com

EDITORIAL COORDINATOR

Mirkka Lindroos

PROJECT MANAGER

Paul Charpentier

CONTRIBUTORS

Sami J. Anteroine
Frederik Erdmann
Merja Kihl
Ari Mononen

GRAPHIC DESIGN

A5 Plate Media Oy

COVER PHOTO

Royal Caribbean International

AD SALES

Paul Charpentier
Phone +358 9 6866 2533
Fax +358 9 685 2940
paul.charpentier@publico.com

Risto Valkeapää
Phone +358 9 6866 2532
Fax +358 9 685 2940
risto.valkeapaa@publico.com

PRINTED BY

PunaMusta Oy, July 2010



PubliCo is a member of the European Association of Directory and Database Publishers (EADP), ensuring quality and reliability for advertisers and users.

All rights reserved. This publication may not be used in whole or in part to prepare or compile other directories or mailing lists without the written permission of the publisher. Measures have been taken in the preparation of this publication to assist the publisher protect its copyright. Any unauthorized use of the data herein will result in immediate legal proceeding.

PUSH FOR THE GREEN HORIZON

Cruise lines do not have the best environmental record around. The industry has a troubled past which includes dumping waste where it doesn't belong and endangering, for example, fragile reefs in the process. Times are changing, however, and the Cruise Lines International Association (CLIA) claims that the cruise business has reformed itself. According to CLIA, the cruise industry has been very proactive in its efforts to minimise all types of pollution at sea.

Things have certainly been moving in the right direction as state-of-the-art environmental equipment is now standard on the ships. There are grinders for food and product waste, separators for galley products and recycling, crushers for glass, aluminium and cardboard materials; incinerators for food, cardboard, paper and other waste by-products; and sophisticated engine room equipment to reduce or eliminate liquid discharge.

Still, in the Climate Change Era, a huge cruise ship does not sound like the most environmental choice out there. Nobody builds them bigger than Royal Caribbean – and nobody has more to lose if the public suddenly turns its back on the ships. While designing the Oasis-class behemoths, the executives of RCCL understood full well that the world would be looking at these ships with a magnifying glass. Therefore, the entire project was geared towards making a ship duo that would possess a decidedly green streak. RCCL even hired an environmentalist guru to lead the eco-charge.

The STX Europe's shipyard in Turku embraced the challenge of making its most environmental cruiser yet – and succeeded in the task. Per passenger, Oasis of the Seas boasts a 15 % – 25 % energy and carbon footprint improvement in comparison to its predecessors.

The footprint is brought down by using the latest commercially available equipment, such as common rail diesel technology for emission control. The ship is also equipped for alternative fuels.

The green upgrades have garnered approving nods from environmental organisations such as the Friends of the Earth. Still, there is work to be done with regards to the big picture. For instance, Oasis has a plug-in feature that would allow it to run on electricity rather than fuel when in port – but, as of yet, the ports aren't ready to handle the load.

SAMI J. ANTEROINE

NEW HORIZONS IN ENERGY SOLUTIONS

At Gasum, we develop innovative energy services for industries, energy production, accommodation heating and transport. The versatile, clean-burning natural gas is an ecological yet economical choice. We now focus on offering liquefied natural gas, LNG, to meet future customer needs.

An efficient fuel for gas engines, industrial processes, transport and shipping, LNG can also be used as a reserve fuel for installations running on biogas. Our new, soon to be completed liquefying plant in Porvoo, Finland, with an annual production capacity of 20,000 tonnes and a storage facility of 2,100 cubic meters, will help us address the rising demand.

www.gasum.fi



I N T E R I O R D E S I G N
G R A P H I C A N D S I G N D E S I G N
S H O P A N D D E P A R T M E N T S T O R E D E S I G N

APROCOS
INTERIOR DESIGN

Aprocos Ky / Paciuksenkujä 1 / 00270 Helsinki Finland
+358 9 241 0404 / heikki.mattila@aprocos.fi / www.aprocos.fi



Photo: City of Helsinki Picture Bank / Kari Palsia

Between going big and going green, the cruise lines are not exactly going steady. Pages 6–9.



Photo: Baltic Yachts

Baltic 112 Reichel Pugh Nauta, named Nilaya – one of the most high-performance sailing boats of its size. Page 12.

02	Editorial
06	Super Size Me
10	Ice Trials During Ice Winter
10	Beacon Finland Ltd Takes Part in International Marine Design Projects
12	“Nilaya”, Baltic 112 Reichel Pugh – Nauta – Launched Successfully
14	Cleaning the Waves
18	Oilon Marine Burners Since Year 1963
20	Ship Classification to Incorporate Inspection of LNG Fuel Systems
22	Eclipse to the Rescue!
30	The Two Largest English Channel Ferries under Construction at STX Rauma Shipyard
36	J.J. Sietas: German Shipyard Successfully Enters The Special-purpose Vessels Segment
42	“Uthlande” – Attractive and Efficient
43	Turku Repair Yard Ltd Handles a Wide Range of Ship Overhauls
43	Windside Wind Turbines for Professional Use with 30 years’ Experience
44	New Higly Efficient Azimuth Propulsor for Cruise Ships
44	Macro-module Cabin Structures – an innovation for ship-builders
45	Power to the Sea – Integrated Electrical Solutions



Photo: Risto Valkeapää

Curbing ship emissions is rising on the agenda all over the world. At present, ships are responsible for 2,7% of global warming emissions. Pages 14–17.



Photo: Meyer Werft

The newest Solstice-class ship makes its debut with style. Celebrity Eclipse operated as the most luxurious rescue boat of all time for 2,200 vacationers stranded in Spain because of the volcanic eruption in Iceland. Pages 22–29.

- 45** IVK-Tuote Provides P&O Ferries with Ventilation Sound Attenuators
- 46** Ship Interiors Often Require Careful Planning and Design
- 46** WatMan SWRO
- 46** Onboard-NAPA Solutions Prove Highly Beneficial in the Green Marine Industry
- 47** **COMPANY DIRECTORY**

ADVERTISEMENTS

- 01** Seatrade Cruise Shipping Miami 2011
- 03** Aprocos
- 03** Gasum
- 11** Jukova
- 11** Meiko Maschinenbau GmbH & Co. KG
- 13** SMM 2010
- 18** Shiptec China 2010
- 19** Tebul
- 21** Bureau Veritas

- 21** Paroc
- 33** Aalborg Industries
- 35** Marine Tech Korea 2010
- 45** Shippax
- 56** Intermodal Europe 2010

- Front insert** Seatrade Med
- Back insert** ONS 2010
- Back cover** seatec



Photos: Royal
Caribbean
International

Super Size Me

BETWEEN GOING BIG AND GOING GREEN, THE CRUISE LINES ARE NOT EXACTLY GOING STEADY

With Oasis of the Seas leading the charge – and Allure of the Seas waiting in the wings – the super-sized ships are ruling the seven seas. The winds have been favourable for a long time: according to Cruise Lines International Association, worldwide cruising has grown annually to the tune of 7 % for the past 20 years. But the global recession has turned the tides somewhat. Cruise lines have been able to fill their vessels during the recession, but only by offering steep price discounts. Yields have come down, and cruise lines have put new acquisitions on ice – or so it seems.

Behind the scenes, the industry players are hard at work trying to figure out the roadmap of the future – what will cruise ships be like in 2010's, and beyond?

The cruise industry is dominated by two players, Carnival and Royal Caribbean, who control 70 % of the market. Both companies operate mostly in the contem-

porary segment and woo the everyman's wallet. The old adage states that cruise goers are either "newlywed, nearly dead or over fed," but industry executives feel

that there's room on the boat for others as well. Only 20 % of Americans have ever taken a cruise, which has led some experts to argue that the market is underpenetrated. At present, only 5 % of American vacationers opt for a cruise every year.

In addition to honey-mooners, the cruise lines are reaching out to the younger target groups with fervour now. The fight for the hearts and minds of the youthful demographic drives the on-going march of multiple (often extreme sounding) activities, super spas and entertainment. Another change in the cruise profile can be observed in the duration of the trip: young professionals, for one, can ill afford the time to sail down the coast of South America for three weeks. This is one reason why Oasis is scheduled to make only seven-day runs around the Caribbean.

THE BIGGER THEY COME

What remains unsolved, however, is the question of size. Can cruise lines continue to go big – which is often justified with economies of scale – or will they look for other options?

Micky Arison, chief executive of Carnival, has speculated that the industry has gone too far in the size race – referring, specifically, to the rival RCCL's Oasis-class. While Arison believes that there is still a market for bigger ships, he contends that Oasis is so big that it might just feel like "a huge mall" for your average cruise-goer.

Richard Fain, Royal Caribbean's number one man, has countered that any ship will have its ups and downs over its considerable lifespan, arguing that Oasis of the Seas will deliver one of the highest returns on investment the industry has ever seen.

In fact, RCCL is so convinced that Oasis is the way to go that it has started an "Oasisation" process of older models as well. Freedom of the Seas and Liberty of the Seas (originally launched 2005 and 2006, respectively) are set to go to dry-





dock in the first quarter of 2011 and RC-CL will reload the ships with a number of key innovations from Oasis. A major focus will, of course, be on entertainment and activities, and there will be large outdoor movie screens pool side, like those found in the Oasis aqua-theatre. Also, there are 3D movie screens and projectors in the main theatre, a children's puppet show on both ships and even a nursery.

In addition, the interactive digital signage on Oasis, which was touted as one of the top cruise innovations of 2009, will also be part of the Freedom and Liberty new programming.

Other cruise lines are following suite with improved features and several new-to-cruise ship amenities. For instance, the NCL Epic – which was launched in June – features the first ice bar at sea. (And yes, the bar, walls, tables and stools are all made out of ice.) At the same time, older ships are being refitted with all the works from waterslides to nightclubs.

MULTITASKING TO THE MAX

Still, big and splashy is not the only game in town – at least if you ask the designers and builders of these floating wonders. STX Europe, the number one builder of luxury cruise ships in the world, has been exploring other options as well. In March 2009, STX introduced its latest concept: the xpTRAY, where all public passenger areas and activities are based in one location, on a wide “tray”, if you will. Here's the math: reducing ship volume by up to 15% results in higher space ratios and more efficient service operations.

STX concept comes from the common sense observation that ships, no matter how large, have limited space. Therefore, cruise ship design should embrace simplicity and versatility.

Centralising all the restaurants, for example, means you have a central galley that is more efficient in both energy and size. The xpTRAY offers economies



of scale, as well, but with a lower gross tonnage compared with a standard post-Panamax cruise vessel, delivering the total package at 130,000 GT rather than 160,000 GT. This results in substantial savings in e.g. building costs, electrical load and propulsion power.

GREENER HORIZONS

STX is clearly preparing for a leaner, greener cruise circuit where the emphasis is more and more on efficiency and environmental issues.

The company has an ambitious strategic environmental plan – called Ecorizon – which is based on STX Europe's latest in-

novations and continuous R&D. Ecorizon aims to protect water and its ecosystems, preserve the natural resources of the Earth, and limit the impact of the human activity.

This mindset is already evident on Oasis, which shows a 15%–25% energy and carbon footprint improvement (per passenger) in comparison to its predecessors. In fact, the Oasis design effort is the most extensive for any cruise ship – ever. While still not exactly “Jolly Green Giant,” the ship is e.g. equipped for alternative fuels and features integrated advanced waste handling systems for all waste streams. ■

SAMI J. ANTEROINEN

ICE TRIALS DURING ICE WINTER

During the last winter 2009–2010, ILS Oy carried out a number of ice trials for ships of ILS's design. The ice trials of IB Varandey, an ice breaker built by Kessel Singmarine for Lukoil, were conducted in November in Russian Arctic.

The ice trials for M/S Nämdö, the first of the ice breaking passenger ferries built by a Finnish yard Uudenkaupungin Työvene Oy, were carried out in Stockholm Archipelago in February. The results were good and the shipyard and owners, Waxholms Ångfartygs Ab, were very satisfied. The sister vessel M/S Gällnö was delivered early May 2010.

Seven days ice trial program for M/S Skarven, a car/passenger ferry for Åland, was carried out in the middle of February in co-operation between the owners – Ålands Landskapsregering, the building shipyard – Western Shipbuilding Yard BLRT Group (Klaipeda, Lithuania), the classifica-



tion Society – Lloyds Register of Shipping (London), the propulsion unit manufacturer – Rolls Royce Oy (Rauma) and designer ILS Oy (Turku). The tests confirmed that a double ended ferry design concept with

controllable pitch propellers in azimuth thrusters in both ends give an excellent ice breaking performance in all conditions. M/S Skarven made a 8.5 knots speed in 36 cm level ice! ■

Beacon Finland Ltd Takes Part in International Marine Design Projects

Established in 1987, Beacon Finland Ltd is a privately owned, independent naval architectural consulting company located in Rauma, Finland. The company offers a wide range of high-quality marine design and consulting solutions.

According to Beacon Finland's Managing Director Tuija Hörkkö, Beacon works increasingly in cooperation with shipowners, shipyards and ship equipment manufacturers.

"These have been busy times for the company," she mentions, between two urgent business meetings.

In 2009, Beacon Finland Ltd was

awarded the International Company of the Year prize by the Chamber of Commerce – the first-ever prize of its kind in the Rauma region.

VERSATILE PROJECTS

The main activities of Beacon Finland Oy are ship design – for both conventional and specialised ships –, design and sales of ship equipment, plus supervision and management of ship repair and conversions.

With a solid theoretical and practical background in naval architecture and manufacturing of marine industry products, Beacon Finland's personnel has the skills and know-how for reliable and innovative solutions. The company currently employs eight professionals.

"Wide and deep knowledge and practical experience in naval architecture and shipyard work ensure superior results," Hörkkö asserts. "Our designers have a very long and profound experience in domestic as well as foreign projects. In their work, they use the latest design tools and computer programs. Beacon Finland also has a wide network of skilled freelance designers and partner companies."

The marine equipment designed by Beacon Finland over the years includes fixed and steerable propeller nozzles, conventional rudders, propulsion applications for drill ships, and innovative ATB-coupling systems for pusher-barge assemblies. ■

MERJA KIHLE
ARI MONONEN



MEIKO's Marine Division

MEIKO the technology leader in dishwashing
and food waste vacuum systems



Taking perfection to another level: the ultimate in
hygiene, safety, economy and **eco-friendliness**.



E-Mail: marine@meiko.de · www.meiko.de



meridian



Turn key systems for passenger transport

Jukova Oy is one of the leading system suppliers
for the passenger transport industry. Jukova's
long experience in maritime products has been
gathered under one product line, Meridian.

The Meridian product line includes:

- Prefabricated balcony modules
- Watertight sliding doors
- Windshields and windows
- Divider walls and door sections
- Luggage stacks

All products are designed in co-operation with
the customers to meet their requirements.



Jukova Oy
Jukovantie 20 FIN-21430 Yliskulma FINLAND
tel. +358 10 474 444 fax +358 10 474 4290
jukova@jukova.fi www.jukova.fi



“NILAYA”, BALTIC 112 REICHEL PUGH – NAUTA – Launched Successfully

Baltic Yachts and Nauta Yacht Design are pleased to announce that on the 3rd of May the Baltic 112 Reichel Pugh Nauta, named Nilaya, was successfully launched at Baltic Yachts new facilities in Jakobstad. Baltic 112 Nilaya is set to be one of the most high-performance sailing boats of its size. It's a superyacht that can deliver high performance with all the pedigree of a stripped-out racer. When high performance is high on the priorities, carbon-fibre pre-preg composite construction is the obvious way to go.

Nauta Yacht Design conceived the general arrangement plans and the sleek lines of “NILAYA” teaming up with Reichel Pugh Yacht Design who has been responsible of the Naval Architecture. The two design studios already have a solid collab-

oration history in the design of high performance cruiser racers.

The Baltic 112 Nilaya will have a displacement of just 90 tons and incorporates a lifting keel, capable of reducing the maximum draft of 5.50 metres to just 3.50 metres.

At the same time the yacht offers the most esteemed guests some elements which are normally the characteristics of yachts in a higher L.O.A. range: the bright deck house where one can enjoy an all-around sight, as if you were outside; the four spacious guest cabins, with a large and elegant master cabin; three comfortable cabins for crew with the Captain's double cabin; the functional and huge galley. Care for details, even the smallest, a rational and functional interior arrange-

ment, a simple, synthetic yet timeless style are the ingredients of this spectacular looking superyacht.

This is the first time Nauta and Baltic have been working together and quoting Baltic's Managing Director Marjo Keiramo and Nauta's C.E.O. Mario Pedol “it has been really a pleasure working together during the three years building period”.

Also Nigel Ingram of Marine Construction Management has been working closely with the project management of the 112 build.

At the incoming Monaco Yacht Show in September 2010 Baltic Yachts will have the pleasure of presenting this stunning yacht. ■

More information: www.balticyachts.fi and www.nautayachts.com



keeping the course

7-10 sept 2010

hamburg

www.smm-hamburg.com

26-28 jan 2011

istanbul

www.smm-istanbul.com

7-9 april 2011

mumbai

www.smm-india.com

shipbuilding • machinery & marine technology
international trade fair



SMM



Hamburg Messe

Cleaning the Waves

WITH BALTIC SEA IN PERIL, LOCAL PLAYERS TURN TO LNG



Curbing ship emissions is rising on the agenda all over the world. At present, ships are responsible for 2.7% of global warming emissions. International Maritime Organisation (IMO) estimates that these emissions could increase by as much as 150-250% by the year 2050 – if the international seaborne trade continues to show robust growth.



The IMO has been criticised that it has been too slow to forge international rules to curb maritime emissions. IMO Secretary-General Efthimios E. Mitropoulos has responded by saying that global issues demand global solutions. According to Mitropoulos, the shipping world should not work in a fragmented manner, but as “responsible members of a community that has a role to play in this effort.”

The European Union is not willing to sit by the sidelines, just waiting to see if IMO can get its ranks in order. The EU has stated that it will act on its own if neither the IMO nor international climate negotiations succeed in curbing emissions from ships. The EU already aims to add aviation to its emissions trading scheme, starting from 2012.

SAFEGUARDING THE BALTIC SEA

The concern of the EU is understandable, especially from the perspective of conservation of the Baltic Sea, the “Mare Nostrum” of the Union. At present, the Baltic Sea has some of the busiest shipping routes in the world. According to HELCOM, around 2,000 ships are normally at sea at any given time on the Baltic Sea. Cargo and container traffic is expected to

triple and oil transportation is estimated to increase by 40% by 2017. The large number of islands, narrow straits, routes that are difficult to navigate and ice covered in the winter, makes the Baltic Sea a high risk area for accidents.

The Baltic Sea, with its unique flora and fauna, has a very slow exchange of water which makes the sea sensitive to changes in the environment caused by pollution. An accident in the Baltic Sea could, therefore, have devastating impacts on the sea environment.

According to environmental organisation Baltic Sea 2020, seaborne transport contributes to 1.5 – 3 % of the total emissions of carbon dioxide. Fuel consumption in shipping also contributes considerably to global emissions of nitrogen oxides and sulphur oxides. In 2005, the European Commission reported that nitrogen and sulphur oxide emissions from international shipping around Europe will by 2020 have surpassed the emissions from all land-based sources in the EU.

Nitrogen oxides and sulphur oxides are especially problematic since they have

been proven to have an acidifying effect on soil and water. As shipping is one of the main contributors to nitrogen oxide deposition in the Baltic Sea, it is thereby a huge contributor to eutrophication.

WANTED: GREENER FUEL

The EU emissions restrictions will tighten considerably in the future, with the first regulations taking effect in 2015. As always, change brings about also opportunity. For instance, the market for liquefied natural gas (LNG) market is expected to benefit from the new scenario. Ships powered by LNG are desirable over traditional ones, since natural gas does not contain sulphur, dust particles or heavy metals.

One of the players looking to explore the markets is the Finnish natural gas company Gasum. The company started production at Porvoo's new natural liquefaction plant on 10 June and is planning to add a terminal in order to deploy LNG as a fuel for maritime traffic. Director Björn

Photos: Gasum





Ahlnäs believes that a low-emission alternative will be a hot commodity in the marketplace. LNG-ships are also practical:

“LNG-powered ships do not need expensive additional equipment in order to stay within the emission limits,” Ahlnäs comments.

Gasum has been spearheading the cause of LNG for a while now: in addition to the new LNG production plant, investments have been made in LNG special transport.

STX GOES LNG

Also shipyards are taking notice of LNG. In June, STX Europe secured a contract with Solstad Rederi AS to build an innovative LNG-powered Platform Supply Vessel (PSV). The vessel is of STX Europe PSV 12 LNG design and scheduled for delivery in late 2011.

Roy Reite, President of STX Europe’s Offshore & Specialised Vessels business area, comments that the order confirms the company’s strong position in design and building of environmentally friendly vessels.

“LNG is a technology in which we already have a strong track record,” Reite says.

In addition to LNG, the vessel will be able to run on biofuel and ordinary marine diesel oil. STX Europe’s gas tank solution is also unique in the sense that the LNG tank does not reduce the cargo capacity on board. In fact, the new design has a higher cargo capacity than other vessels of relative size.

FUN IN THE SUN

Still, some innovators are looking even further to champion the cause of clean-

er waves. In March, PlanetSolar unveiled a 100-foot-long catamaran at the HDW Shipyard in Germany. The catamaran is crowned with about 5,300 square feet of solar panels made up with some 38,000 sun power cells. Each of the cells offers an efficiency of at least 22 percent, making them the highest-efficiency solar cells commercially available.

On a cloudy day, batteries below the deck get going – and they can push on for several days without direct sunlight.

Also Oasis of the Seas is flirting with the sun – there are 21,000 square feet of thin solar film onboard the world’s largest cruise ship. The solar panels produce enough power to light the ship’s Royal Promenade and Central Park areas. ■

SAMI J. ANTEROINEN

Oilon Marine Burners Since Year 1963

Oilon is one of the leading burner manufacturers for marine industry. Common application for Oilon pressure jet marine burner is 1 to 8 ton/h steam boiler, although burners are also suitable for hot water boilers and thermal oil heaters. Oilon can also supply steam atomising burners up to 80 ton/h boilers (63 MW).

Oilon's burners are suitable for nearly every possible fuel used in marine industry, from non sulphur light fuel oils up to 700 cSt at 50 °C heavy fuel oil. Oilon can also manage sludge combustion.

EASY COMMISSIONING

Oilon burners are built for easy commissioning. All major components are mounted on the burner, which makes commissioning work quick and easy. Also all of the electrical connections are placed on top of the burner.

WHY TO CHOOSE OILON MARINE BURNER?

Oilon has more than 40 years experience on heavy fuel oil combustion, which ensures burner's reliability.

Oilon has delivered burners for marine industry since year 1963. Oilon uses high quality components from international suppliers. Oilon has world wide service network. ■



The Flagship Maritime Trade Fair in Northeast Asia

Shiptec China 2010

- 7TH INTERNATIONAL SHIPBUILDING, PORTS AND MARINE EQUIPMENT EXHIBITION FOR CHINA

26-28 October 2010

Dalian World Expo Center, Dalian, Liaoning, PR China

Shiptec China, the upgraded edition of Shiport China which had been serving the industry since 1998 till 2008, will carry on its obligation to present revolutionary innovations in areas such as shipbuilding, ship repairing, ship auxiliaries, port and logistics, marine services, marine technology and offshore engineering from 2010 on.

The market that Shiptec China will serve includes Japan, Korea, Russia and two major shipbuilding bases of China in Around Bohai Sea Area and in the Yangtze River Delta where the shipyards hold most of the world's shipbuilding orders.

More information is available at <http://www.shiptec.com.cn>. Welcome to join us!



Shiptec China's Objectives in 2010:

- 700+ exhibitors from all over the world
- 30%+ international exhibitors
- 15,000 of professional visitors
- 30,000 square meters of gross exhibition area
- 10 national pavilions

Hosted by:

China Association of the National Shipbuilding Industry
China Shipowners' Association
Chinese Society of Naval Architects & Marine Engineers
Dalian Municipal People's Government

Organized by:

Dalian Xinghai Exhibitions Co., Ltd.



For enquiries, please contact Mr. Harbor Chai, International Marketing Director, Dalian Xinghai Exhibitions
Tel: +86-411-3991-6904 Fax: +86-411-8480-9988 E-mail: shiptec.china@gmail.com

Watertight bulkhead door system

www.tebul.fi



The advantages:

- fully electric
- a compact unit ready to be installed
- no retightening means fair savings
- minimum risk of distortion
- low lifetime cost
- silent operation



Service and spareparts for all Tebul type doors

Tebul Oy, Luumäentie 2, FIN-21420 LIETO, Finland. Tel. + 358-50-5406 031

Ship Classification to Incorporate Inspection of LNG Fuel Systems

Bureau Veritas is a professional organisation for the classification and verification of maritime and other technologies. These days, Bureau Veritas' inspectors are getting more and more familiar with LNG fuel systems on board ships.

The efficiency of international maritime transports is closely connected to the free movement of ships on the seas. This in turn is supported by universal standards and regulations, often relating to requirements of quality, health, environment-friendliness and safety in maritime transportation.

As the utilisation of LNG (liquefied natural gas) as ship fuel is becoming more commonplace, classification bodies such as Bureau Veritas are preparing to classify LNG-fuelled ships and their gas systems as needed.

"Bureau Veritas has inspected and classified LNG-based fuel systems on ships since 2004. At first, such fuel systems were only being utilised on board a number of LNG tanker vessels," recounts Mr. Olli Kaljala, Marine Chief Executive for Bureau Veritas' Branch Office for Finland.

"As International Maritime Organisation (IMO) will impose stricter rules (sulphur content of fuel to be below 0.1 percent) for ship emissions within the Baltic Sea emission control area by January 1st 2015, the use of LNG fuel on ships is becoming more popular. Already, LNG is envisaged for a broader range of vessels, in particular Ro-Ro ships, car and passenger ferries and supply ships," Kaljala mentions.

"So far, no BV classed Finnish vessels utilise LNG as ship fuel. Among the local



Photo: Exxon Mobil

Ras Laffan Industrial City is Qatar's main site for production of liquefied natural gas, with an annual output of 4.7 million tons of LNG.

ship owners interest in using LNG as fuel is increasing, Viking Line for one is considering building a new ferry capable of running on LNG fuel – but no final decision has been made on this."

SAFETY IS CRUCIAL

Bureau Veritas has rules for designing and building dual-fuel systems onboard vessel and also specific detailed instructions for carrying out annual inspections of the LNG fuel systems of ships.

"When designing and building a gas fuel system to a ship, risk analyses are required to be conducted in order to substantiate the adequate safety and dependability of the propulsion system of the vessel."

"During vessels' life-time, the safety of these systems will be inspected in the course of our normal annual ship inspections, according to 5-year classification period," notes Kaljala.

In general, Bureau Veritas' branch office for Finland currently carries out approximately 400 ship inspections and audits annually (Finland and Baltic States).

"On LNG-fuelled ships, the LNG storage tanks might be situated on deck – but they may also be inside of the ship's hull. This depends very much on the type of the ship. The size of the fuel tanks is also a factor: LNG tanks take up almost twice as much space as tanks filled with traditional bunker oil for transporting the ship the same distance," Kaljala calculates.

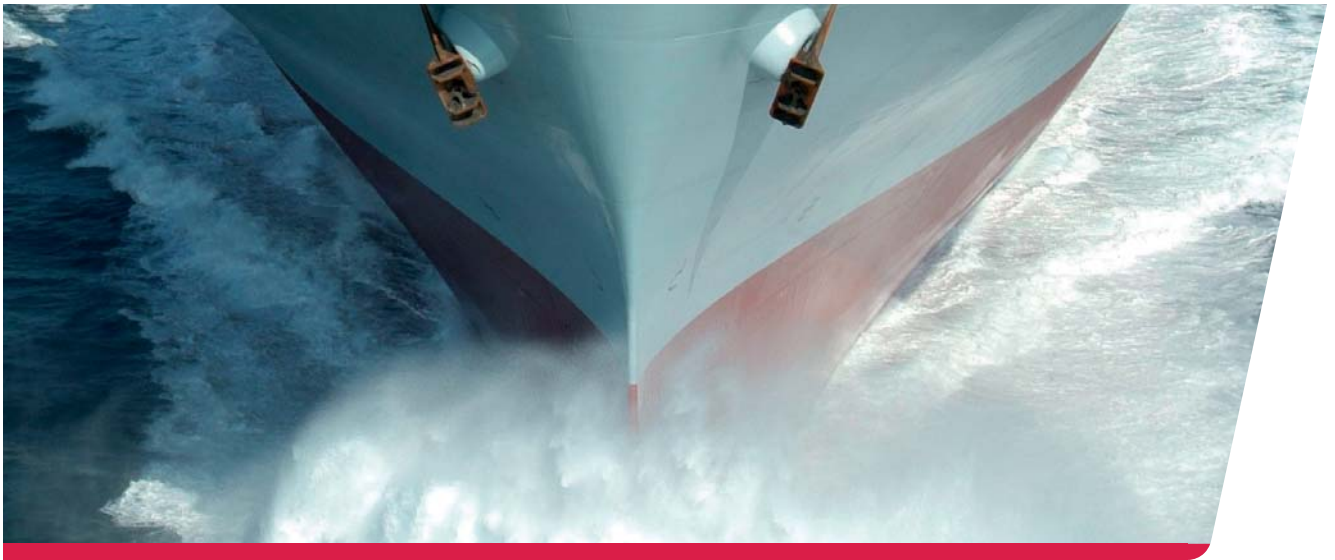
GOING FOR FLEXIBILITY

In maritime transports, the use of LNG as ship fuel may be hindered by the limited availability of LNG distribution infrastructure – at least at first.

"Because of this, it seems that LNG fuel might be best suited for ships on regular lines."

"So far, most of the LNG-fuelled ships have been fitted with dual fuel engines. If necessary, they could resort to the use of auxiliary fuels," Kaljala explains. ■

MERJA KIHIL
ARI MONONEN



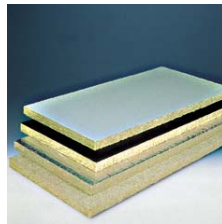
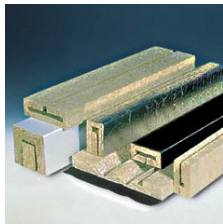
*Global technical excellence closer
to shipowners - closer to shipyards
wherever you are*

Visit us on: www.bureauveritas.com
www.veristar.com

Move Forward with Confidence

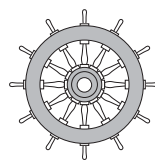


**BUREAU
VERITAS**



Marine Insulation

Highly developed, economical and fire safe solutions for fire,
thermal and sound insulation.



0809



www.paroc.com

Eclipse to the rescue!

THE NEWEST SOLSTICE-CLASS SHIP MAKES ITS DEBUT WITH STYLE



It was a cruise ship launch like no other. And it was a storybook rescue worthy of a king. Celebrity Eclipse, the latest in a series of five stunning Solstice Class ships from Celebrity Cruises, was all set to embark on a two-day promotional cruise on April 22-24, when she received a more urgent mission. As luck would have it, 2,200 vacationers were stranded in Spain due to the travel disruption caused by the volcanic eruption in Iceland. Celebrity Eclipse promptly left her homeport of Southampton, England, and headed for Bilbao, Spain.



Photos: Meyer Werft

And soon enough, the stranded air passengers were heading home from Spain on the luxury liner, sampling champagne and fresh fruit as they recovered from their woes. Celebrity Cruises and four travel firms paid for the rescue mission.

Richard D. Fain, Chairman of the Celebrity Cruises, was also on board the most luxurious rescue boat of all time. He noted that there could hardly be a better way to bless a new ship than by doing “a small bit of good in a very big problem.”

Upon returning home to Southampton on 23 April, everybody agreed that this was one maiden voyage to remember. Celebrity's President & CEO Dan Hanrahan commented that the company is proud of its tradition of planning and implementing memorable ship launches, but the launch of Celebrity Eclipse was particularly unique.

“The atmosphere has been fantastic among the guests and our crew. Everyone feels they are part of something truly special.”

ANSWERING THE CALL

As the actual formal naming ceremony took place three days later, the momentous occasion was seriously in danger of being “eclipsed” by the previous high seas heroics. The Bilbao rescue mission was still very much a hot topic as glasses were raised in honour of the ship. At the ceremony, there were nearly 2,000 primarily UK-based travel agents, press and other special guests. The vessel will be the first in the Celebrity fleet to be dedicated to the UK market.

“What a rare and notable way for Celebrity Eclipse to begin her sailing career,” mused Richard D. Fain.

“Who knew that a \$700-million ship would start her career as emergency transport? One of the particular pleasures was seeing how responsive our exceptional crew was, and how much effort



they contributed to make sure that these unexpected guests had the time of their lives."

Dan Hanrahan shared a similar sentiment:

"Never in my wildest dreams did I imagine we could be so impacted by a volcano whose name I can't even begin to pronounce."

With the launch of the Eclipse, Celebrity Cruises achieved "a perfect 10" – the company now boasts a fleet of 10 ships.

MAKING MEMORIES

Presiding over the naming ceremony was ship's godmother Emma Pontin, ocean-racing yachtswoman and breast cancer survivor. Pontin noted that for her, life has become more precious than ever:

"I now want memories, not just dreams. And memories are what will be created on this magnificent ship," she said in a poignant address.

Memories as vivid as green grass in a summer breeze: like her sister ships – Celebrity Solstice and Celebrity Equinox – also Celebrity Eclipse presents The Lawn Club, with real, growing grass (an industry first). In addition, the new ship features the Hot Glass Show, a glassblowing show and studio developed with The Corning Museum of Glass; 10 top-notch dining venues, including Qsine; and widely varied entertainment, including shows with breathtaking aerial acts.

With Solstice-class ships the grass is not the only thing that is green: the ships come equipped with Photovoltaic System, an optimised hull design, highly-efficient hull coatings and lighting system using LED lights. With this set of innovations, Solstice-class ships deliver 30 % energy savings in comparison to the average cruise ship.

DARING THE RIVER

While sounding dire and dramatic, the rescue mission down south did not provide

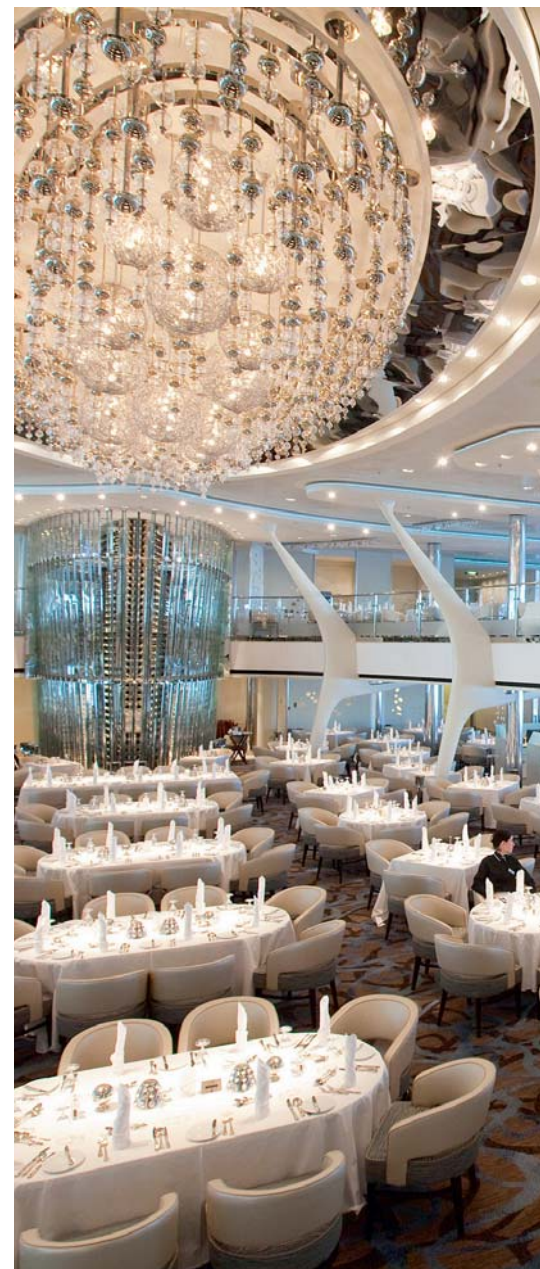






a great challenge to the seaborne skills of the crew. In fact, the tightest spot for Celebrity Eclipse – in fact, the tightest spot she is likely encounter in all her days at sea – came and went on River Ems in Germany. It's a rite of passage known as "conveyance", as the ship leaves the Meyer Werft shipyard in Papenburg and head up the river to the sea.

During the March conveyance, there were as few as two feet between each side



of the 1,040-foot-long, 121-foot-wide Celebrity Eclipse and the locks. The depth of the river and the draft of the ship allowed for mere inches – or less – beneath the ship. These factors and others led Celebrity Cruises and Meyer Werft to essentially create a science all their own, carefully monitoring the position of the moon and tidal conditions to identify the precise moment when the depth of the river is ideal for the ship to set sail from the shipyard.

Celebrity Eclipse Captain Panagiotis Skylogiannis pointed out that cruise ship captains generally do not expect to encounter the challenges the conveyance presents. Although the good captain was accustomed to docking in tight ports, he admitted that his preference is to be “chasing sunshine in the open sea”.

Skylogiannis also acknowledged – with a smile – that he should not sleep on the job as the president of the company was onboard. Still, the captain was confident that the conveyance would be a successful one – after all, the two sister ships had taken the same route in their day.

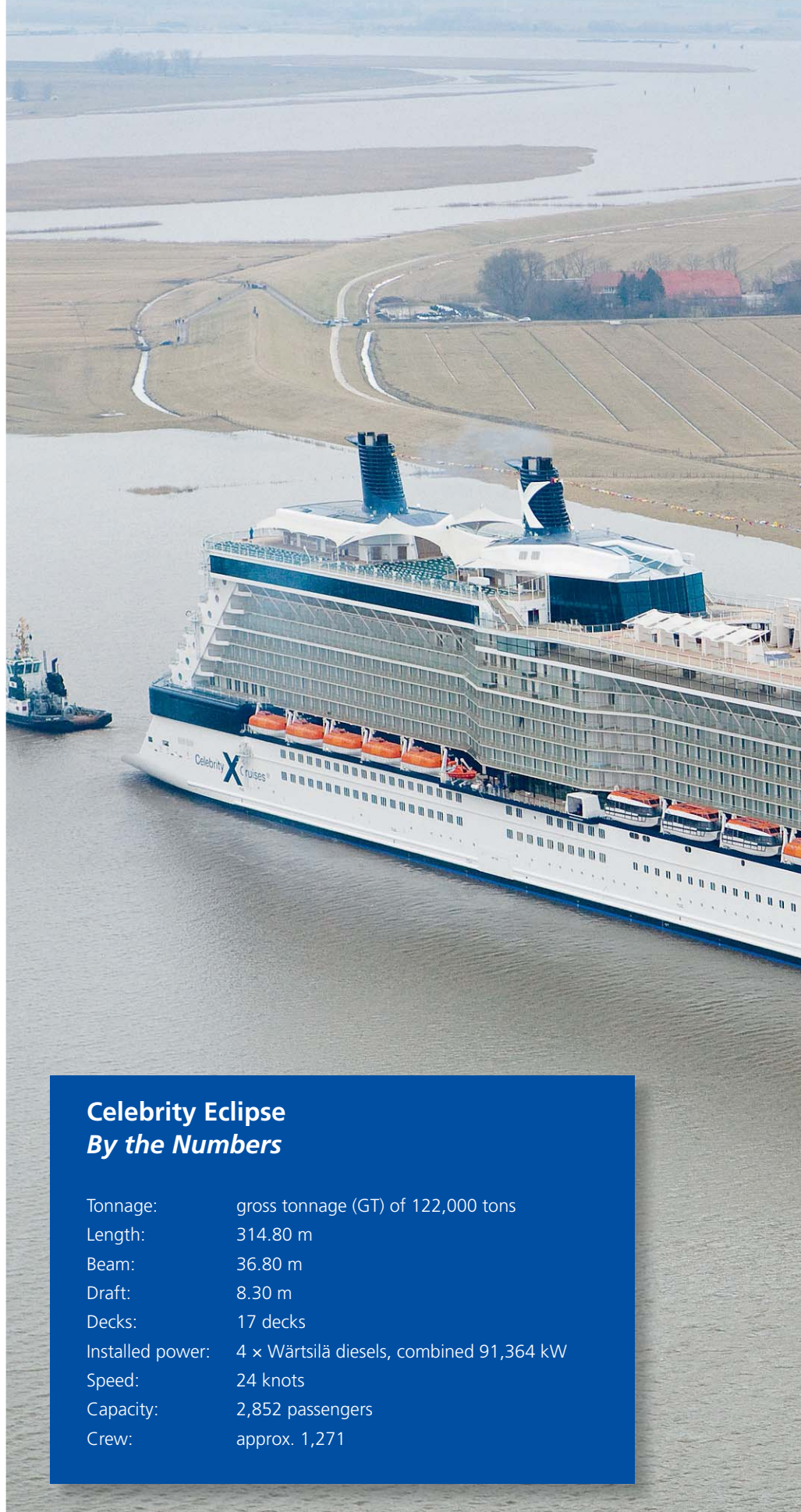
BUSY INAUGURAL

In the end, everything proceeded without a hitch. Thousands of people lined the banks of River Ems to see Celebrity Eclipse embark on her adventure.

After arriving in Emshaven, Netherlands, the ship performed a series of sea trials, followed by a string of promotional events in Hamburg, Germany, and finally headed to Southampton.

During her inaugural season, Celebrity Eclipse will offer cruises in the Mediterranean, Canary Islands, Scandinavia and Russia, as well as short cruise options to Le Havre (for Paris), France, and Cork, Ireland, all roundtrip from Southampton. The ship will present Caribbean cruises roundtrip from Miami, Florida, after crossing the Atlantic in November. ■

SAMI J. ANTEROINEN



Celebrity Eclipse *By the Numbers*

Tonnage:	gross tonnage (GT) of 122,000 tons
Length:	314.80 m
Beam:	36.80 m
Draft:	8.30 m
Decks:	17 decks
Installed power:	4 × Wärtsilä diesels, combined 91,364 kW
Speed:	24 knots
Capacity:	2,852 passengers
Crew:	approx. 1,271





The Two Largest English Channel Ferries under Construction at STX Rauma Shipyard

STX Finland's Rauma shipyard is currently constructing two large car and passenger ships ordered by P&O Ferries for the Dover – Calais route. Each ship will have the capacity to take 180 lorries in addition to 195 cars and 1,750 passengers.



An aerial view of STX Finland's Rauma shipyard.

Photos: STX Europe

According to Mr. Markku Uusitalo, Project Manager for STX, the construction work of the two vessels was awarded to STX Rauma shipyard on the basis of a bidding competition.

"The project started on 7 August, 2008. This is when the contract for the two vessels was signed," Uusitalo recounts.

Last winter, STX Finland's Rauma shipyard was engaged in the hull construction and outfitting work of the first vessel.

"The first of the two vessels is now nearing completion. It was floated out on 8 June, 2010. At present, the ship is still undergoing some paintwork for the machinery compartments."

"By autumn, the public compartments on the ship – including restaurants, galleys and cabins – will be completed. Sea Trial test will be carried out in October."

The finishing touches are to be ready by December 2010. In early January, the ship will be delivered to the customer.

The second vessel is also under construction. Its production was started on 8 December 2009.

This ship is scheduled to be completed by September 2011. An adequate share of blocks for the second vessel was completed by early summer of 2010 for the Rauma shipyard to be able to lay down the keel on 11 June, soon after the first vessel was launched.

Mr. Uusitalo affirms that the construction of both ships is proceeding on schedule.

SHIPS DESIGNED FOR LOW-SULPHUR FUELS

P&O Ferries is a leading ferry operator, with a network of 10 routes linking Britain with Ireland, France, Spain, Belgium and the Netherlands. The company operates a fleet of 27 multi-purpose and freight ferries and employs 4,500 people. It is part of Ports & Freezone World, a company ultimately owned by the Government of Dubai.

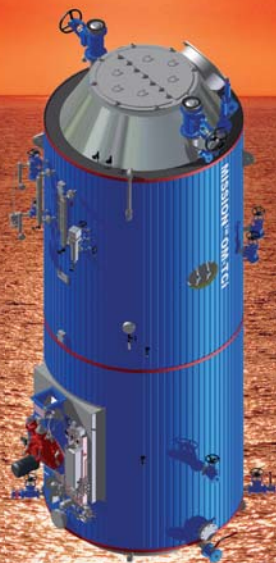
The first of two vessels, Spirit of Britain was floated out on 8 June, 2010.



High Efficiency & Environmental Value



www.aalborg-industries.com



Up to today, we here in Rauma office have sold about 2000 exhaust gas economizers and oil-fired boilers with auxiliary equipment to various ships worldwide.

MISSION™ OM-TCi sets the new standard for fuel economy in marine boilers. With upgraded thermal design, it provides high efficiency of 89 - 92% depending on different boiler load conditions. The operating excellence is to save energy and reduce emissions by less fuel consumption.

Aalborg Industries Oy

PL 9, Kaivopuistontie 33, FIN-26101 Rauma, Finland
☎ +358 10 838 3800 📠 +358 10 838 3808 ✉ sales@aalborg-industries.fi

STX's contract with P&O Ferries states that since the International Maritime Organisation (IMO) intends to impose new strict limits for sulphur dioxide emissions from ships – the maximum limit being 1.5 percent of sulphur allowed in ship fuels in sensitive Emission Control Areas – the design of the two new vessels will take into account even the forthcoming stringent environmental requirements. This means that low-sulphur fuels will become essential.

"The auxiliary engines will be designed for classification in accordance with TIER II class regulations," Uusitalo assures.

"The main engines of the ships are direct jet-stream engines manufactured by MAN Corporation. They will be fine-tuned for the use of low-sulphur fuel."

Other steps, too, are being taken to protect the marine environment. The sew-

age from the two vessels will not be discarded at sea but will be taken to port for proper handling and disposal.

DESIGNING FOR SAFETY

The main design of the ships was carried out at STX's Rauma shipyard.

"We also handle the design work for the manufacturing stages," says Uusitalo.

"In addition to STX, such design offices as Deltamarine Oy – from Rauma – and ENG'ND Design took part in the design work."

P&O Ferries expects the ships to be up to SRTP (Safe Return to Port) specifications.

"This means that special attention is being paid to safety-related matters. If ever there is a fire on board, the ships will be able to return to port unaided when necessary," Uusitalo explains.

"Moreover, the vessels will conform to Lloyd's SDA (Ship Design Agent) hull design specification. The strength of the ship's hull structure has been defined by the utilisation of an analysis model. This has never before been done for ROPAX ships."

The two vessels are sister ships and, consequently, quite identical.

"The design work for the ships started in September 2008. Construction work commenced on 3 March, 2009. Part of the design work continued throughout the first phases of construction. The basic design of the vessels was completed by autumn 2009."

The value of the two-vessel project for P&O Ferries is some 360 million euros, with an employment impact of approximately 1,800 man-years. These 49,000 gt vessels will have a vehicle capacity of 3,700 lane meters.



ADVANCES IN TECHNOLOGY

The ships are being built and designed in parallel, partly at the same time.

Both ships are equipped with four main engines, with a total propulsion power of 30,400 kW (kilowatts). The ships will become the largest car & passenger ferries utilised on cross-Channel routes, with an overall hull length of 213 metres each.

STX Europe is a leading designer and builder of passenger and car ferries. Of the 20 largest ferries in the world, twelve have been built by STX Europe.

"Before this, STX has constructed a number of other kinds of Channel ferries. Some of them are equipped with somewhat similar types of docking structures."

"For the P&O Ferries' vessels, one of the special features is the high power of the bow propellers," Uusitalo points out.

There are three bow thrusters for each ship, yielding a total power of nine megawatts.

NEW INVESTMENTS

Mr. Uusitalo mentions that the two vessels are being constructed by 500 professionals, 300 of whom are on STX's payroll. The largest subcontractor is the Helsinki-based Merima Oy who is in charge of deck construction.

"A number of blocks of the ships have been built by STX's Turku shipyard, whereas a couple of blocks were purchased from Poland. The blocks have been transferred to Rauma shipyard by utilising the M/V Aura transport vessel, or with the aid of barges from the Turku shipyard," notes Uusitalo.

In the autumn of 2009, an auto-

mated profile cutting line worth approximately two million euros was installed in the Parts Fabrication department of Rauma shipyard. Since then, it has been utilised in the construction work of the second vessel of the P&O Ferries project. The aim of this large-scale cutting line investment is to enhance quality, productivity and occupational safety. According to Mr. Uusitalo, the employment situation at Rauma shipyard looks good. The order of a research vessel received by STX Finland to be built for the South African Ministry of the Environment will employ the Rauma shipyard even after the P&O Ferries order has been completed. ■

MERJA KIHIL
ARI MONONEN

MARINE TECH KOREA 2010

International Exhibition for the Korea Shipbuilding,
Marine Technology Industries 2010

20(Wed) ▶ 23(Sat) October 2010
CECO, Changwon, Korea



Mecca of World Shipbuilding Industry, Gyeongsangnam-do

Gyeongsangnam-do is the core position of
manufacturing technique of LNG Carrier
and Offshore Plant.

Main Exhibits

- Shipbuilding & Marine Equipment
- LNG Carrier & Offshore Plant
- Harbors, Logistics, Marine Safety

Events

- International Conference and Seminar
- One on One Business Meeting
- Shipbuilding Company & Marine Equipment Company Tour

Invitation for Foreign Buyers

- If foreign buyers want to make a contract, sign MOU etc during the show, the organizer would support 50% of airfare and accommodation

Organized by : GYEONGNAM PROVINCE CHANGWON CITY JINHAЕ CITY TONGYEONG CITY GEOJE CITY

Managed by : K. FAIRS GNA International Co., Ltd. KOMEA Reed Exhibitions

MARINE TECH KOREA 2010 Secretariat Tel : +82-2-555-7153, +82-55-212-1334~6 E-mail : info@mtkorea.org

J.J. SIETAS:

German Shipyard Successfully Enters The Special-purpose Vessels Segment

A view of Sietas' shipyard compound in Hamburg-Neuenfelde.



In early 2009 perspectives looked rather bleak for the Sietas Group, Germany's eldest shipbuilding venture with roots dating back to 1635: Heavy losses had been generated in 2007 and 2008, the order book was diminishing rapidly, and the yard had obviously approached new markets beyond the fiercely competitive container ship building too slowly.

Today, only one and a half years later, the situation is quite different: Sietas has dynamically entered the special-purpose vessels segment, a number of new orders were obtained, and the recently delivered commuter ferry M/V "Uthlande" has turned into an instant marketing success.



Photo: Sietas Group



The implementation of sectional ship building was a cornerstone of Sietas' recent restructuring program. Here the prefabricated deckhouse and bridge of the M/V "Uthlande" are just being lifted onto the hull.

It was probably one of the most important praises that Sietas ever received in its more than 375 years of history: "This ship does not just fulfil our expectations, it exceeds them," said Axel Meynköhn, CEO of the German ferry operator Wyker Dampfschiffs-Reederei Föhr-Amrum GmbH, in a speech delivered minutes before the official christening of the M/V "Uthlande" on 11 June. The 3,300 GT commuter ferry, which was designed for island trade off the coast of Schleswig-Holstein in Northern Germany, stands as a symbol of the new beginning at Sietas: "Uthlande" constituted Sietas' first new

order contract obtained after the implementation of a sharp restructuring program in spring 2009.

She is, at the same time, the yard's first reference in the ferry segment, and she proves that Sietas is a globally competitive force: Her contract – worth about 16.5 million euros – was obtained in sharp competition with other yards, among others from Latin America and Eastern Europe.

THOROUGH SHIPYARD RESTRUCTURING

Founded in 1635 and still family-owned, Sietas Group constitutes Germany's eldest

shipbuilding venture. Based in Hamburg-Neuenfelde it comprises the J.J. Sietas KG Schiffswerft GmbH & Co. as well as three subsidiaries: Neuenfelder Maschinenfabrik GmbH (a supplier of special hydraulic equipment for ships), Kommanditgesellschaft Norderwerft GmbH & Co. (a company specialised in repairs and conversions) as well as GfA Gesellschaft für Asset-Management mbH.

Until recently, Sietas concentrated mainly on the construction of container ships, a market segment which has become increasingly dominated by huge shipyard corporations from Far East-

*The inviting passenger lounge onboard
"Uthlande".*



Photo: W.D.R.

M/V "Uthlande" commenced operation between the ports of Dagebüll, Wyk and Wittdün in June.





Photo: W.D.R.

ern countries. It was also one of the first shipping segments affected by the global economic crisis in 2008/09. Sietas Group – which had recorded a loss already for the 2007 fiscal year – was rammed very severely by the downturn, and only a thorough redevelopment and realignment concept, launched early last year, succeeded to secure the shipyard's viability.

A new Managing Board comprising Rüdiger Fuchs – a former Airbus manager – and Rüdiger Wolf took office on 01 March 2009, and within few months the entire enterprise underwent deep restructuring: The product portfolio was reshuffled with a new focus on special-purpose ships rather than container vessels, costs were drastically cut and the production changed to an industrial concept facilitating shorter processing times, higher productivity and reduced inventories.

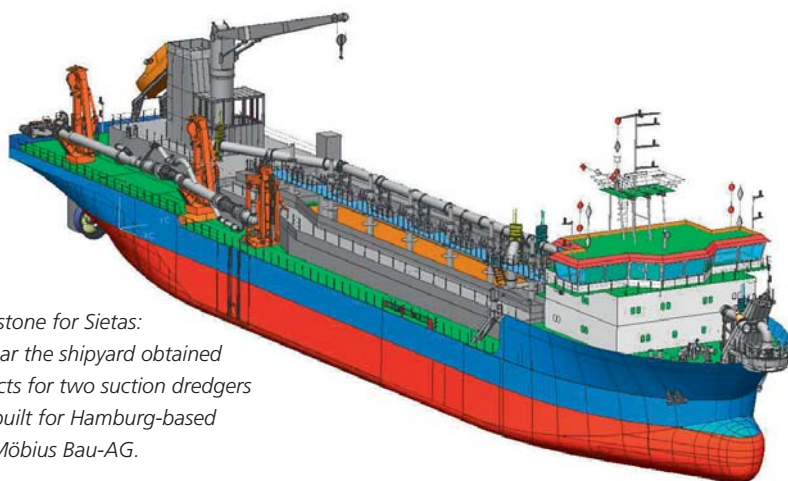
A key objective was the reduction of construction times from 13 to ten months through the implementation of latest industrial concepts allowing efficient workflow management and sequential control.

"We want to bring back the lifeblood of the Sietas shipyard which is a jewel in the maritime crown of Germany," Rüdiger Fuchs and Rüdiger Wolf promised when taking office, "we believe that we will have steered our way into calmer waters by 2011."

CONTRACTS FOR SPECIAL-PURPOSE SHIPS

Sietas' new management quickly came on a good course for fulfilling this ambitious goal. The main focus was set on the acquisition of new contracts for special-purpose ships requiring particular technical expertise and innovativeness, such as RoRo-vessels and ferries, offshore vessels, heavylift-vessels or dredgers.

Already in April 2009, Sietas obtained the important contract for the M/V "Uthlande". Another order from the ferry segment followed a few months later:



*A milestone for Sietas:
Last year the shipyard obtained
contracts for two suction dredgers
to be built for Hamburg-based
Josef Möbius Bau-AG.*

In December 2009 AG Reederei Norden-Frisia, which operates services to the German North Sea islands of Norderney and Juist, contracted a 68 metre long commuter cargo ferry dedicated exclusively to the transportation of rolling cargo. This ship, which will be fitted with special anchor piles for and aft, is due to be delivered in summer 2010.

Another important contract was obtained in July last year when SAL – Schiffahrtsskontor Altes Land GmbH & Co. KG ordered the two largest heavy lift ships in the world from Sietas at a total contract value of 120 million euros. The two vessels – which will boast a lifting capacity of 2,000 tons and sail at a speed of up to 20 knots – are due for delivery in December 2010 and March 2011, respectively.

In September 2009, Sietas obtained yet another order: It teamed up with the German-Dutch company VOSTA LMG, one of the world's leading dredger technology companies, to construct two suction dredgers for Hamburg-based Josef Möbius Bau-AG. The two diesel-electric dredgers – which are due for delivery this summer and in January 2012 respectively – will have different sizes, although their bow and stern sections are going to be identical.

One dredger will boast a hopper volume of 7,350 cubic metres, the other one for 5,550 cubic metres. In both cases, the

draught will amount to 6.80 metres, and both dredgers are going to be equipped with a suction tube of one meter in diameter which can reach depths of up to 30 metres. The total order volume for both dredgers amounts to 90 million euros.

PROMISING PERSPECTIVES

The orders from W.D.R., AG Reederei Norden-Frisia, SAL and Josef Möbius Bau-AG

have come at a decisive time for Sietas and helped to expand its product range. Currently the yard works very hard to obtain additional orders, not the least from international clients. Already last year Sietas appointed the experienced ship broker company Peter Döhle Schiffahrts-KG to handle its international marketing on an exclusive basis. The objective of this move was to promote the yard – which has so far been known principally in Germany – on a worldwide stage.

Sietas' international positioning is apparently about to bear fruit: e.g. ferry segment international operators are said to have shown great interest in the yard's products, and industry sources claim that Sietas might obtain new contracts for commuter ferries in the near future. The successful inauguration of M/V "Uthlande" – which commenced operation on the Dagebüll-Föhr-Amrum service in mid-June – could obviously help this case. ■

FREDERIK ERDMANN

"Uthlande" – attractive and efficient

The 75.88 metres long commuter ferry M/V "Uthlande" has launched a new era on the Dagebüll-Wyk-Wittdün ferry service linking the North Sea islands of Föhr and Amrum to mainland Germany. Boasting capacity for up to 1,200 passengers and 75 private cars or cargo on 270 lane metres, she successfully unites passenger comfort and efficiency.

Thanks to its four Voith-Schneider propellers the ship features excellent manoeuvring capabilities while the very low design draft of just 1.75 metres contributes to maximum operational reliability even in case of low tide.

"Uthlande" sails at a speed of twelve knots, and due to her double-end design she does not have to turn in port, which contributes to a reduction of fuel consumption and emissions. The ferry's passenger facilities are outstanding with an extremely bright and friendly salon deck located above the cardeck and a spacious sundeck situated on top.

"Uthlande" also cares for disabled passengers who can easily reach the salon area and the sundeck by means of a spacious lift. ■



Turku Repair Yard Ltd Handles a Wide Range of Ship Overhauls

Turku Repair Yard Ltd continues the long tradition of Finnish ship repairs. It is one of the leading ship repair yards in Northern Europe.

The main repair dock of Turku Repair Yard is situated in Naantali. "Most of our projects fall within the category of rapid-pace annual repairs," says Mr. Hans Sundqvist, Managing Director for Turku Repair Yard Ltd.

"However, we are also involved in long-term repair and installation work. At the moment, we are fitting the Finnish ice-breaker 'Kon-tio' with new oil-spill recovery equipment."

The ice-breaker has been docked at Turku Repair Yard at Naantali since April 2010. The conversion to oil destruction activities – scheduled to be ready by late June – is being financed by EMSA (European Maritime Safety Agency).

Another specialised ship currently undergoing work at Turku Repair Yard is the 150-metre Russian research ship 'Akademik Fedorov'. The vessel, often utilised for Antarctic research, was originally built by Rauma-Repola shipyard in Finland.

"The research ship is due for a large-scale overhaul. For instance, new sonar equipment is being fitted underneath the ship's keel. The service work will be ready by July 2010," Sundqvist notes.

According to Mr. Sundqvist, approximately 70 percent of Turku Repair Yard's projects are related to ships built in Finland.

"Annually, Turku Repair Yard works on the ships for 300,000 man hours. Our own personnel handles 100,000 hours of the total, while the rest is taken care of by the subcontractors."

"More than two thirds of our subcontractors are Finnish companies. We have one-year contracts with several local companies in the Naantali region," Sundqvist points out. ■

More information: www.turkurepairyard.com

MERJA KIHIL
ARI MONONEN

Windside Wind Turbines for Professional Use with 30 years' experience

Finnish Windside Wind Turbines have been designed for the most demanding professional use in the harshest of environments. Completely self contained and automatic Windside Wind Turbines are operating in the extremes of climate. From the freezing Antarctica with its ice and snowstorms, to the heat and sandstorms of the Sahara Desert and to the wet, stormy and corrosive atmosphere of the Pacific Ocean. Windside wind turbines are in use in over 40 countries.

Windside wind turbines have been designed for battery charging and can be used wherever energy is needed. The Windside uses are almost limitless be it safety lights, traffic signs, emergency exits, street lighting, telecommunication towers, remote signal and surveillance equipment, lighthouses, gas and oil platforms, ships and boats etc. ■

Oy Windside Production Ltd is a member of IALA.

Patented Technology.

Read more: www.windside.com



New Highly Efficient Azimuth Propulsor for Cruise Ships

Emphasis on fuel economy and green values has increased the interest in enhanced propulsion efficiency. For ship owners a matter of great importance is reliability and trouble-free operation. To meet these demands Steerprop has introduced a new type of geared azimuth propulsor – Cruise CRP – targeted for ships with high speed and high power, such as cruise liners and cruise ferries.

Steerprop Cruise CRP features the benefits of Contra-Rotating Propellers: Recovery of rotational losses, high propeller efficiency because of low blade loading, reduced frictional losses due to small blade area and low propeller RPM. In addition, it has the advantages of a pulling propeller:

Homogeneous in-flow providing non-cavitating operation and reducing pressure pulses, high efficiency of a propeller always operating close to its design condition, as well as additional gains from propeller-pod interaction. Steerprop Cruise CRP is pressure-lubricated providing high mechanical efficiency, about 98%.

High power capacity because of large area of propeller disk(s) and good efficiency even with reduced propeller diameter together with low mechanical losses makes Steerprop Cruise CRP a viable solution also for ice-classed applications.



The enhanced maneuvering with fully azimuthing units shortens the turnaround times and helps to access ports even in bad weather.

The Steerprop Cruise CRPs are designed for speeds of 25 knots and above and cover the power range from 5 MW to 20 MW. ■

Macro-module cabin structures – an innovation for ship-builders

Established in 1984, Shippax Ltd is an independent Finnish interior and accommodation building company.

The company now manufactures Fixcel steel sandwich structures for many applications.

Up to now, Shippax's Fixcel structure has been used in the construction of various land-based applications and floating villas. However, Shippax Ltd expects that the innovation may yet have huge potential in the shipping industry.

For instance, cruise liners and passenger ferries could be built of fully outfitted, ready-made macro modules of up to eight cabins. Such accommodation blocks could be attached onto the ship's hull to form a part of the vessel's structure.

"The R&D work for the new structure was started approximately five years ago. Fixcel was invented by Mr. Tapio Kordelin, Shippax's Managing Director who is known

for his innovations," says Seija Hirvonen, Development Manager for Shippax Ltd.

"By now, Shippax – along with Tapio Kordelin and Chairman of the Board Pertti Lahtivuori – owns numerous patents around the world."

Fixcel structure has standardised connections for cables and tubings. "A module of, say, eight interconnecting cabins can be built within a very short time once the final blueprints have been made. As the structure is rigid and lightweight, it can be utilised to construct quite sizeable cabin modules and accommodation towers."

SELF-SUPPORTING STRUCTURE FOR SHIPS

Sales Director Jukka Laiterä from Shippax Ltd points out that ready-made macro modules are a definite advantage in shipbuilding.

"The old method for constructing ships with modular cabins requires the cabins to be hoisted to position without

floor structures and cabin windows. This means that the modules cannot be completed at the factory. They still need extra work at the shipyard."

"When steel sandwich systems are utilised, modular cabin structures can even be stacked so that they form self-supporting structures. They do not need to be surrounded by a separate steel structure," Laiterä explains.

"Fixcel sandwich structure is made of hot-galvanised steel profiles using triple seam rolling technology. No welding is needed." According to Laiterä, the new structure is fire and corrosion resistant and has good thermal insulation. At present, Shippax is negotiating with STX Europe and other companies for several macro-module projects.

Steel sandwich structures are being manufactured in Uusikaupunki in Finland. ■

MERJA KIHIL
ARI MONONEN

Power to the Sea – Integrated Electrical Solutions

The maritime industry is something special. Nothing you can put words to, but a simple matter of pride.

Seeing a ship completed on time and working is what generates that feeling of pride, and the vital element here, is that it has to work!

FROM THE BIG PICTURE TO THE SMALLEST DETAIL

Ever since YIT Marine was launched in 1982, it has completed electrical installa-

tions on over 180 ships, making the company one of the most experienced on the market. The company is the leading supplier of intelligent electrical solutions for some of the biggest ships in the world.

MAKE THE COMPLICATED SIMPLE

YIT Marine can call on the resources of around 500 skilled personnel, putting together teams to suit the project: from single man tasked with detecting a fault in a main switchboard, to teams of specialists to take a project from design through installation and testing to commissioning.

The company handles the entire process, whilst maintaining a clear overview.

FROM LOCAL TO GLOBAL

YIT Marine has supplied intelligent solutions to ships of all types since 1982. The company manages projects from Finland to Florida and from Chile to China. The company has divisions in Denmark, Finland and Lithuania. ■

More information:
www.yitgroup.com

IVK-Tuote Provides P&O Ferries with Ventilation Sound Attenuators

Founded in 1988, IVK-Tuote Oy has grown from a small workshop to a leading manufacturer of sound attenuators, dampers and cleaning doors for air handling systems in Finland.

At present, IVK employs 67 people. The company had a turnover of 6.1 million euros in 2009.

Since November last year, IVK has participated in STX Rauma shipyard's project to build two vessels for P&O Ferries.

"IVK provides sound attenuators for both ships," notes Sales Engineer Piia Kyrönlahti from IVK-Tuote Oy.

Sound attenuators are utilised aboard ships to reduce the noise caused by ventilation system cooling fans or by ventilation-channels. Reduction level varies between 5 and 40 dB.

"For the first ship, IVK supplied a total of 170 sound attenuator units. They were manufactured at our factory in Jyväskylä," says Kyrönlahti.

In May 2010, STX's Rauma yard received the first shipment of IVK sound attenuators to be installed to the second P&O ferry. The last attenuator units are to be delivered in November. ■

MERJA KIHIL
ARI MONONEN

Fixcel ® Macro Modules



www.shippax.fi

Jukka Laiterä, Sales Director

+358 400 523 173

Juha Lahtivuori, Estimating Manager

+358 40 501 5866

Oy SHIPPAX Ltd

Ship Interiors Often Require Careful Planning and Design

Founded in 1981, S.A. Svendsen Oy has become an experienced specialist supplier of interior outfitting materials for the ship-building industry in Finland for close to 30 years. The company also provides custom-made ship interior modules and furnishings.

"We supply ship interiors for new ships as well as for vessels hauled to repair yards for two to three weeks for annual docking," explains Mr. Kimmo Räisänen, Managing Director for S.A. Svendsen Oy.

"It is not uncommon that design work for ship interiors is started as early as 1.5 years prior to installation." Occasionally, interior furnishings are also provided to ships at sea.

According to Räisänen, S.A. Svendsen Oy recently supplied new interiors for such well-known passenger ferries as Silja Serenade, Silja Symphony, and Birka Paradise at Turku Repair Yard.

Interior design trends for ships largely depend on who the shipowner appoints as architect. Of course, designers tend to choose furnishings and colour schemes that are currently fashionable within the industry. "These days, many shipowners are investing in the design of ships' restaurants," Räisänen recounts. ■

MERJA KIHLE
ARI MONONEN

WatMan SWRO

SeaWater Reverse Osmosis (SWRO) rejects typically 98.5–99.5% of the salinity in one pass.

In large-scale production, energy consumption creates a noticeable expense. In conventional SWRO systems, typical energy consumption varies from 6 to 10 kWh/m³-fresh water, depending on salinity, temperature and recovery rate among others. In state-of-the-art systems with energy recovery the energy consumption can be as low as 2...4 kWh/m³-fresh water.

On the other hand, 1-pass SWRO can produce fresh water with 100–150 mg/l of chloride at its best. These high rejection systems always need an average feed pressure of 55–70 bars. So called 2-pass SWRO can remove even up to 99.9 % of the total salinity, meaning 20–50 mg/l of chloride. These extremely high rejections are sometimes needed to spare the metal piping from corrosion.

WatMan SWRO Systems can help you to produce extremely low-salinity fresh water with very low energy consumption. This means less energy, less maintenance, less down-time, less costs and more customer satisfaction. Less is sometimes more. ■

More information: www.watman.fi

Onboard-NAPA Solutions Prove Highly Beneficial in the Green Marine Industry

Safety is the most important factor to consider when loading a ship or planning the loading condition. The vessel must meet stability and strength requirements at all times. Today, e.g. large passenger vessels already operate within a very narrow margin as regards these limits, making it very difficult to achieve the most efficient loading condition.

NAPA OptiFloat enables more efficient and safe planning of the loading condition because it takes the vessel's operational limits (stability and strength) into account. In fully loaded conditions, considerable savings can be achieved realistically and easily by using OptiFloat to re-plan the loading condition. In the case of interim or light conditions, the savings potential increases dramatically.

It is very common to believe that a certain trim requires less power and therefore saves fuel. This, however, is based mostly on feelings and rather than facts. Sometimes it is more economical to reduce the displacement instead of adjusting the trim, which often requires taking on more ballast water.

When a vessel sails with a full load, close to its maximum draft, there is little flexibility for changes in trim, etc. This is the case especially with regard to operational limits; in addition, the safe loading conditions are limited. The stability and strength limits do not necessarily allow the most efficient floating position. If these limitations are not considered, the ship may suffer from structural damages or it may not have an adequate stability margin when it sails. NAPA OptiFloat takes these limitations into account and recommends the best possible solution for the most efficient and safe condition.

In fully loaded conditions, e.g. for modern passenger vessels, the trim is normally flexible, allowing changes that enable potential savings of 250–500 USD/day, while the interim or light loading condition allows changes making it possible to save 1,200–1,600 USD/day. ■

More information: www.napa.fi

company directory



Photo: Royal Caribbean International

ACM-TRADING LTD

Ketunleivänkuja 4
FI-21110 Naantali, Finland
Phone +358 20 799 1400
Fax +358 20 799 1409
firstname.lastname@acm-trading.fi
www.acm-trading.fi

**Contact Person**

Kari U. Laiho

Specialty Areas

Complete PUSHPIN®-ATB-Coupler System for Pusher Tug and Barge combinations. Available models 2 or 3 pin executions, with electro-pneumatic or electro-hydraulic controls with modern PLC controls. New Model! PUSHPIN®-SliderRig – Coupler enabling to be engaged during loading and discharging. Pin forces from 150 Tons up to 3000 Tons, from River ATBs to Large Offshore ATBs, 11 systems in service. Concept design, Feasibility Studies and total installation engineering and supervision including class approvals with FEM-analysis. Electro-Hydraulic EHS Actuators for valve control and remote sounding systems with total BUSLoop systems for all kind of vessels. Cooling control systems for HT-, LT-, LO-, SW- etc. cooling circuits. Marine Pumps, Marine Butterfly valves In house already over 40 years experience.

ANTTI-TEOLLISUUS OY, WIURILA MARINE

Koskentie 89
FI-25340 Kanunki
Finland
Phone +358 2 774 4700
Fax +358 2 774 4777
wmd@antti-teollisuus.fi
www.antti-teollisuus.fi

**Contact Person**

Markko Takkinen
Commercial Director
markko.takkinen@antti-teollisuus.fi

Subsidiaries & Representatives

Germany, Benipo Oy, USA, Almaco Group Inc, www.almaco.cc

Specialty Areas

Cabin, Accommodation & Interior fire doors for marine and off-shore applications.
WMD doors are available in C, B-15 and B-30 class with MED & USCG approvals.

BALTIC YACHTS OY AB LTD

Balticvägen 1
FI-68555 Bosund
Finland
Phone +358 6 781 9200
Fax +358 6 781 9222
www.balticyachts.fi

**Contact Person**

Kenneth Nyfelt
Sales Director
kenneth.nyfelt@balticyachts.fi

Facts & Figures

Turnover: EUR 25 million
Personnel: 155
Established: 1973

Specialty Areas

Sailing and motor yachts

BEACON FINLAND LTD OY

P.O. Box 228, FI-26101 Rauma, Finland
Phone +358 2 8387 9500
Fax +358 2 8387 9510
beacon@beaconfinland.com
www.beaconfinland.com

**Contact Person**

Timo Rintala
timo.rintala@beaconfinland.com

Facts & Figures

Personnel: 10
Established: 1987

Specialty Areas

Ship concept, project and basic design
Ship theory design, strength and vibration analysis
Design of Tugs, Navy vessels, pilot- and workboats
Supervision and coordination of rebuilding vessels
Inclining tests
Design and manufacturing of JAK®-ATB coupling system for pusher-barge combinations, including the mounting design and strength analysis
Rudders, propeller nozzles
Thruster Propulsion Canisters for offshore vessels

BEVTEC OY AB

Konalantie 47 B
FI-00390 Helsinki
Finland
Phone +358 9 547 1700
Fax +358 9 547 1701
bevtec@bevtec.fi
www.bevtec.fi

**Contact Person**

Kaj Nykvist

Facts & Figures

Turnover: EUR 3,5 million
Personnel: 14
Established: 1998
Parent Company: Bevtec AS

Specialty Areas

Beverage dispense multiflow systems
Softdrink-, beer-, wine-, liquor-dispensers and control systems
Planning project management, equipment, installation, start up, after sales support

BUREAU VERITAS

Hermannin rantatie 10
FI-00580 Helsinki
Finland
Phone +358 10 830 8630
Fax +358 10 830 8690
helsinki@fi.bureauveritas.com
www.bureauveritas.com

**Contact Person**

Olli Kaljala
Chief Executive
olli.kaljala@fi.bureauveritas.com

Facts & Figures

Personnel: 50
Established: 1984 (Finland)
Parent Company: Bureau Veritas SA (est. 1828)

Specialty Areas

Survey of ships & ship equipment, classification of newbuildings
Inspection of industrial products & goods for international trade
Certification of management systems against international standards

2 6 7

EVAC OY

Sinimäentie 14
FI-02630 Espoo
Finland
Phone +358 20 763 0200
Fax +358 20 763 0222
firstname.lastname@zmp-zodiac.com
www.evac.com

**Contact Person**

Mika Karjalainen
mika.karjalainen@zmp-zodiac.com

Facts & Figures

Turnover: EUR 53,2 million

Specialty Areas

Evac is a company of the Zodiac Marine & Pool Group. Evac designs, manufactures and markets environmentally friendly wet and dry waste collection and treatment systems for the shipbuilding industry. Skilled personnel, professional design and high-quality technical solutions have facilitated continuous growth, both in turnover and market share.

5

EXIT-PAINIKE KY

P.O. Box 78
FI-61801 Kauhajoki
Finland
Phone +358 6 231 4034
Fax +358 6 231 4112
exitpainike@exitpainike.fi
www.exitpainike.fi

**Contact Person**

Timo Hakala

Specialty Areas

EXIT 6000 series emergency doors
(EXIT panic device)

7

FINLAYSON OY

Headquarter:
Heikkiläntie 7 A
FI-00210 Helsinki
Finland
Phone +358 20 721 3671
Fax +358 20 721 3679
proship@finlayson.fi
www.finlayson.fi

Contact Person

Mari Ylinen
mari.ylinen@finlayson.fi
Askonkatu 9 C, 2nd floor
FI-15100 Lahti
Finland

Facts & Figures

Established: 1820
Parent Company: Finlayson & Co

Specialty Areas

Finlayson Pro interior textiles and bed products provide a rich source of inspiration for an integrated decoration of cabins and public spaces.

6

GS-HYDRO OY

Lautatarhankatu 4
FI-13110 Hämeenlinna
Finland
Phone +358 3 656 41
Fax +358 3 653 2998
info@gshydro.com
www.gshydro.com

**Contact Person**

Lauri Leskinen

Facts & Figures

Turnover: EUR 142 million
Personnel: 624
Established: 1974

Subsidiaries & Representatives

Austria, China, Denmark, Finland, France, Germany, Korea, Netherlands, Norway, Poland, Russia, Spain, Sweden, UK, USA, Canada

Specialty Areas

GS-Hydro is the world's leading supplier of piping without welding

2 5 6

HALTON MARINE

Pulttikatu 2
FI-15700 Lahti
Finland
Phone +358 20 792 200
Fax +358 20 792 2060
haltonmarine@halton.com
www.haltonmarine.com

Contact Person

Tommi Rantanen

Facts & Figures

Turnover: EUR 170 million
Personnel: 1150
Established: 1969

Specialty Areas

High-quality ventilation systems specifically designed for demanding marine, navy and Oil & Gas markets. Main product groups: Cabin Ventilation, Galley Ventilation, Fire dampers, Airflow Management and Air Distribution products.

9

HANS LANGH - INDUSTRIAL & SHIP CLEANING

Alaskartano
FI-21500 Pikis
Finland
Phone +358 2 477 9400
Fax +358 2 472 6552
langh@langh.fi
www.langh.fi

**Hans Langh****Contact Person**

Ari Kumpulainen
Managing Director
ari.kumpulainen@langh.fi

Subsidiaries & Representatives

Site office in Hamburg at Blohm & Voss Repair

Specialty Areas

Heavy duty ship cleaning
Waterjetting up to 3000 bar
Cleaning of bilges, engine rooms etc.
Cleaning of HFO contaminations
Cleaning and conservation of machinery and engines after fire or grounding
Cleaning also during voyage

1. Consulting
2. Equipment
3. Machinery

4. Materials
5. Safety
6. Systems

7. Turnkey Deliveries
8. Yards
9. Other

HELKAMA BICA OY

Lakimiehenkatu 4
FI-20780 Kaarina
Finland
Phone +358 2 410 8700
Fax +358 2 410 8750
sales@helkamabica.fi
www.helkamabica.fi

HELKAMA**Contact Persons**

Krister Wideman
Mikko Aavamäki
Raymond Hellström
Sami-Pekka Arlin

Facts & Figures

Turnover: EUR 42 million
Personnel: 190
Established: 1984

Specialty Areas

Marine cables

HUURRE INSULATION OY

P.O. Box 127
FI-33101 Tampere
Finland
Phone +358 20 5555 11
Fax +358 20 5555 288
www.huurreinsulation.fi

HUURRE**Contact Person**

Petri Hiilloste
insulation@huurre.com

Facts & Figures

Turnover: Approx. EUR 23 million
Personnel: Approx. 130
Established: 1946
Parent Company: Huurre Group Oy

Specialty Areas

Provision stores
Walk-in rooms in galleys/pantries
Insulated doors
Insulated fire doors, A60, for cold stores

See page 10

ILS LTD

Puutarhakatu 45
FI-20100 Turku
Finland
Phone +358 2 417 2200
Fax +358 2 417 2210
ils@ils.fi
www.ils.fi

**Contact Person**

Jyrki Lehtonen
Managing Director

Specialty Areas

Design of ice breakers and ice going ships

See page 45

IVK-TUOTE OY

Helmintie 8-10
FI-40250 Jyväskylä
Finland
Phone +358 207 229 670
Fax +358 207 229 671
ivk@ivk-tuote.fi
www.ivk-tuote.fi

**Facts & Figures**

Turnover: EUR 7 million
Personnel: 67
Established: 1988
Parent Company: Lindab Group

Specialty Areas

IVK-Tuote Oy is a leading manufacturer of sound attenuators, dampers and cleaning doors for air handling systems for offshore, marine and land applications. We are specialized in designing custom-made silencers with sound attenuation analyse. IVK-Tuote also provides special products and pays attention to health- and environmental related issues.

See page 11

JUKOVA OY

Jukovantie 20
FI-21430 Yliskulma
Finland
Phone +358 10 474 444
Fax +358 10 474 4290
jukova@jukova.fi
www.jukova.fi

**Contact Person**

Stefan Sundblom
stefan.sundblom@jukova.fi

Specialty Areas

Modular balconies, sliding doors, balcony divider walls and glass railings.

KEMPPI OY

Hennalankatu 39
FI-15800 Lahti, Finland
Phone +358 3 899 11
Fax +358 3 899 428
export@kemppi.com
www.kemppi.com

**KEMPPI**
The Joy of Welding**Facts & Figures**

Turnover: EUR 77 million (2009)
Personnel: 550
Established: 1949

Subsidiaries & Representatives

Kemppikoneet Oy, Finland; Kemppi Sverige AB, Sweden; Kemppi Norge A/S, Norway; Kemppi Danmark AS, Denmark; Kemppi GmbH, Germany; Kemppi (UK) Ltd., United Kingdom; Kemppi France S.A., France; Kemppi Benelux B.V., Holland; Kemppi Welding Machines Australia Pty Ltd., Australia; Kemppi Spolka z.o.o., Poland; OOO Kemppi, Russia; Kemppi, Trading (Beijing) Company Ltd, China. Distributors in more than 70 countries.

Specialty Areas

Kemppi develops, builds and markets production solutions for arc welding and related applications.

3 4

KESKIPAKOVALU OY**KESKIPAKOVALU OY**

Lastikankatu 21
FI-33730 Tampere
Finland
Phone +358 3 357 9000
Fax +358 3 364 5964
info@keskipakovalu.fi
www.keskipakovalu.fi

Contact Persons

Kimmo Markkula
Keijo Koivisto
Asmo Rantanen

Facts & Figures

Turnover: EUR 7 million
Personnel: 39
Established: 1956

Specialty Areas

Bronze parts of diesel engines
Bronze parts of propulsion machinery
Bronze parts of maneuvering machinery

2 6 7

KOJA MARINE

KOJA 
KOJA MARINE

P.O. Box 351
(Lentokentänkatu 7)
FI-33101 Tampere
Finland
Phone +358 3 282 5111
Fax +358 3 282 5404
marine@koja.fi
www.koja.fi

Contact Person

Esko Nousiainen
Director
esko.nousiainen@koja.fi

Facts & Figures

Turnover: EUR 83,3 million
Personnel: 240
Established: 1935
Parent Company: Koja Group

Specialty Areas

Air conditioning systems, air conditioning units, system design and material deliveries. Cargo ventilation systems. Air Conditioning turn-key deliveries, HVAC electrical / automation systems.

1 2 6

KONE MARINE

Myllykatu 3, FI-05830 Hyvinkää, Finland
Phone +358 20 475 2300
Fax +358 20 475 3450
marine.info@kone.com
www.kone.com

**Contact Person**

John Hemgård
Sales Director
john.hemgard@kone.com

Facts & Figures

Turnover: EUR 35 million
Personnel: 45
Established: 2005
Parent Company: KONE Elevators Ltd

Subsidiaries & Representatives

Marine Elevators LLC, USA

Specialty Areas

KONE is the global leader in providing elevators and escalators for the shipbuilding industry with the latest technology, engineering and installation services, maintenance and spare parts, modernizations and refurbishments.

2 6

L & P LAAKSONEN & POIKA

Akselintie 1
FI-20200 Turku
Finland
Phone +358 2 515 4600
Fax +358 2 469 0861
contact@lplaaksonen.com
www.lplaaksonen.com

Contact Person

Harri Laaksonen
Managing Director

Facts & Figures

Turnover: EUR 1,2 million
Personnel: 9
Established: 1948

Specialty Areas

Lighting fitting for marine use
Decorative lighting fittings

4

LAUTEX OY AB**OY LAUTEX AB**

P.O. Box 58
FI-03101 Nummela
Finland
Phone +358 9 224 8810
Fax +358 9 222 5447
sales@lautex.com
www.lautex.com

Contact Persons

Juha Kytö
Jukka-Pekka Tuominen
Thomas Pökelmann

Facts & Figures

Turnover: EUR 14 million
Personnel: 90
Established: 1951
Parent Company: Christian Berner Invest AB

Specialty Areas

Ceilings for ship accommodation and public spaces, such as metal panels, profiles, tiles and grating in aluminium or steel.
Special ceilings, domes and beams etc.
Various finishes possible: real wood finish, digital coating etc.

4 7

LEMMINKÄINEN RAKENNUSTUOTTEET OY

Lemminkäinen 
bolidt

Puusepantie 11
FI-04360 Tuusula
Finland
Phone +358 20 715 7713
www.lemminkainenomni.fi

Contact Person

Tomi Hulmi
tomi.hulmi@lemminkainen.fi

Facts & Figures

Turnover: EUR 13,2 million
Personnel: 45
Established: 1962
Parent Company: Lemminkäinen Oy

Specialty Areas

Outdoor/indoor deck surfaces, auditorium seating systems, recreation / sport artificial turfs, climbing walls.

1. Consulting
2. Equipment
3. Machinery

4. Materials
5. Safety
6. Systems

7. Turnkey Deliveries
8. Yards
9. Other

MARINE DIESEL FINLAND OY

Eteläkaari 10
FI-21420 Lieto
Finland
Phone +358 207 118 220
Fax +358 2 253 9121
marine.diesel@wihuri.fi

**MARINE DIESEL FINLAND OY****Contact Persons**

Markus Hjerpe
Mika Aaltonen

Facts & Figures

Personnel: 32

Specialty Areas

Main – and Aux engine repair and service
Mechanical engineering
Total overhaul of all types of diesel engines
Total delivery of emergency generator rooms
Conservation works after engine room fires and water damages
Ultra sonic cleaning of charge- air aftercoolers

METSO MINERALS OY LOKOMO STEEL FOUNDRY

P.O. Box 306 (Lokomonkatu 3)
FI-33101 Tampere, Finland
Phone +358 20 484 4222
Fax +358 20 484 4233
minerals.lokomosteels@metso.com
www.metsolokomosteels.com

**Contact Person**

Timo Norvasto
Sales Manager
timo.norvasto@metso.com

Facts & Figures

Personnel: 250
Established: 1916
Parent Company: Metso Corporation

Specialty Areas

Lokomo Steel Foundry has been a pioneer in stainless steel production. In 1982 Metso Lokomo Steels began to manufacture vacuum steel castings using world's first "Vacuum Oxygen Decarburization Converter" VODC. Lokomo Steel Foundry's vacuum steel are marketed under the Vaculok® -trademark. Metso Minerals Oy Lokomo Steel Foundry is a member of Metso Corporation.

See page 46

NAPA GROUP

P.O. Box 470
FI-00181 Helsinki
Finland
Phone +358 9 228 131
Fax +358 9 2281 3600
marketing@napa.fi
www.napa.fi

**Contact Person**

Outi-Pauliina Pelkonen
Marketing Communications Manager

Facts & Figures

Personnel: 115
Established: 1989

Subsidiaries & Representatives

Onboard-Napa Ltd, Finland; Napa Japan Ltd, Japan; Napa Korea Ltd, Korea; Napa Software Services India Pvt. Ltd., India Napa Representation Office, China; Napa Romani SRL

Specialty Areas

NAPA and Onboard-NAPA software systems for ship design and ship operations.

See page 18

OILON OY

P.O. Box 5
FI-15801 Lahti
Finland
Phone +358 3 857 61
Fax +358 3 857 6239
www.oilon.com

**Contact Person**

Jani Kurikka
jani.kurikka@oilon.com

Facts & Figures

Turnover: EUR 45 million
Personnel: 280
Established: 1961

Specialty Areas

Oil & gas burners for marine applications

ONNINEN OY

Telakkakatu 1
FI-20240 Turku
Finland
Phone +358 20 485 5111
Fax +358 20 489 072
n.n@onninen.com
www.onninen.fi

**Contact Person**

Tapio Hjort
Sales Group Manager
tapio.hjort@onninen.fi

PARKER HANNIFIN OY HYDRAULIC FILTER DIVISION EUROPE

Salmentie 260
FI-31700 Urjala As.
Finland
Phone +358 20 753 2500
Fax +358 20 753 2501
filtration.finland@parker.com
www.parker.com

**Contact Person**

Jyrki Sandt
jyrki.sandt@parker.com

Facts & Figures

Personnel: 200
Established: 1964
Parent Company: Parker Hannifin

Specialty Areas

Filtration: Lubrication oil filtration, fuel oil filtration, hydraulic filtration.
Condition Monitoring

7

PARMARINE OY

Cabins and bathrooms:
P.O. Box 95
FI-30101 Forssa
Finland
sales.marine@parmarine.fi



Fire doors:
P.O. Box 22
FI-79101 Leppävirta
Finland
sales.master@parmarine.fi

Contact Person

Risto Kallio
risto.kallio@parmarine.fi

Specialty Areas

Cabins and bathrooms
A60 hinged and sliding fire doors
A60 SWT sliding fire doors
A60 fire walls
B15 cabin doors

2 3

PATRIA AVIATION ENGINE BUSINESS UNIT

FI-37240 Linnavuori
Finland
Phone +358 40 869 2800
Fax +358 20 469 2801
www.patria.fi

**Contact Person**

Seppo Tamminen
seppo.tamminen@patria.fi

Facts & Figures

Turnover: EUR 12 million
Personnel: 150
Established: 1947
Parent Company: Patria Industries

Specialty Areas

Maintenance and overhaul of high speed diesel engines and related equipment (500-6000 kW, Authorised MTU Service Dealer). Maintenance and overhaul of industrial and marine gas turbines. Special repairs of parts for diesel engines and gas turbines.

3 6 7

PROJEKTIA OY

Tuulissuontie 21
FI-21420 Lieto
Finland
Phone +358 2 477 9200
Fax +358 2 477 9210
projektia@projektia.fi
www.projektia.fi

**Contact Person**

Paavo Mikkola
paavo.mikkola@projektia.fi

Specialty Areas

Turnkey deliveries of provision refrigeration ; machinery and coolers
Pipe installations and automation
Cooling machinery for technical spaces and air condition
Water chillers

2

PUTTEK OY

Jokitie 8
(P.O. Box 28)
FI-37800 Toijala
Finland
Phone +358 3 575 2500
Fax +358 3 575 2550
info@puttek.fi
www.puttek.fi

**Contact Person**

Harri Syrjalainen
Managing Director
harri.syrjalainen@puttek.fi

Specialty Areas

Pipe clamps and supporting systems for shipbuilding and offshore industry

7

RAUMA INTERIOR OY

Hallitie 8, FI-26510 Rauma, Finland
Phone +358 2 8387 8200
Fax +358 2 8387 8210
info@raumainterior.fi
www.raumainterior.fi

**Contact Person**

Kari Elo
kari.elo@raumainterior.fi
Phone +358 400 489 638

Facts & Figures

Turnover: EUR 10 million
Personnel: 90
Established: 1991
Parent Company: Rauma Interior Group Oy

Specialty Areas

Rauma Interior is a project house specializing in the management and realization of interior desing projects. Our expertise has risen to a very high level along with large and demanding marine-industry projects. Rauma Interior Marine is one of Europe's leading manufactures of passenger cabin furnishing for luxurious cruisers with yearly volume appr. 4 000 cabin furnitures.

2

ROLLS-ROYCE OY AB

P.O. Box 220
FI-26101 Rauma
Finland
Phone +358 2 837 91
Fax +358 2 8379 4804
rolls-royce.finland@rolls-royce.com
www.rolls-royce.com/marine

**Contact Person**

Liisa Snellman
Communications
liisa.snellman@rolls-royce.com

Facts & Figures

Turnover: EUR 599 million
Established: 1988
Parent Company: Rolls-Royce plc

Subsidiaries & Representatives

Rolls-Royce worldwide sales and service network

Specialty Areas

Thrusters, propulsion systems, winch systems
Stabilizers, steering gears, bearings

1. Consulting
2. Equipment
3. Machinery

4. Materials
5. Safety
6. Systems

7. Turnkey Deliveries
8. Yards
9. Other

S.A. SVENDSEN OY

Särkiniementie 3 B
FI-00210 Helsinki
Finland
Phone +358 9 6811 170
Fax +358 9 6811 1768
www.sasvensden.com



S.A.Svendsen Oy

From a shipyard to a shipyard

Contact Person

Kimmo Räisänen
Managing Director
kimmo.raisanen@sasvensden.com

Facts & Figures

Turnover: EUR 16,5 million
Personnel: 11
Established: 1981

Specialty Areas

Complete turnkey deliveries for cruise ships and ferries
Interior materials and custom made interior modules
Refurbishments and refits for cruise ships and ferries

SHIPPAX OY

Telakkatie 5
FI-23500 Uusikaupunki
Finland
Phone +358 2 468 812
Fax +358 2 468 8307
info@shippax.fi
www.shippax.fi



Oy SHIPPAX Ltd

Contact Persons

Jukka Laitera
jukka.laitera@shippax.fi
Juha Lahtivuori
juha.lahtivuori@shippax.fi

Facts & Figures

Turnover: EUR 23,3 million
Personnel: 47
Established: 1984

Specialty Areas

Fixcel® Macro Modules
Turn key deliveries
High Gienic™ products

OY SIKI FINLAND AB

P.O. Box 49
FI-02921 Espoo
Finland
Phone +358 9 5114 31
Fax +358 9 5114 3300
sika.finland@fi.sika.com
www.sika.com

**Contact Person**

Kai Winqvist
Industry Manager
winqvist.kai@fi.sika.com

Facts & Figures

Turnover: EUR 14,1 million
Personnel: 29
Established: 1985
Parent Company: Sika AG

Specialty Areas

Sealing – Bonding – Acoustic Damping – Reinforcing – Protecting

STEERPROP LTD

P.O. Box 217
FI-26101 Rauma
Finland
Phone +358 2 8387 7900
Fax +358 2 8387 7910
www.steerprop.com

**Contact Person**

steerprop@steerprop.com

Specialty Areas

Steerprop Ltd, The Azimuth Propulsion Company – a maker of azimuth propulsion for powers up to 20 MW, also dual-end CRP solutions.
Potential applications: offshore vessels, ferries, tugs, ice breakers, etc.

TEVO OY

Hiihentie 17, FI-92160 Saloinen, Finland
Phone +358 8 265 8800
Fax +358 8 265 8805
tevo@tevo.fi
www.tevo.fi

**Contact Person**

Marjatta Pyhtilä
Export Assistant
marjatta.pyhtila@tevo.fi

Facts & Figures

Turnover: EUR 14,5 million
Personnel: 110
Established: 1974

Specialty Areas

TEVO/Finnscrew NiAl bronze marine propellers
Manufacturing and repair
Offshore equipment
Heavy machine building
Welding
TEVO Spreader rolls
Manufacturing and overhaul

OY TRITMAR LTD

Koskenmäentie 9
FI-04300 Tuusula
Finland
Phone +358 9 2735 2140
Fax +358 9 2586 5192
sales@tritmar.com
www.tritmar.com

**Contact Person**

Martti Tulimaa

Facts & Figures

Turnover: EUR 3 million
Personnel: 5
Established: 1998

Specialty Areas

Galley equipment for all kind of vessels
Bar and pantry equipment
Buffet tables and waiter stations for cruise ships
Turn-Key deliveries

TURKU REPAIR YARD LTD

Navientie
FI-21100 Naantali
Finland
Phone +358 2 445 11
Fax +358 2 445 1407
try@turkurepairyard.com
www.turkurepairyard.com

**Contact Person**

Hans Sundqvist
Managing Director
hans.sundqvist@turkurepairyard.com

Facts & Figures

Turnover: EUR 20 million
Personnel: 100
Established: 1989

Specialty Areas

Dockings, heavy steel work, heavy machinery work, interior work, surface treatment, annual service and maintenance, 24h Voyage repairs.

**VTT TECHNICAL RESEARCH CENTRE OF FINLAND
VEHICLE ENGINEERING**

P.O. Box 1000
FI-02044 VTT
Finland
Phone +358 20 722 4294
Fax +358 20 722 4815
www.vtt.fi

**Contact Person**

Seppo Kivimaa
Vehicle Engineering
seppo.kivimaa@vtt.fi

Facts & Figures

Turnover: EUR 269 million
Personnel: 2700
Established: 1942

Specialty Areas

R&D services. In vehicle engineering VTT offers expertise in model and full-scale tests, computational fluid dynamics, structural monitoring, structural integrity and dynamics, maritime simulations and virtual prototyping, maritime safety and environmental engineering, small craft design analysis, hydraulics.

OY WAT MAN AB

Yrittäjätie 4
FI-09430 Saukkola
Finland
Phone +358 20 741 7220
Fax +358 3 752 2750
info@watman.fi
www.watman.fi

**Facts & Figures**

Turnover: EUR 3,5 million
Personnel: 15
Established: 1995
Parent Company: Pumpulohja Oy

Specialty Areas

Water treatment, desalination, RO-units, waste water treatment Pressure vessels and storage tanks, tube heat exchangers, pumps, water management.

WINDSIDE PRODUCTION OY LTD

Keskitie 4
FI-44500 Viitasaari
Finland
Phone +358 20 835 0700
Fax +358 20 835 0701
finland@windside.com
www.windside.com

**Contact Person**

Sara-Maaria Asp
Export Manager
sara@windside.com

Specialty Areas

Windside wind turbines for battery charging are safe, soundless and ecological solution for energy production wherever energy is needed. They meet the requirements of the demanding professional use in the harshest of environments. Their unique features ensure reliability, high efficiency, long life span, durability and an absolute minimum of maintenance. All the advantages of the turbine together with the beautiful design, enables almost limitless use of Windside.

YIT INDUSTRIAL AND NETWORK SERVICES LTD

P.O. Box 27
(Lemminkäisenkatu 59)
FI-20521 Turku
Finland
Phone +358 20 433 111
Fax +358 20 433 7251
www.yit.fi

**Contact Person**

Markku Salonen
markku.salonen@yit.fi

Facts & Figures

Turnover: EUR 430 million
Personnel: 3800
Established: 1920
Parent Company: YIT Corporation

Specialty Areas

Prefabricated pipes, pipe modules, electrical and steel outfitting.

NOTES



WWW.INTERMODAL-EVENTS.COM

A NEW ERA FOR THE EUROPEAN INTERMODAL INDUSTRY

Transport and logistics in action – on road, rail and sea. For more than 30 years, one flagship event has served your industry as it has grown and developed. Now, after the deepest recession ever, Intermodal Europe is again ready to help you meet the transport and logistic challenges of tomorrow.

Exhibit at Intermodal:

- Meet thousands of professionals from across the industry face to face
- Active Buyers who come to you ready to make decisions
- Raise brand awareness and create maximum impact
- Launch new products and services
- Generate new sales leads and open up new markets
- Networking and social events

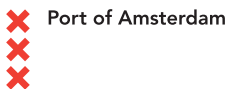
For more information on exhibiting or sponsorship opportunities contact:

Philip Hunter Tel: +44 (0)20 7017 4395 Email: phunter@iirx.co.uk

Organised by



Host Port



Media Partners



Supported by



Join us on



SECURE SUSTAIN SUPPLY

ENERGY FOR MORE PEOPLE - BOOK NOW

Energy is a must for prosperity and a better quality of life. Energy for more people is thus the main theme of the 19th ONS to be held on 24 – 27 August 2010.

Can we combine increased energy consumption with sustainability? Can we secure both our prosperity and our future?

Since 1974 ONS has involved itself in challenges, innovation and inventive solutions as one of the world's leading energy meeting places.

This year the focus will be on environmentally sound and energy efficient production methods, enhanced resource use and accessibility, and the search for new, renewable sources. ONS is the only arena that showcases the complete energy picture from fossil to renewable resources.

To secure your seat at the conference and get the advantage of our **early bird rate**, book your ticket now!

Early bird rate: NOK 16 200,- + VAT
(this rate expires 30 June 2010)

Exhibition tickets: NOK 380 for the whole week (incl. VAT)

WELCOME TO STAVANGER 24-27 AUGUST 2010
MORE INFORMATION AND TICKETS, VISIT **ONS.NO**

EXHIBITION TICKETS

ONS FAST TRACK

Book your ticket online at **ons.no** and bring your e-mail receipt to the self-service check-in on site.

BOOK ONLINE



PRINT RECEIPT



SCAN ON SITE



ENTER ONS 2010



ONS 2010
energy for more people
STAVANGER, NORWAY, 24-27 AUGUST 2010
EXHIBITION CONFERENCE FESTIVAL



SEATEC AWARDS



ABITARE
LA BARCA



16/18 February 2011 Carrara Italy

seatec⁹

INTERNATIONAL EXHIBITION
TECHNOLOGIES, SUBCONTRACTING
AND DESIGN FOR BOATS,
MEGAYACHTS AND SHIPS

www.sea-tec.it
info@sea-tec.it

compotec³

INTERNATIONAL EXHIBITION
COMPOSITES &
RELATED TECHNOLOGIES

www.compotec.it
info@compotec.it

SEATEC IS A MEMBER OF:



CarraraFiere

Viale Galileo Galilei, 133
54033 Marina di Carrara (MS) Italy
Tel. +39 0585 787963
Fax +39 0585 787602

ORGANIZER:



SUPPORTED BY:



SOLE SPONSORING BANK:

