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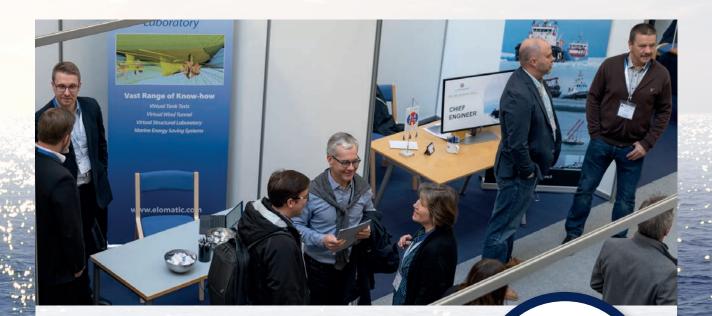
ready to fly the finnish flag

Brighter times ahead for passenger cruises

Tallink Group announced to increase in the number of cruise passengers



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GRFFN WAVF RISING

The Finnish maritime industry keeps heading to a more sustainable direction. In the spring of 2020, the Ministry of Employment and the Economy launched a new sustainable maritime industry development program, believing that climate targets and digitalisation will create significant new demand and business opportunities – as long as the industry remembers to keep investing in know-how and innovation. The program will run until the end of 2023.

Director Jarmo Heinonen from Business Finland, who serves as Chairman of the Steering Group of the development program, believes that the maritime industry is currently facing major challenges/ opportunities related to climate change and the requirements to reduce emissions. The national program is essential because it brings together different actors to promote the competitiveness of the Finnish maritime industry in a sustainable way.

Finnish maritime industry has always been and continues to be one of the world's leading makers of innovative and energy-efficient ships and ship systems. The goal of the Finnish maritime industry is to develop solutions geared towards carbon-free and emission-free shipping. The new program, much in demand by the industry, strongly supports this goal.

In the spring it was also announced that industrial powerhouse Wärtsilä will launch a Zero Emission Marine research project with the aim to reduce greenhouse gas emissions from maritime transport by 60% by 2030. In addition, all products in the ecosystem will be carbon neutral or carbon negative by 2050. The aim is to create an ecosystem of several different players - already numbering 200 - who will work together to develop zero-emission shipping solutions.

The project will introduce new fuels which require a wide range of expertise, from ship and engine design to advanced IT systems – and many corporate players have already signed up for the undertaking. The project will develop engine technology and energy and carbon storage systems for sustainable and carbon-neutral fuels. In addition, the digital solutions being developed will enable significant reductions in fuel consumption, which will improve the profitability of new fuels.

This carbon-free ecosystem is being strengthened by industry organizations, research institutes and universities. In addition, the intention is to cooperate with other pioneering ventures. For example, the new Meyer Turku project, which is developing a carbon-neutral cruise ship, has considerable "kinship" with the Zero Emission Marine project.

The new "save the world" agenda of leading maritime industry actors is also good business. The global market has its ways of rewarding the responsible companies – and punishing those deemed unsustainable.

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The new ship M/S Finneco I will start operations in June, at first on the Bay of Biscay route between Kotka and Bilbao. The two other hybrid Finneco ships will soon follow as they, too, are ready for delivery to Finnlines in early summer of 2022.





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Comprehensive maintenance work of modern-day vessels exacts lots of know-how and experience, plus the right kind of attitude. In southwestern Finland, Mill & Marine Service Ltd. meets the requirements. Established in 1988, the company's main office has been situated in the city of Pori since 2014.

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BRIGHTER TIMES AHEAD FOR PASSENGER CRUISES

by: ARI MONONEN
photos by: TALLINK SILJA





Cruise lines and cruise ferries were seriously affected by Covid-19 pandemic lockdowns and other restrictions, but some glints of a better future can already be seen on the horizon. Numbers of cruise ship passengers are gradually showing signs of increasing. Even so, there's still a long way to go.

t the end of April 2022, the annual cruise line business conference Seatrade Cruise Global (SCG) was arranged in Miami, Florida. The participants discussed the current state of business, as well as future prospects and developmental ideas.

For obvious reasons, the emphasis of the discussions was focused on the Covid-19 pandemic. The Cruise Line Industrial Association (CLIA) members gravely enumerated the pandemic's effects on the cruise line industries but – on a more positive note – also had some optimism for business recovery in the foreseeable future.

In the two years of Covid-19 pandemic, cruise lines suffered considerably more from the restrictions and business disruptions than other business sectors related to tourism. According to CLIA, this was largely due to massive amounts of infec-

tions aboard cruise ships, and the resulting negative publicity. Still, cruise lines did their best to ensure the health and safety of passengers.

In the recent months, cruise lines have already started on the path to recovery, but there have been some regional differences. Europe and the U.S. have seen positive progress, while cruise lines in China are still in lockdown mode, due to China's national

zero-tolerance policies. Considerable caution can also be noted in other Asian and Pacific areas.

Still, according to CLIA's estimates, cruise ships may operate on an average passenger capacity of 92 percent already in July 2022. Globally, shipyards now have 77 new cruise ships under construction. A passenger-capacity increase of 4.7 million can be expected by the year 2026.

we are facing it with careful optimism.













BETTER NUMBERS FOR TALLINK GROUP

Cruise industries have started to recover from Covid-19 problems in Northern Europe, too.

For instance, the cruise ferry company Tallink Group that operates largely in the Baltic Sea region announced in April an increase in the number of cruise passengers in the first quarter of 2022, compared to the same period in the year 2021.

From January to March, the company carried a total of 720,261 passengers. This means an increase of 169.5 percent from 01/2021.

"Of course, the numbers of passengers are still lower than in the pre-pandemic era, but things are gradually beginning to go in the right direction," notes Ms. Marika Nöjd, Communications Director for Tallink Silja Oy.

"Some of our routes – e.g. between Stockholm and Riga – have not yet been opened after the pandemic, while some others now have only reduced traffic. At the moment, only one ship is operational on the route between Stockholm and Tallinn."

However, Tallink Silja's routes from Finland to Sweden and Estonia are being operated normally.

"In April 2022, our routes between Finland and Estonia carried 250,000 passengers, while three years earlier - in April 2019 - the number was 390,000. We still have some catching up to do, but the passenger numbers are on a steady upward curve," explains Nöjd.

RAPID RECOVERIES

On cruise ferry routes between Finland and Sweden, the passenger numbers yield even more evidence of imminent recovery.

"For April 2022, passengers on these routes totaled 175,000, whereas in April 2019 Tallink Silja's cruise ships carried 240,000 passengers. Here, things are looking up already," Nöjd rejoices.

"Towards the summer, the cruise line business will undoubtedly recover even more rapidly. As we speak, passenger reservations for the summer are being made at a good pace. Besides, many passengers typically will reserve the cruise at the last moment."

Many of Tallink Group's cruise line routes are relatively short in duration. Even if another Covid-19 surge should appear within the next months, it would not interrupt the cruises as seriously as would be the case for the operators of intercontinental cruises.

"If passengers stay on board for a two-night cruise, no long-term isolations or quarantines would be necessary," Nöjd expects.

Also, more and more passengers now have full vaccination coverage. This, too, has reduced the need for new quarantines.

NEW CRUISE SHIP FOR AUTUMN 2022

When the Covid-19 pandemic disrupted the cruise business, Tallink Silja sold or leased out some of the company's cruise ships, though not those utilised on the most popular routes.

"However, Rauma Marine Constructions RMC shipyard in Rauma, Finland, is already making the finishing touches on our new cruise ship, M/S MyStar. She will be delivered in early autumn of 2022 and will start operations on the Helsinki to Tallinn route," Nöjd recounts.

The new ship will operate along Tallink's current ship M/S Megastar that started her cruises in early 2017.

"At the moment, we have no other plans for ordering cruise ships, but this new vessel will prepare us for the postpandemic future. Come what may, we are facing it with careful optimism," asserts Nöjd. ■



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THREE HYBRID RO-RO VESSELS READY TO FLY THE FINNISH FLAG







company Finnlines Plc. is today part of the Italian-based Grimaldi Group SpA. Finnlines has subsidiaries or sales offices in Germany, Belgium, Great Britain, Sweden, Denmark, Norway, and Poland. The company operates ro-ro and passenger services in the Baltic Sea, the North Sea and the Bay of Biscay areas.

The three Finneco hybrid ro-ro vessels currently being delivered are part of a larger series of twelve hybrid ships ordered by Grimaldi Group and built by the Jinling shipyard in China.

"All of those vessels will be largely similar, except that the six Grimaldi ships that will operate in the Mediterranean region are equipped with one additional deck," says Mr. Juha Ahia, Naval Architect and Project Manager, Newbuildings at Finnlines Plc.

M/S Finneco I will commence operations on the Bay of Biscay lines, particularly the cargo route between Kotka in Finland and Bilbao in Spain.

"The ship is suitable for carrying versatile ro-ro and project cargo, plus various other export goods, such as paper industry products. Return cargo might

typically consist of motor vehicles," Mr. Ahia specifies.

The three Finneco ships were designed by Messrs. Knud E. Hansen from Denmark. Between themselves, all three Finnlines' ships are identical. Knud E. Hansen also developed the hybrid ro-ro ship concept that was utilised for the entire series.

ECO-FRIENDLY PROPULSION

In the design work, one of the key targets was to make the ships very environmentally-friendly. The classification society Rina has assigned an additional class notation 'Green Plus' for Finneco I's environmental performance.

"Our aim is to make our new ships more ecological than the vessels of previous generations. For this purpose, largersized ships and onboard lithium-ion battery banks are helpful," Mr. Ahia notes.

According to him, the Finneco vessels come with air lubrication in addition to a state-of-art integrated propeller-rudder system and modern hull lines that have been designed for better hydrodynamics.

The vessels are equipped with MAN's modern two-stroke main engines having

a lower specific fuel consumption than four-stroke engines. Consequently, they will produce less CO₂ and other emissions.

The two 12,780 kW engines will yield a service speed of 20.7 knots.

Complementing the oil-fuelled engines, the battery banks of 5 MW will save fuel and reduce emissions.

"The idea is that the lithium-ion batteries are recharged while the ship is at sea. At the port, it will not be necessary to use the ship's auxiliary engines. This enables zero-emission operations in port," explains Ahia.

REDUCED EMISSIONS

Furthermore, an exhaust gas cleaning system will cut air emissions and reduce harmful particles. The Finneco ships will be equipped with SOx emission control technology.

Finnlines has invested in eco-friendly Langh Tec scrubbers to comply with existing and future SOx emission regulations. Open loop scrubbers remove SOx from the exhaust by utilising the natural alkalinity in seawater.

Seawater is sprayed on the exhaust, and the SOx in the exhaust reacts with

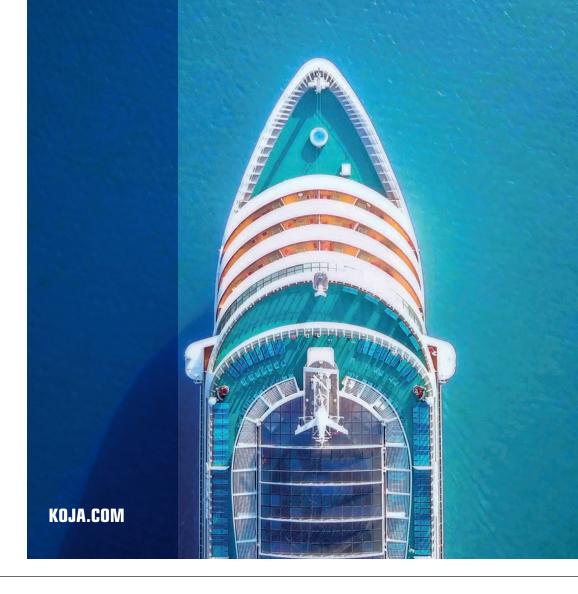
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water to form sulphuric acid which is then neutralised to sulphates by the natural alkalinity in seawater.

The new ships will be equipped with waste heat recovery and ballast water treatment systems.

Also, an innovative air lubrication system has been designed to reduce hull resistance. Compressors and nozzles at the ship's bow will produce an air buffer beneath the specially-designed hull, resulting in reduced resistance and thus reduced fuel consumption.

Additionally, the vessels will be equipped with approximately 600 square metres of solar panels. Renewable energy is available on board to users.

LARGE-SIZED RO-RO SHIPS

After Finneco I, the other ships in the series – Finneco II and III – will be delivered during the summer of 2022.

"We chose the Jinling shipyard as shipbuilders since we knew them to be

capable and competent for producing ro-ro vessels. As early as in 2007, the same shipyard started the project to build M/S Finnbreeze and her sister ships' project for Finnlines," recounts Ahia.

The Finneco ro-ro vessels are 238 metres in length, with a cargo capacity of 5,800 lane metres. One vessel is able to carry e.g. approximately 300 trailers, 150 cars and 500 sea containers for each sailing.

The ships are considerably larger than previous-generation ro-ro vessels. Compared with the largest vessels in today's Finnlines fleet, the cargo carrying capacity of the hybrid newbuilds will increase by nearly 40 percent. According to Finnlines, the new ships will be larger and more eco-friendly than any ro-ro vessel currently operating in the Baltic Sea.

FLEXIBLE CARGO OPERATIONS

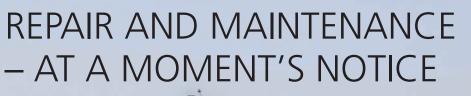
As lorry drivers will be frequent passengers aboard the ro-ro ships, Finnlines will

upgrade the services and accommodation on these freight ships. The ships will include a gym and sauna area, dining and recreation room, and laundry facilities for all drivers to use. To enhance comfort on board, drivers will be allocated single cabins. There will be 12 cabins for drivers and 26 cabins for the crew on each Finneco ship.

The new ships are designed to be flexible for all type of ro-ro cargo. Efficient cargo operations will be ensured by arrangement of stern ramps, internal ramps, and hoistable car decks. Certain areas on cargo decks have been dedicated for loading of paper reels.

Several decks and internal ramps speed up loading and unloading.

"At the same the vessels will be quite flexible – hoistable decks make it possible to utilise the cargo space efficiently for new cars, and the high clearance on main deck for any type of rolling freight up to 7 metres," Mr. Ahia points out.







Comprehensive maintenance work of modern-day vessels exacts lots of know-how and experience, plus the right kind of attitude. In southwestern Finland, Mill & Marine Service Ltd. meets the requirements. Established in 1988, the company's main office has been situated in the city of Pori since 2014.

marine maintenance operations around the world, including ship repairs and newbuilds," CEO & Sales Manager Pasi Kerola from Mill & Marine Service Ltd. sums up.

Cruise and cargo ships are also frequently serviced by the company. Marine service work picked up after the acquisition of half of Turun Kovakromi Oy's shares, eight years ago.

"Before that, chrome platings were outsourced, but it was challenging to get the platings for hydraulic or other cylinders finished on time. Now that we handle platings ourselves, we can make sure that both the timetables and the quality of work will match our high standards. For maritime repair work, timely deliveries are often crucial," notes Kerola.

One of Mill & Marine's recent assignments was to install the world's first onboard rollercoaster onto a large cruise ship.

VERSATILE OPERATIONS

Along standard repair and maintenance work, Mill & Marine Service Ltd. handles classification inspections for various types of vessels.

"These may include, for instance, hatch and crane inspections for ro-ro vessels. Such inspections are our speciality. Furthermore, we service propulsion devices and stabiliser equipment of vessels," Kerola mentions.

"We also inspect and repair steel structures, hydraulics, and electrical system installations, in addition to general trouble-shooting and fault localisation. These days, collecting big data can help in pinpointing system errors, but quite often the problems can be in the hardware so they need to be hunted down by other methods."

The company's special abilities further include installation and removing of actuators, renewal and changing of components, pipe installations and renewals, repairs for gasket arrangements, overhauls

of various structures, deliveries and adjustments of hydraulic cylinders and pumps, deliveries of electric motors and electrical installations, plus yearly inspections of vessels and equipment, with reports to public authorities as necessary.

Today, Mill & Marine's personnel consists of some 20 professionals, with experts in various fields of service work. A wide network of subcontractors also comes in handy, e.g. in supplying spare parts.

to be constantly aware of the latest developments.



Mill & Marine Service Ltd.

Mechanical / Steel works
Hydraulic works
Electric and automation works
RORO & Hatch Covers yearly inspections and reports
Spare parts service











Spare parts are often delivered for steel hardware, for hydraulic works onboard vessels – pumps, cylinders, valves, gaskets, pipes, and hoses –, for gaskets utilised in ramp, door and hatch assemblies, or for electric and automation system repairs.

"In our line of work, you need to be ready to travel to service locations at a moment's notice, even to distant countries to carry out permanent or temporary repairs. Quite often, cruise ships need troubleshooting in the Caribbean," Mr. Kerola recounts.

PREPARING FOR THE FUTURE

Many of Mill & Marine's assignments require plenty of technical knowledge and expertise.

"You need to be constantly aware of the latest developments in ship technologies, in order to know what kind of faults you can expect to find onboard ships," Kerola emphasises.

For maritime repair work, timely deliveries are often crucial.

"As onboard automatisation keeps increasing, service personnel will need to learn the details of all the latest hi-tech devices. The job requires life-long learning. It is demanding but also highly interesting work for people who love challenges and who have a lot of maritime experience. In fact. we'd very much like to hire some new professionals of this type!"

Typically, ships are inspected in the course of their regular service periods at shipyards – but often vessels need repairs even at other times.

"Inspections for newbuilds may call for ascertaining that certain parts of ships

are watertight, gas-tight or weather-proof. This data is needed for ship classification."

One of Mill & Marine's recent repair jobs was to renew the bow cargo-hatches for M/S Gabriella after the ship had collided with the pier at Helsinki harbour. Certain steel structures needed to be replaced and hatch mechanisms re-adjusted. This was occasionally challenging work, particularly as the hatches weighed some 35 tons.

"Even so, the ship has already returned to her shipping route, sailing happily on the seas. In the maritime repair and maintenance business, successful repairs are the only option," Kerola points out.

FIGHTING THE PERFECT STORM

DEALING WITH A DEADLY PANDEMIC AND WAR IN UKRAINE, MARINE INDUSTRY SHOWS RESILIENCE AND REMAINS HOPEFUL FOR THE FUTURE

by: SAMI J. ANTEROINEN



BEYOND THE COVID/UKRAINE DOUBLE CRISIS: CUTTING CARBON, SUPPORTING LIFECYCLE

ruise Lines International Association's (CLIA) ocean-going members are committed to pursuing net-zero carbon cruising by 2050. In addition, by 2035 all ships calling at ports where shoreside electricity (SSE) is available will be equipped to use SSE, allowing engines to be switched off, thus effectively eliminating carbon emissions while berthed at port. Where shoreside power is not available, the ships will use available alternative low carbon technologies required by ports.

According to CLIA, the industry is acting now for the future. The cruise lines are reducing the carbon footprint of their ships while at berth and at sea and investing in advanced environmental technologies while partnering with cities and ports on sustainable destination management.

By equipping cruise ships with the ability to connect shoreside electricity and using it where available, the cruise industry is prepared to eliminate emissions while at port for the benefit of local communities. This is responsible tourism in action, notes CLIA.

Sustainable ways are finding root in other areas, as well. In Europe, Meyer Group is making its business more circular. In cooperation with shipping companies, the newly established subsidiary by the name of MEYER RE aims to maintain and modernize the vessels throughout their service life and to ensure the optimization of the vessels' operations.

According to the ship-maker, significant benefits and added value will accrue to customers when ship products are supported throughout their life. In the future, Meyer Group's customers will be able to benefit from the shipyards' extensive know-how in this way, as well, and will make a significant contribution to maintaining the responsibility and value of ships.

Jan Meyer, CEO of Meyer Werft, says that MEYER RE is a new way to land extra work and orders for the Group's shipyards and companies.

"The ships we renovate will be more attractive and responsible as products," Jan Meyer says, calling MEYER RE an "important building block" for the German family company's future.

MEYER RE will focus on ship refurbishment, including cabin deliveries, engineering services (e.g. ship energy management systems) and the conversion of ships to renewable fuels.



Global plague, followed by the winds of war? The marine industry has had a rather unusual couple of years. For the most part, the industry is united in fighting COVID and condemning Russian aggression in Ukraine.

or example, as Russia invaded Ukraine on now infamous 24th of February 2022, Cruise Lines International Association (CLIA) wasted no time in expressing its solidarity with the people of Ukraine. CLIA also wowed to work with the organizations across the maritime community, including the International Labour Organization (ILO), the International Maritime Organization (IMO) and shipping associations, to address challenges to the safety, security, and well-being of seafarers as a result of the conflict.

Also, Shipowners' Associations – among them, Finnish Shipowners' Association – have condemned the Russian

invasion. The Shipowners' Associations called the Russian Government's decision to invade Ukraine "appalling," noting that this act has serious consequences for the people of Ukraine and must be stopped immediately.

We call on Russia to cease the hostilities and respect international law and human rights, including the protection of all affected seafarers and the protection of lives at sea, the Shipowners' Associations urged in a joint statement.

DARK CLOUDS ABOVE

According to the Confederation of Finnish Industries' April 2022 Business Tendency

Survey, Finnish companies' outlooks have darkened in all the main sectors. The business cycle is still favourable in manufacturing, but is already declining in construction and services.

Sami Pakarinen, Director at the Confederation of Finnish Industries, observes that Russia's attack on Ukraine is reflected especially in construction, where the situation has deteriorated quickly.

"The availability of materials in particular is now a major issue, and it is also a significant problem in manufacturing. Even though there still is ample demand in many areas, uncertainty about the future combined with a strong rise in costs is mak-



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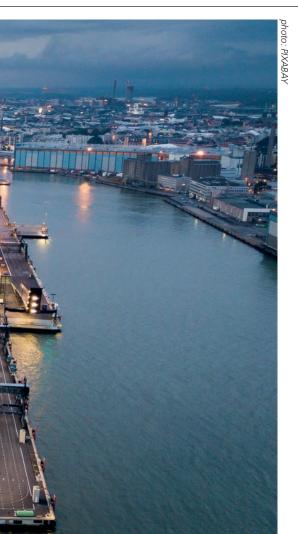
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The availability of materials in particular is now a major issue.

ing the operating environment significantly more difficult also for Finnish companies," says Pakarinen.

FAREWELL TO COVID, FINALLY?

Dealing with the aftermath of the pandemic, however, is showing some light at the end of the tunnel. CLIA states that its science-backed protocols have facilitated the resumption of cruise operations, with over 7.5 million passengers having sailed in nearly 90 markets.

Kelly Craighead, President and CEO, CLIA, stated in April that as the industry resumes operations, passenger volume is expected to recover and surpass 2019 levels by the end of 2023, with passenger volumes projected to recover 12% above pre-pandemic levels by the end of 2026.

CLIA's consumer research shows that the intent to go on a cruise is rebounding, with 63% of cruisers or potential cruisers indicating they are 'very likely' or 'likely' to cruise in the next two years. 69% of respondents that have never cruised said they are open to cruise, exceeding prepandemic levels.

Generation Y seems to be driving the reboot, as millennial cruisers are the most enthusiastic about taking another cruise, with 87% indicating they will take a cruise in the next few years, followed by Gen X at 85%.

GRACE UNDER FIRE

In Finland, leading shipyard Meyer Turku has been able to cope amidst tough times. The company's turnover for 2021 was EUR 1.08 billion which was somewhat higher than in the previous year – but, of course, 2020 was marred with COVID.

CEO Tim Meyer commented the financial results in May, admitting that exceptional times lasted longer than expected.

"The global effects of the COVID-19 pandemic, such as labor and material mobility, affected our operations as well. However, despite significant challenges, we were able to keep our production and processes running," says Meyer.

ORDERBOOK STILL SOLID

In the spring of 2021, for example, the company launched a major transformation program in Turku and Papenburg, Germany, to increase its cost efficiency and to ensure a sustainable profitability level.

"Our customers see growth in the market after the pandemic, and our shipyard's order books extend to 2026," Meyer says, adding that today, society, customers and ship passengers all require action to enhance responsibility.

"Our focus will increasingly shift to sustainable shipbuilding."

The Turku Shipyard has kept its head to the grindstone, handing over Costa Toscana to Costa Crociere in December 2021 and now continuing work on Carnival Celebration (to be delivered by the end of 2022). Next up in the pipeline: Royal Caribbean International's Icon of The Seas in 2023 and the TUI Cruises' Mein Schiff 7 in 2024.

Our focus will increasingly shift to sustainable shipbuilding.





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NEW ON BOARD

Adiabatix's New Product Increases Occupational Safety in Industrial Environments

Adiabatix, based in Vaasa, Finland, has created a product that drastically increases occupational safety in industrial environments. Used especially in the insulation of pipes in shipbuilding and in power plants, the brand-new Adi-SMART® reduces the surface temperature of the ADIBOX® insulation module it is integrated into.

The product allows companies to meet regulations regarding safety in high-temperature operations.

diabatix is among the first companies in the world to develop easily-installable insulation that keeps surfaces safe-to-touch. The idea for the revolutionary design was sparked by employers' concerns about the well-being of staff working close to pipes that carry hot gases. Adi-SMART® lowers the surface temperature down to around + 60 degrees Celsius, making the insulation modules safe to touch without the sustenance of irreversible burn damage. Low surface temperatures also reduce the risk of fire in the work environment.

Adi-SMART® is a fully independent system that is not dependent on external power sources. The system can be connected to a wireless network, allowing the temperature data it generates to be examined remotely. Adi-SMART® can also be integrated into existing insulation modules.

POSITIVE FEEDBACK FROM M/S ECKERÖ

Adiabatix has already received positive feedback on the product. M/S Eckerö operates in the Baltic Sea between Eckerö, Åland and Grisslehamn, Sweden. M/S Eckerö was the first to receive Adi-SMART® for testing. The testing has continued for six months so far. M/S Eckerö has been pleased with the product and is eager to continue testing it.

Adiabatix is excited to be able to introduce an innovative new product to a traditional market. Adi-SMART® has been carefully designed to alleviate customers' concerns regarding occupational safety and meeting different requirements, all the while using the latest technology. Adi-SMART® is the appropriate next chapter to Adiabatix's advanced insulation solutions for demanding applications. A patent for the product is pending in several countries.

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Kaefer Oy Kavika Oy Kemppi Oy Koja Oy **KONE Hissit Oy**

Koneteknologiakeskus Turku Oy **Kongsberg Maritime Finland Oy**

Kvaerner Finland Oy Laivasähkötyö Oy **Lamor Corporation Ab**

Oy Lautex Ab **LED Tailor Oy**

MAN Energy Solutions Sverige AB,

Finland Branch

Marioff Corporation Oy

Merima Oy Mesekon Oy

Metalliasennus Huuhka Oy

Metos Oy Ab Meyer Turku Oy **Mobimar Oy** Napa Oy

Nora flooring systems Oy

Norsepower

Oy NIT Naval Interior Team Ltd

Oilon Oy

Onninen Oy **ORSAP Oy Parmarine Oy** Paroc Oy Ab **Pemamek Oy** Piikkio Works Oy **Pocadel Oy**

Promeco Group Oy

Rauma Marine Constructions Oy Rauman Meriteollisuuskiinteistöt Oy

Reddal Oy

R&M Ship Technologies Finland

RR Site Service Oy

Saajos Oy

S.A. Svendsen Oy **SBA Interior Oy** SeaKing Oy

Shipbuilding Completion Oy

SSAB Europe Oy **Steerprop Oy** Oy Stellio Ab

Suomenlahden Telakka Oy

TEVO Lokomo Oy

The Switch Engineering Oy / YASKAWA

Turun Korjaustelakka Oy **Uudenkaupungin Työvene Oy**

Vallila Marine Oy Valmet Oyj VTT SenseWay Oy Wiima Logistics Oy

Wärtsilä Oyj Abp



ABLEMANS OY

Häriänkurkuntie 46 FI-21250 Masku Finland Phone +358 2 439 6500 ablemans@ablemans.fi www.ablemans.fi



Contact Person

Marko Ruostekivi, Managing Director marko.ruostekivi@ablemans.fi

Facts & Figures

Turnover: EUR 9 million Personnel: 1987 Established:

Specialty Areas

Steel and Aluminium structures.

Shipbuilding – Shiprepairing – Conversions – Outfitting.

1 4 6 7

AB-MARINEL OY

Konsantie 30 FI-21260 Raisio Finland Phone +358 2 444 11 info@ab-marinel.fi www.ab-marinel.fi



Contact Persons

Tommi Niemi, Henry Lindström

Facts & Figures

Turnover: EUR 5 million Personnel 1986 Established:

Specialty Areas

- AB-Marinel Oy supplies comprehensive delivery of the electrical materials, -equipment and spare parts for all kind of ships and represents several manufacturer of the electrical control-, alarm and communication systems.
- Specialized in turn-key-deliveries for newbuilding ships, including design, installations, material and equipment

2 6 7

AT-MARINE OY, AUTROSAFE

📤 AT-Marine Oy **AUTROSAFE**

Power

Uranuksenkuja 10 FI-01480 Vantaa Finland

Phone +358 9 5494 2600 sales@atmarine.fi www.atmarine.fi

Contact Person

Antti Pihlajamäki, antti.pihlajamaki@atmarine.fi Jussi Kujanpää, jussi.kujanpaa@atmarine.fi

Specialty Areas

Services:

- · Sales, maintenance, manufacturing, commissioning and planning.
- Navigation and communication systems.
- Machine and fire alarm systems.
- Engine room equipment, sound and light alarms, alarm panels and centers.
- Temperature and pressure sensors Machine automation.
- Escape and emergency lighting including special signs for exterior and interior decks.
- LED lamps, searchlights and window wipers.
- Liquid Handling Equipment.Special Electronic Devices.

JOUKA OY

Somerotie 4 FI-33470 Ylöjärvi Finland

Phone: +358 3 359 7500

info@iouka.fi www.jouka.fi



Contact Person

Peter Lillavist, Peter.Lillqvist@jouka.fi

Facts and Figures:

Net sales: EUR 6,5 million Personnel: Established: 1957 Parent Company: Indutrade AB

Speacialty Areas

Jouka manufactures ball valves for demanding solutions with years of experience. We thrive from customer success, and we are specialized in finding best valve solutions for our customers.

1 3 8

JTK POWER OY

Teollisuustie 6 FI-66600 Vöyri Finland

Phone +358 20 781 2300 Fax +358 6 361 0383 info@jtk-power.fi

JTK -Power-group.com, JTK -Power-Finland.com JTK -Power-Estonia.com, JTK -Power-China.com

Contact Person

Robert Ollus, Managing Director robert.ollus@jtk-power.com

Facts and Figures

EUR 45 million Turnover:

Personnel: 93 in Finland, 110 in Estonia, 25 in China

Established:

Specialty Areas

Large Diesel and Gas engines exhaust and intake silencers Offshore-, paper- & pulp and other process industries large silencers Also Valve seat inserts are manufactured for exhaust and intake valves, of both large and small diesel engines.



2. Equipment

3. Machinery



KOJA MARINE

P.O. Box 351 (Lentokentänkatu 7) FI-33101 Tampere Finland

Phone +358 3 282 5111 kojamarine@koja.fi www.koja.fi

Contact Person

Esko Nousiainen, Director esko.nousiainen@koia.fi

Facts & Figures

EUR 100 million Turnover: Personnel: 350 Established: 1935 Parent Company: Koja Group

Specialty Areas

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



5. Safety

7. Turnkey Deliveries 8. Yards

6. Systems

9. Other

KOJA 🌊

OY LAUTEX AB

Ojakkalantie 13 FÍ-03100 Nummela



Finland Phone +358 9 224 8810 sales@lautex.com www.lautex.com

Contact Persons

Jukka-Pekka Tuominen, Sales Manager, jukka-pekka.tuominen@lautex.com, +358 44 704 6353 Antti Holappa, Sales Manager, antti.holappa@lautex.com, +358 50 386 1213

Facts & Figures

Personnel: Established: 1951 Parent Company: Teknoma Oy

Specialty Areas

Ceilings for ship accommodation and public spaces, such as metal panels, profiles, tiles and gratings in aluminium or steel. The product range includes also B-0 and B-15 fire classified ceilings, domes, beams and special ceilings. All ceiling materials are possible to coat on different materials.

POCADEL OY

Kornelantie 229 FI-21570 Sauvo Finland Phone +358 50 435 2638 pocadel@pocadel.fi www.pocadel.fi



Contact Person

Maria Perrakoski maria.perrakoski@pocadel.fi

Facts & Figures

Established: 1997

Specialty Areas

Light weight B15 – A60 fire rated glass doors and partitions for marine and offshore use. Product range includes hinged doors, sliding doors, extra wide tandem doors, glass walls and partitions.

PORKKA FINLAND OY



P.O. Box 127 FI-3310 Tampere Finland Phone +35820555512 contact@porkka.com www.porkka.com

Contact Person

Petri Hiilloste petri.hiilloste@porkka.com

Facts & Figures

EUR 30 million Turnover: 170 Personnel: Established: 1962

Parent Company: Festivo Finland Oy

Specialty Areas:

Provision stores. Walk-in rooms in galleys/pantries. Insulated doors. Insulated fire doors A60, for cold stores, Marine cold cabinets and counters.

RENOTECH OY

Sampsankatu 4 B FI-20520 Turku Finland

Phone +358 10 830 1600 rt@renotech.fi www.renotech.fi

★ Renotech Oy Advanced Material Technology

saalos

Contact Person

Bob Talling, +358 50 558 1806, bt@renotech.fi

Facts & Figures

EUR 1,5 million Turnover: Personnel: Established: 1994

Specialty Areas

MED Certified products, B + D. GRG decorative wall and ceiling elements, mouldings and sculpture work. DGG light-weight gypsum board. Renopur decorative surface finishes, paint effects, marbling, wood graining, gilding, paintings and art work. Stonemix textured mouldings and finishes. Renofix non-combustible glues. Fireshield acoustic and fire proofing. Renolmage silk printing and 3-D release films. Acoustic flooring and floor screeds.

S.A. SVENDSEN OY

Valkiärventie 7 B FI-00230 Helsinki Finland

Phone +358 9 681 1170 +358 9 6811 1768 www.sasvendsen.com

Contact Person

Kimmo Räisänen Managing Director kimmo.raisanen@sasvendsen.com

Facts & Figures

Turnover: FUR 3 million Personnel: Established: 1981

Specialty Areas

1. Consulting

2. Equipment

3. Machinery

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

4. Materials

S.A.Svendsen Oy

5. Safety 6. Systems

SAAJOS OY

Puistokatu 21 FI-08150 Lohja Finland www.saajos.fi

Contact Person

Tomi Lehtinen Sales Director +358 400 811 591

Facts & Figures

Turnover: EUR 7 million Personnel¹ 30 Established: 1949

Specialty Areas

A-class fire doors, A60 and B15 sliding doors,

Saajos Oy. B- and C-class fire doors,

Saajos AS



8. Yards

9. Other



SBA INTERIOR LTD

Hangontie 940, FI-10300 Karjaa Finland Phone +358 19 327 71 sales@sba.fi www.sba.fi



Contact Persons

Thomas Pökelmann, Sales Manager, thomas.pokelmann@sba.fi Johan Fagerlund, Technical Director, johan.fagerlund@sba.fi Aki Virta, Business Development Director, aki.virta@sba.fi

Facts & Figures

Turnover: EUR 18,4 million

Personnel: 119 Established: 1985

Specialty Areas

SBA Interior is specialised in accommodation panelling and different types of beds for marine applications.

Latest development is an only 16mm B-0 class panel and a 50 mm A-60 class light weight box; wall and ceiling as well as a B-15 class Extension

Screen. Digital printed panels available. Another branch of SBA is subcontracting for metal industry.



VALLILA MARINE OY

Nilsiänkatu 15 FI-00510 Helsinki Finland Phone +358 (0)20 776 7700 info@vallilamarine.com www.vallilamarine.com



Marine

Contact Person

Miikka Ketola miikka.ketola@vallilamarine.com +358 (0)50 550 7866

Specialty areas

Full turn-key interior solutions for newbuild cruise ships, Full turn-key refurbishment solutions for cruise ships, Light soft goods refurbishment solutions for cruise ships, Tailor-made soft good products

| NOTES | | | |
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^{2.} Equipment

^{3.} Machinery

^{4.} Materials

^{5.} Safety

^{6.} Systems



BUSINESS RESIDENTIAL SERVICES

BUSINESS LEVEL APARTMENT HOTEL IN CENTRE HELSINKI FROM 51 EUROS/NIGHT



NAVIGATING THE ENERGY TRANSITION

BUREAU VERITAS IS COMMITTED TO SUPPORT THE CRUISE INDUSTRY ON ITS WAY TO NET ZERO EMISSIONS

A SUITE OF GREEN SERVICES

Bureau Veritas supports industry players in meeting the safety, technical and regulatory challenges of low carbon or zero carbon fuels, and alternative propulsion. We help clients achieve emissions compliance, meeting EEDI, EEXI and CII requirements. Our other green services support owners to prepare for an evolving regulatory landscape, such as the reduction of underwater and airborne noise.

CLASSED REFERENCES 1ST LNG-FUELED HYBRID-ELECTRIC CRUISE SHIP TO OPERATE IN POLAR WATERS

LNG-FUELED CRUISE SHIP
WITH FUEL CELLS

