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hub is aiming for greatness

Meyer Turku shipyard
looking for new recruits

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BACK ON TRACK

While the biggest buzz surrounding Finnish maritime has involved the Turku shipyard, there has been a stream of positive news from the neighbouring shipyard of Rauma, as well. Since breaking away from STX in 2014, Rauma Marine Constructions (RMC) has quickly made a name for itself as a capable builder and project manager.

In November 2018, the wholly Finnish-owned shipbuilding company signed a letter of intent with Finnish Defence Forces Logistics Command for the construction of four corvettes for the Finnish Navy. The contract for the construction of the vessels will be signed in early 2019.

Earlier, in October, RMC and Tallink announced a letter of intent for a new high-speed car and passenger ferry between Helsinki and Tallinn. RMC promises it can deliver on simultaneous orders: according to the plan, Tallink's car and passenger ship will be delivered at the end of 2021, and the construction of the corvettes will begin in 2020 and last until 2027. The commercial vessels and the corvettes are to be built alongside one another, but kept completely separate as there are, for instance, various security reasons to consider.

In the light of these news, it's no big surprise that Rauma Marine Constructions is currently seeking more employees. The company expects to grow significantly in the coming years due to its new orders – and the eventual goal is to become a world-leading shipyard.

Also the entire Finnish maritime cluster seems to be pursuing growth opportunities presently. In August 2018, a new maritime business accelerator programme started in Finland in order to add some startup smarts to – already formidable – industry muscle.

In Maritime Accelerator, traditional maritime industry players operating on global markets – such as shipyards, design agencies and shipping companies – search for new ideas and partnerships among smaller growth companies. The ideas may be related to, for instance, material and sensor technologies, robotics, sustainable development, or logistics solutions.

The partner companies in the first programme are Wärtsilä, Royal Caribbean, Meyer Turku, Foreship, NAPA Group, and CADMATIC, all of them representing the leading edge in the world in their respective fields. The accelerator programme is implemented by the regional development company Turku Science Park.

The Finnish maritime cluster doesn't really need a dictionary to distinguish between 'pilot' and 'pivot,' since innovation is very much the lifeblood of the entire industry. Still, bringing in some fresh brains will probably help, too.

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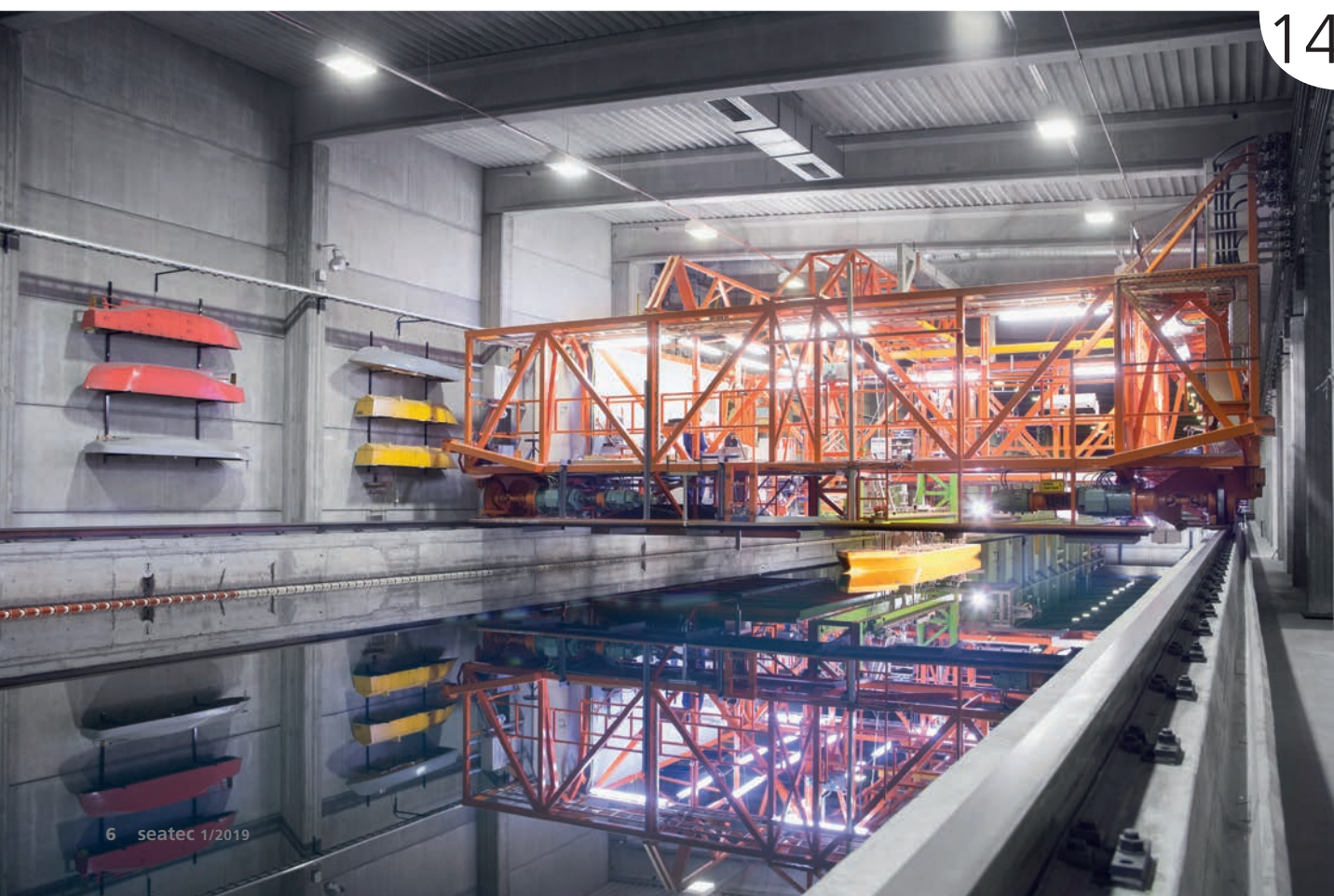
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Through the ArTEco project (Arctic Thruster Ecosystem), European marine research institutes and companies, under the leadership of VTT and Wärtsilä, worked together to increase thruster lifetimes, decrease maintenance needs and boost over-all reliability – particularly in extreme conditions on arctic seas.

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Rauma Marine Constructions (RMC), which is operating the Rauma Shipyard, and Meyer Turku, the owner of Turku Shipyard, are engaged in a new kind of cooperation. Meyer Turku ordered from Rauma two ship blocks for Costa Esmeralda cruise ship built in Turku, and soon after an order of two more blocks followed.

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36 Meyer Turku shipyard looking for new recruits

Located on the southwestern coast of Finland, Meyer Turku shipyard is specialised in the production of large cruise ships. Currently owned by Meyer family, the shipyard is one of the leading European shipbuilders. As orders for new ships keep coming in steadily, the shipyard has a growing demand for new shipbuilding professionals.

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Innovative strategic partners for the Finnish maritime industry

by: ARI MONONEN



**Maritime
Accelerator is an
innovation platform for
corporations and startups.**

Finland is known as the builder of the world's biggest cruise liners.

photo: ESKO KESKI-OJA / TURKU BUSINESS REGION





Finland's first Maritime Accelerator programme had the final meeting as a side-event of SLUSH event in Helsinki.

Maritime Accelerator is an innovation platform for corporations and startups. It brings together large maritime corporations and smaller companies that are on a growth curve and have potential to join the Finnish maritime cluster. The aim is to strengthen the competitiveness of the Finnish companies in the industry. The accelerator programme culminated in December 2018 in the Helsinki Fair Centre as a side event of the major international startup event 'Slush'.

Implemented by Turku Business Region in cooperation with Avanto Ventures, the Maritime Accelerator programme is a spearhead project that has the goal of enabling the development of new solutions for

the maritime industry, together with innovative growth companies.

"In the late summer of 2017, we started to contemplate new schemes for assisting the maritime industry. The ship-

building companies were doing very well, so they were in need of more workforce, as well as new cooperative partners in various fields of know-how and new technology," says Mr. Jukka Laiterä, Senior Advisor



**// The majority of
the companies
were from abroad, quite
many from the United
States.**

for Turku Science Park Ltd, a development company of Turku Business Region.

Even though a large part of the Finnish maritime industry is concentrated around the Turku region, he emphasises that the Maritime Accelerator programme is a nationwide project.

“We are looking for growth companies all over the world, and from all parts of Finland. Of course, Turku and its surroundings might be a good location to set up premises for maritime business in Finland – but it is by no means a condition for taking part in the programme.”



photo: PEKKA KORET / TURKU BUSINESS REGION

LOOKING FOR NEW TECHNOLOGIES

One of the reasons for starting the Maritime Accelerator programme was to improve communication and visibility between the Finnish maritime industry and companies specialising in other kinds of technologies, such as remote networking and monitoring, artificial intelligence, augmented reality, machine-learning, and health technology.

"After preliminary discussions with potential corporate partners, the programme was started at the end of 2017. We charted the needs of a number of maritime corporations for their strategic initiatives of the near future. Of course, the corporations could hire and train new personnel by themselves, but that would take more time than finding new partner companies with the required know-how and expertise," Laiterä explains.

"Consequently, the search was on for growth companies offering a product or service matching the specific challenges set by our corporate partners, and wanting to expand their market areas to the maritime field."

"Combing through the startup ecosystems world-wide, more than 500 potential enterprises were found. The screening for the particular needs of our corporate partners were made in several phases."

At the end of the initial round in the beginning of last September, approximately ten of the best matching companies for each partner were interviewed over the internet.

"The majority of the companies were from abroad, quite many from the United States."

A few of the most promising enterprises were selected by each of the corporate partners to participate in a series of three two-day boot camps in Finland, for the purpose of tailoring and fine-tuning the offering of the growth enterprises to suit the specific needs of the maritime company in question.

SEVEN STARTUPS FOR THE FINALS

The startups in the final phase at hand were Tulip, Delta Cygni Labs, Neuron

"It is good to see how these innovative growth companies and large maritime corporations have found new cooperative potential through the Maritime Accelerator programme," says Mr. Jukka Laiterä, Senior Advisor for Turku Science Park Ltd.

// One of our long-term objectives is to boost cross-scientific cooperation and create an innovation ecosystem within the maritime industry.

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Soundware, Hemalmaging, Thermal Imaging Radar, Vital Vio, and Marine Bubble Flow. Finland was represented by Delta Cygni Labs.

According to Laiterä, six growth companies participated in the final boot camp.

"All of them were chosen by the corporate partners – Wärtsilä, Royal Caribbean, and Meyer Turku Oy – to continue cooperation even beyond Maritime Accelerator."

"The six remaining companies presented themselves at the closing event to a large audience of around 200 people in the morning of December 4th, during the Slush event at the Helsinki Fair Centre. The topmost three of the growth companies were also on the scene in the international Breaking Waves think tank conference in the afternoon."

Partnership thinking, mutual goals, and the utilisation of versatile know-how were essential factors when new strategic partners were chosen.

"One of our long-term objectives is to boost cross-scientific cooperation and create an innovation ecosystem within the maritime industry," says Laiterä.

NEXT INSTALLMENT IN 2019

For future cooperation, Wärtsilä chose to present Thermal Imaging Radar, a company that manufactures 360-degree radars based on infrared imaging and utilised for controlling the operation of various devices.

Royal Caribbean wanted to showcase Vital Vio, an American health technology company offering a new antibacterial LED-based disinfection method for on-board hygiene.

Meyer Turku shipyard presented Delta Cygni Labs, a Finnish startup that has developed a mobile application for remotely controlled service operations in difficult conditions, such as in the middle of an ocean.

"It is good to see how these innovative growth companies and large maritime corporations have found new cooperative potential through the Maritime Accelerator programme. These kinds of cooperative initiatives will help in ensuring the future competitiveness and success of the whole Finnish maritime industry that already has unique and specialised knowledge of ship-building," Mr. Laiterä expects.

After initial success, the Maritime Accelerator programme will be resumed in 2019. New partner corporations in the maritime industry will be chosen by the end of April. ■



Team-up for Thrusters

THREE-YEAR ARTECO DEVELOPED CREATIVE TECHNOLOGIES FOR THRUSTER SOLUTIONS

by: SAMI J. ANTEROINEN

photos: PIXABAY

Through the ArTEco project (Arctic Thruster Ecosystem), European marine research institutes and companies, under the leadership of VTT and Wärtsilä, worked together to increase thruster lifetimes, decrease maintenance needs and boost over-all reliability – particularly in extreme conditions on arctic seas.



The Finnish consortium of the international project reached the “finish line” already in March 2018, but the project wasn’t fully concluded at that point.

“German partners concluded the project in August and the corporate partners are sticking with the project till the

end of the year,” explains Project Coordinator Jari Halme of VTT.

EXTREME EDGE

But why is the research of the ArTEco consortium so significant? Well, while a ship is at sea, it must overcome tough

resistance as it displaces water masses from its path. Ice creates extreme shock loads especially when the propeller hits and crushes ice blocks in the water flow. Extreme loads wear the propulsion equipment, or thruster, thereby shortening the life cycle and challenging technical rela-



The results will enable the better use of ships, and the predictability of loading and failure.

sion technology in extreme conditions. The results will enable the better use of ships, and the predictability of loading and failure.

As a consequence, ArTEco has revealed a clear path to further possibilities to optimise the design of equipment even more effectively and secure the full capabilities of vessels in difficult ice conditions. Environmental loads will also be reduced when maintenance of vessels is needed less and less in extremely vulnerable, Arctic sea areas.

ECOSYSTEM EMERGING

VTT developed and measured damping solutions for torsional vibrations, caused by issues such as the impact of propeller blades on ice. Jari Halme says that the results of the project can be applied on various vessels, icebreakers and the autonomous ships of the future, which will be able to operate in both non-Arctic and Arctic sea areas.

"The smart products and services of the future and new, competitiveness-boosting business opportunities will be created via the ecosystem projects. The best international research institutes in the field and industrial contributors were involved in the project," says Halme.

THREE COUNTRIES UNITED

The project was very much a joint undertaking between three countries: Finland, Sweden and Germany. Finnish players VTT and Wärtsilä coordinated the ArTEco project, and also ATA Gears, Katsa, the Finnish Transport Safety Agency and Tampere University of Technology participated from

the Finnish side. SKF and Luleå University of Technology represented Sweden; gear manufacturer Klingelberg and Dresden University of Technology brought German expertise to the project.

According to Halme, the most significant available asset for the project was Wärtsilä's testing site in Tuusula, Finland, which was operated by VTT, and utilized several times over the three-year period.

"We managed to run full-scale testing for various thruster solutions which is quite unprecedented anywhere in the world."

PROMISING SOLUTIONS UNCOVERED

The project involved e.g. the development of cutting-edge propeller ice load-specification methods, vibration damping solutions, environmentally friendly lubricants, measurement technology, and the improvement of the gear unit's load carrying capacity. "These led to the creation of innovative, tested and reliable solutions," explains Halme.

"For example, changing external hubcap shapes reduced the maximum ice impact load by 30 %, while a damper reduced vibration in the transmission by more than 20 %."

Anders Hedin, Project Coordinator at Wärtsilä, comments that ArTEco allowed the company to increase the technology readiness level for "several promising solutions" for propulsion products.

For the dissemination of the project results, ArTEco project organised an open workshop in Tampere together with classification authorities and marine industry.

bility. Limited operations or even equipment failure cause direct and indirect costs for owners, operators and equipment and component manufacturers.

ArTEco project involved the development of innovative technologies and solutions for mechanical and rotating propul-



"The workshop was a success. All the main offshore ship propulsion suppliers/manufacturers attended the workshop," says Halme.

GET THE IDEAS FLOWING

ATA Gears was one of the companies invited by Wärtsilä to join the project. Gábor Szánti, ATA Gears' Engineering and Development Manager, says that the company was excited to participate in the venture.

"Wärtsilä is our important customer and we were truly amazed to learn about their massive investment in Tuusula test facility. We did not have to think twice when we were invited to participate, as this has been a unique opportunity to demonstrate our best technologies in a very well controlled full scale thruster environment," says Szánti, who was the project manager from ATA Gears side.

QUEST FOR SYNERGIES

The expectations were also met as ATA Gears worked together with experts of

The workshop was a success.

respected research institutes and companies invited by VTT and Wärtsilä, forming a research ecosystem around thruster development.

"We found ourselves among experts of hydraulic machinery, power electronics, sensor technology, in addition to the fields more closely related to gears: metallurgy, contact mechanics, tribology and dynamics. This multidisciplinary approach created synergies for all participants," Szánti believes. Especially fruitful was the international dialogue with the researchers of Dresden University of Technology.

INSIDER INSIGHTS

Tampere-based ATA Gears has also a long track record of cooperating with the local Tampere University of Technology. "Professor Arto Lehtovaara and his team brought a lot of expertise and insight into this project," Szánti says.

"When there's a lot of different, motivated players from the same industry joining up, it's normally a project that has the potential to push the entire industry forward," he adds.

VTT and Wärtsilä coordinated the ArTEco project, in which the following organisations were also involved: ATA Gears, Katsa, the Finnish Transport Safety Agency, Tampere University of Technology, SKF, TU Luleå, KlingelInberg and TU Dresden. The main funders of the project are Business Finland in Finland, Sjöfartsverket in Sweden and state funding in Germany. The project is part of the European MARTEC II (Maritime Technologies as an ERA-NET). ■



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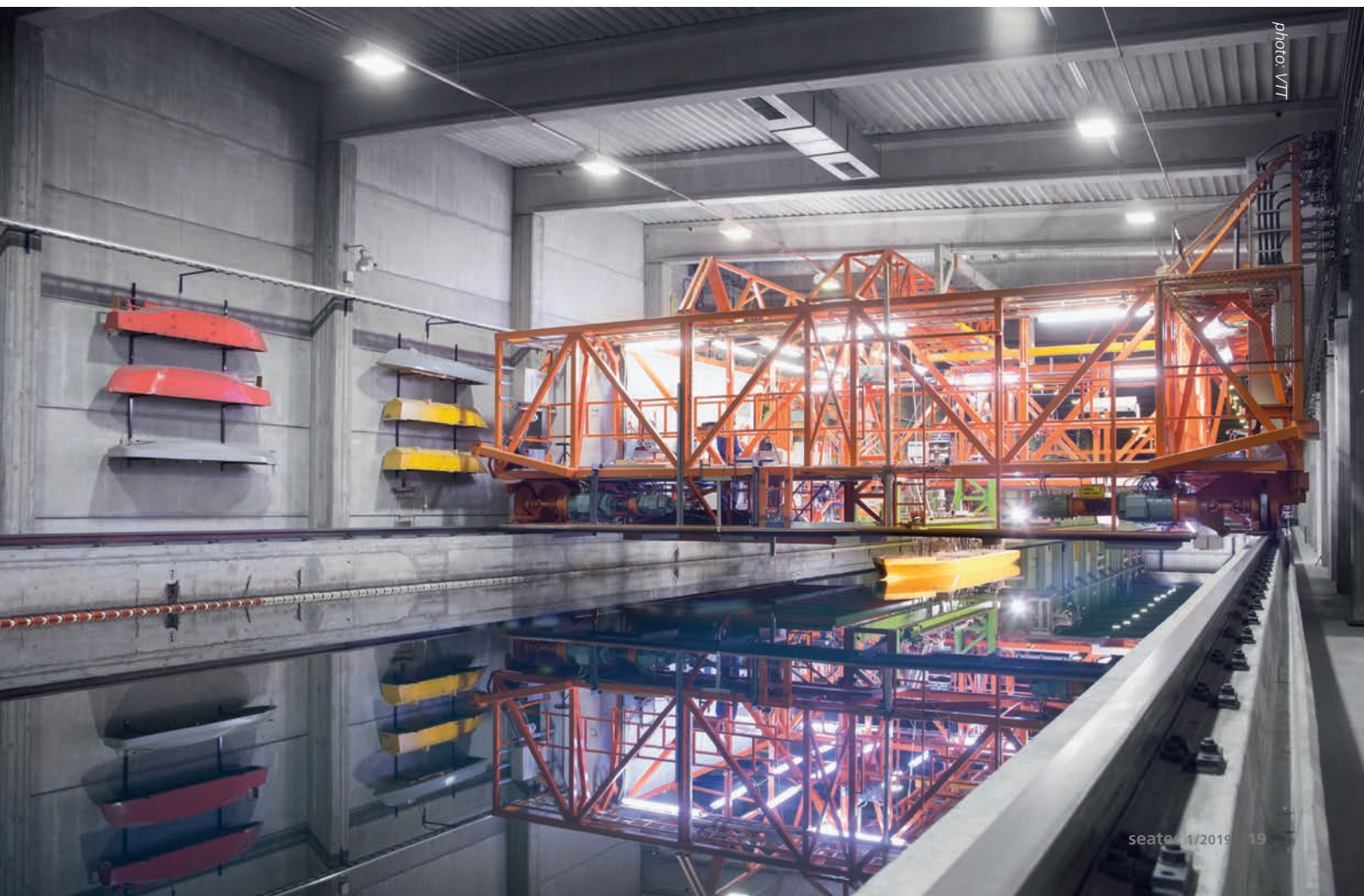


photo: VTT

Green Light for Green Shipping

ALTERNATIVE FUELS AND TECHNOLOGIES ARE CHANGING
THE FACE OF MARITIME – BUT NOT OVERNIGHT

by: SAMI J. ANTEROINEN

photo: TALLINK SILJA / JUSSI OVASKAINEN



*Tallink Megastar,
an environmentally friendly LNG
shuttle ship that uses a number
of energy-saving technologies.*



Maritime is facing a puzzle in the form of alternative fuels and the drive for greener shipping. With numerous competing concepts and technologies, who's to say which method will become main stream and which will remain in the fringes?

photo: GASUM OY / JUHA SINISALO

The IMO decision to limit the sulphur content of ship fuel from 1 January 2020 to 0.5 % worldwide – as well as the recently adopted resolution to reduce greenhouse gas (GHG) emissions by 50 % by 2050 – will change the future mix of ship fuels dramatically. As it stands, in 2016, the combined amount of heavy fuel oil (HFO) and marine gas oil (MGO) consumed by ships accounted for no more than 25 % of total global diesel fuel and petrol production. This is roughly equivalent to the amount of energy consumed using liquefied natural gas (LNG), which stands at 24 %; however, LNG represents only a small portion (approximately 10 %) of the overall gas market.

DNV GL is addressing these issues in a new white paper 'Alternative fuels and technologies for greener shipping'. Assuming an installed base of about 4,000 scrubbers in 2020, no more than 11 % of ship fuel usage will be high-sulphur fuel, DNV GL calculates. Latest estimates assume that no more than 2,000 scrubber installations will be carried out between now and 2020.

This raises the question whether high-sulphur fuel will even be available outside the largest bunkering ports, if only 4,000 or even fewer ships will be able to use it. The next question is what the price differential between HFO and compliant fuels will be.



**// Potential alternative
fuels for shipping
are numerous.**





photo: ARI MONONEN

Olli Kaljala from Bureau Veritas says that ships without emissions are not likely to become mainstream very soon.

LNG LEADS THE PACK

Potential alternative fuels for shipping are numerous: LNG, LPG, methanol, biofuel and hydrogen are often listed as the fore-runners. Among the emerging new technologies, one finds battery systems, fuel cells and wind-assisted propulsion which may offer a boost in the future.

LNG has become the “pet fuel” for maritime, even if it is a fossil fuel (with lowest CO₂ emissions). It is also problematic that the release of unburned methane (so-called methane slip) could reduce the benefit over HFO and MGO in certain engine types. Methane (CH₄) has 25 to 30

times the greenhouse gas effect of CO₂. Nevertheless, engine manufacturers claim that the tank-to-propeller (TTP) CO₂-equivalent emissions of Otto-cycle dual-fuel (DF) and pure gas engines are lower than those of oil-fuelled engines.

Niklas Rönnerberg from Lloyds Register says that in the short term, LNG is a decent tool towards greener shipping. “In the coming years, we are likely to see more hybrid solutions where electricity is utilised in some way – especially with regards to smaller vessels,” Rönnerberg says.

Olli Kaljala from Bureau Veritas agrees that LNG is not a long-term solu-

tion, but it does offer some relief as the search for more sustainable options continues.

“Looking at, for instance, methanol, wind or solar powered vessels, it is clear that a lot of development still needs to be done,” Kaljala says.

GOING CLEAN

DNV GL observes in its White Paper that if produced from renewable energy or biomass, the carbon footprints of methanol and hydrogen can be significantly lower than those of HFO and MGO. According to DNV GL, the cleanest fuel is hydrogen produced using renewable energy. Liquefied hydrogen could be used in future shipping applications.

However, because of its very low energy density liquefied hydrogen requires large storage volumes, which may prevent hydrogen from being used directly in international deep-sea shipping. In a sustainable energy world where the entire energy demand is covered by renewable, CO₂-free sources, hydrogen and CO₂ will be the basic ingredients for fuel production, most likely in the form of methane or diesel-like fuels produced in a Sabatier/Fischer-Tropsch process.

TARGET: ZERO-CARBON FUELS

The White Paper argues that, looking ahead, LNG has already overcome the hurdles of international legislation, and methanol and biofuels will follow suit very soon. It will be a while before LPG and hydrogen are covered by appropriate new regulations within the IMO IGF Code as well. The existing and upcoming environmental restrictions can be met by all alternative fuels using existing technology.

However, the IMO target of reducing GHG emissions by 50 % by 2050 will likely require widespread uptake of zero-carbon fuels and further energy efficiency enhancements. Fuel cells can use all available alternative fuels and achieve efficiencies comparable to, or better than, those of current propulsion systems. However, fuel cell technology for ships is still in its infancy.



photo: LLOYDS REGISTER EMEA


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// The
 development
 of battery technology
 is key in the coming
 years.

Niklas Rönnerberg from Lloyds Register says that in the coming years, we are likely to see more hybrid solutions where electricity is utilised in some way – especially with regards to smaller vessels.

FEEL THE WIND

Wind-assisted propulsion could potentially reduce fuel consumption, especially when used for slow ships, but the business case remains difficult. Batteries as a means of storing energy can be considered as an alternative fuel source in the widest sense. Especially on ships operating on short, regular voyages, they have major potential as a means to boost the efficiency of the propulsion system.

“The development of battery technology is key in the coming years,” observes Olli Kaljala. Presently, in deep-sea shipping, batteries alone are not an ade-

quate substitute for combustible energy sources.

Niklas Rönnerberg believes that we will see totally emissions-free ships within the next decade, but they will be few indeed.

“Ships without emissions are not likely to become mainstream very soon.”

MANAGE THE RISK

For a classification society, new fuels and technologies bring a range of challenges. How do you assess the risks and where do you set the bar?

“One has to maintain an open mind

and follow the development in the industry very closely,” Rönnerberg says.

Olli Kaljala points out that zero-emissions shipping is the general direction of the industry, even if it will take time. “Various commercial applications are following the pilots and technological challenges are gradually overcome,” he says, adding that the fuel evolution is also subject to political winds.

For classifiers, fuels are only one piece of the puzzle, albeit an important one.

“Environmental concerns in general comprise a major part of our work,” adds Kaljala. ■

New Beginnings

RE-ENERGISED RAUMA MARITIME HUB IS AIMING FOR GREATNESS

by: SAMI J. ANTEROINEN

photo: SEASIDE INDUSTRY PARK







Rauuma Marine Constructions (RMC), which is operating the Rauma Shipyard, and Meyer Turku, the owner of Turku Shipyard, are engaged in a new kind of cooperation. Meyer Turku ordered from Rauma two ship blocks for Costa Esmeralda cruise ship built in Turku, and soon after an order of two more blocks followed.

In the interview given at the end of September Jyrki Heinimaa, the CEO of

RMC, noted that at first the agreement was about the delivery of two blocks with an expectation that more will follow, provided that everything works out. As the “pilot blocks” were a success, Meyer wasted no time ordering two more. A ship as huge as Costa Esmeralda is assembled of about hundred blocks, so there’s plenty of work to go around.

“This job has given us an experience how to handle thin 5 mm sheets – and

we really have had a great success with this,” says Jyrki Heinimaa and adds that the works on the further two blocks are already being carried out.

Jyrki Heinimaa notes, that as such, there is nothing extraordinary about the cooperation of Turku and Rauma, because the whole industry works as a network and shipyards communicate with each other closely. “When Turku asked, whether we would be interested in Costa Esmeralda,

// The first ship made
by RMC has already
exceeded the expectations
of the client.

photo: RAUMA MARINE CONSTRUCTIONS



we immediately grabbed the opportunity,” Heinimaa says.

FIRST SHIP OUT

The Rauma shipyard is, at the moment, in a quiet spot, for the first ship ever built by Rauma Marine Constructions was handed over in summer and the dry dock has since been empty. When the passenger/car ferry Hammershus was handed over to the Dan-

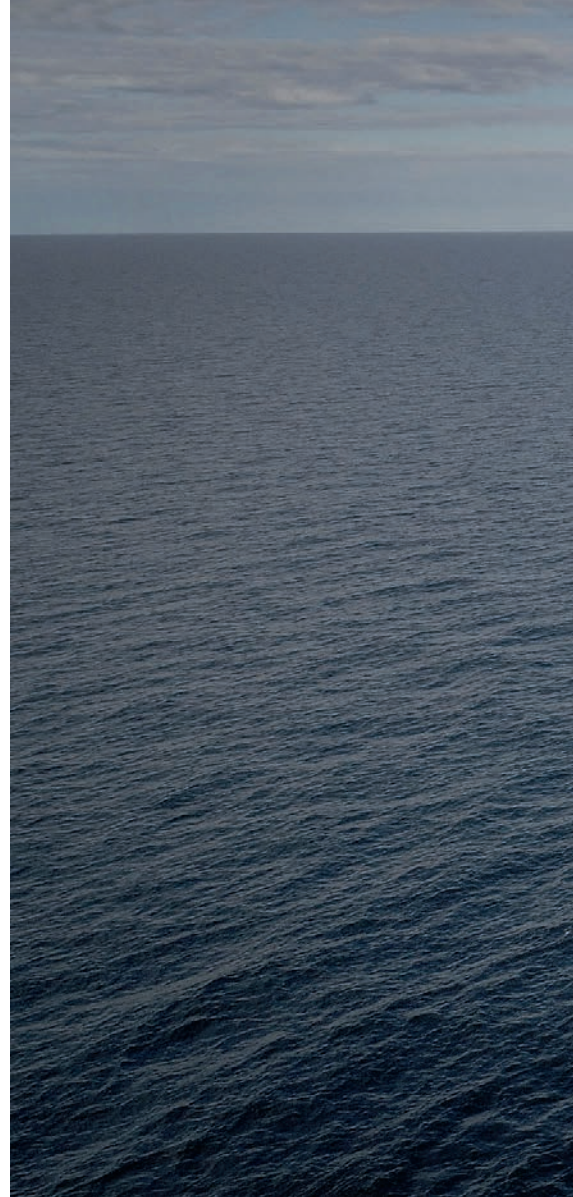
ish client Molslinjen and it sailed to far horizons, the situation was according to Jyrki Heinimaa’s description at the same time both melancholic and exhilarating.

Hammerhus started to operate between Køgen and Rønne in Denmark on 1st of September. The ferry is also operating between Bornholm in Denmark and Sassnitz in Germany. The ferry will have enough work well into the future as Molslinjen won the Denmark state com-

petitive bidding for Bornholm traffic with a long 10–12-year contract.

“The first ship made by RMC has already exceeded the expectations of the client, for example in terms of load capacity and speed,” Heinimaa remarks.

“According to the feedback, the client is really happy with the ferry. For example, speed, buoyancy and maneuverability of the vessel are excellent,” the CEO smiles.



Jyrki Heinimaa, the CEO of RMC, notes that there is nothing extraordinary about the cooperation of Turku and Rauma, because the whole industry works as a network and shipyards communicate with each other closely.

RMC had to prove that its power to deliver and knowhow are still of the highest quality. Jyrki Heinimaa, who was appointed as a CEO in December 2017, admits that the pressure was high:

"The building of the first ship is never an easy task."

ENTER: SQUADRON 2020

After the interview, on November 6, RMC and the Finnish Defence Forces Logistics Command signed a letter of intent on the main principles and conditions for the construction of four corvettes for the Finnish Navy. These Pohjanmaa-class multifunctional corvettes are going to be more than hundred meters long as a part of project 'Squadron 2020', which replaces seven

**// Co-operation
between companies
in the area reduces the
transportation costs
because operations are
concentrated in the same
area.**



naval ships that are going to be removed from operation.

Already in 2017, Rauma Marine Constructions received authorisation from the Finnish Defence Forces Logistics Command to execute a significant share of the basic design of the multi-function corvettes. The rest of the design will be implemented after the vessels' main equipment has been tendered and selected.

The contract for the construction of the vessels will be signed in early 2019.

PROJECT EXCELLENCE

As both public and private projects are pushed forward, Heinimaa looks at future horizons with confidence. "The market situation is very interesting right now and

RMC intends to continue in its role as a network leader," he admits.

The future will witness an increasing focusing on the shipyard's role as "leader of the pack" – and Heinimaa is well aware that the shipyard is trusted in the industry. "Everyone wants to be part of a well-run team – and this is what we can offer."

The Rauma shipyard also gets a strong fire support from Seaside Industry Park Rauma, which provides an efficient operating environment and exceptional competitive advantages to the companies situated in the industrial park.

These include excellent location for logistics by the sea next to the port and a vast ready-made infrastructure, provid-

ing a suitable construction base particularly for heavy industry companies that require lot of space. The facilities of the Seaside Industry Park include a dry dock, cranes and other equipment required for industrial enterprises.

PLATFORM ECONOMY – RAUMA STYLE

According to Timo Luukkonen, the CEO of the Rauman Meriteollisuuskiinteistö Oy (RMTK), a company running the industrial park, one of the strengths of the park is that the RMTK's business platform contains all the necessary services to enable the tenants to focus on their own core businesses.

"We have here a strong network of



companies cooperating with each other and thus improving their competitiveness.”

Synergies may be achieved in different ways – for example, things such as a joint environmental permit, joint electricity, heat and gas purchases, and joint services (security and waste management) bring cost-effectiveness.

“Co-operation between companies in the area reduces the transportation costs because operations are concentrated in the same area, as in the case of surface treatment. Furthermore, the existing cranes and transfer system minimise the need to rent equipment from outside,” Timo Luukkonen adds.

At the moment, there are 31 tenants in the industrial park, with about 400 maritime professionals in attendance.

“The number of personnel has remained somewhat stable over the last couple of years, with some changes,” Luukkonen says.

GOING STRONG

The latest lease agreement is from September when R&M Ship Technologies, the full-line supplier of marine industry rented office premises in the park.

“At the same time, Allstars Engineering’s marine engineering office extended its own lease agreement,” says Luukkonen. The number of square meters to

be rented out is 55,000 m², 87% of which is now rented.

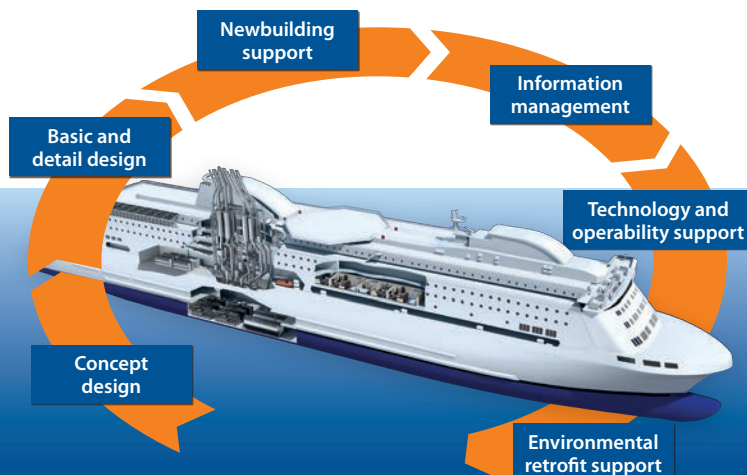
At the same time the turnover of RMTK has increased: while in 2015 it was 3,1 million euros, it was doubled by 2017 up to 6,2 million euros. The goals for 2020s are set high:

“In the next decade, Seaside Industry Park will be a nationally and internationally attractive, logistically superior, resource efficient and competitive industrial park for heavy industry,” Timo Luukkonen envisions. In addition to providing synergies and added value to enterprises operating in the park, the park will also enhance the vitality of the whole Rauma area. ■

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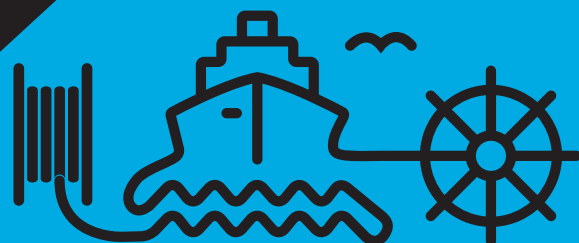
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GREENER FERRY FOR TALLINK

by: SAMI J. ANTEROINEN

In October 2018, Rauma Marine Constructions and Tallink signed a letter of intent to build an environmentally friendly car and passenger ferry for the scheduled service between Tallinn and Helsinki. The ship, with a value of approximately 250 million euros, will be built at Rauma shipyard. RMC now looks strengthen its organisation and recruit more talent.



The planning of the Tallink Shuttle ship, which will operate on the Helsinki-Tallinn route, will start in spring 2019 and building will commence in 2020. The vessel will be delivered to Tallink at the end of 2021.

The new vessel is the biggest new-build order as of yet for RMC. The passenger capacity of the ship will be 2,800 people. According to the company, the newest technology and innovative solutions will be utilised in the design phase to ensure that the vessel will be as energy-efficient and environmentally friendly as possible.

Jyrki Heinimaa, CEO, Rauma Marine Constructions, says that the recruitment of more employees is already underway.

"This is outstanding news for shipbuilding in Rauma. RMC's four-year journey has been consistent and the letter of intent with Tallink represents a natural continuation of our development," he says, estimating the order's impact on employment to total around 1,500 person-years.

Over the years, Rauma shipyard has built a total of four vessels for Tallink Grupp. In addition, two more vessels have been designed at the shipyard. Baltic Queen,

the previous vessel built at Rauma shipyard, was completed in 2009 and operates nowadays on the Tallinn-Stockholm route.

According to Heinimaa, Tallink has always shown appreciation for the shipbuilding expertise in Rauma. "This is an opportunity for us to utilise our longstanding experience and to help steer the ship traffic between Finland and Estonia in a more environmentally friendly direction," says Heinimaa.

Tallink Grupp and RMC are now working on finalising the contract and financial arrangements. ■

Meyer Turku shipyard looking for new recruits

by: ARI MONONEN

photos: MEYER TURKU





// Orders for new
ships keep
coming in steadily.

Located on the southwestern coast of Finland, Meyer Turku shipyard is specialised in the production of large cruise ships. Currently owned by Meyer family, the shipyard is one of the leading European shipbuilders. As orders for new ships keep coming in steadily, the shipyard has a growing demand for new shipbuilding professionals.

Mr. Tapani Mylly, Communications Manager for Meyer Turku, notes that the shipyard's order book is quite full until the year 2024.

"Now that we started work on the new ship ordered by Carnival Cruises, we have three vessels under construction at the moment."

Plate-cutting work is now underway for the Carnival XL1 that will start operating from Florida in 2020. The ship is to be the first North American based cruise ship to run on liquefied natural gas (LNG). It has gross tonnage of more than 180 000 tons.

Still at Turku shipyard in its final stages of construction and expected for delivery in early 2019, TUI Cruises' New Mein Schiff 2 has a length of 315 metres and will carry nearly 2 900 passengers.

Shipbuilding for this vessel was started in early 2017.

"The third ship under construction is Costa Cruises' new LNG-powered liner Costa Smeralda, also with a gross tonnage of over 180 000 tons. The ship will be equipped with more than 2 600 cabins and is scheduled to enter service in October 2019. At the moment, the ship's hull is in its final stages of assembly," Mr. Mylly recounts.

Furthermore, a second Carnival Cruises XL class ship – a sister ship for Carnival XL1 – has already been ordered and is scheduled for delivery from Meyer Turku in 2022.

SHIPBUILDERS WANTED

While the volume of shipbuilding keeps constantly increasing, competition for

**// We have three
vessels under
construction at the
moment.**







skilled personnel in and around the Turku region is getting tougher and tougher.

"At present, we employ around 2 000 people, whereas our current network of subcontractors employs another 6 000. In the past year, we have taken on 250 new employees, but our network would need five times that many new recruits. We do not exactly have a labour shortage yet, but it is undeniable that recruiting of new personnel has

become more challenging than it used to be," Mylly says.

"All in all, some 10 000 new recruits will be required by us and our network companies by the year 2023 to be able to build all the ships on schedule. We need not only more shipbuilders but also engineers and other designers."

According to Mr. Mylly, the growing shipbuilding business means that the entire maritime cluster in the region needs

to expand. Consequently, the subcontractor network should also make preparations for new growth and for hiring more personnel.

"We now have more shipbuilding orders than ever before. In past years, there was a lot of fluctuation in the demand for shipyard personnel, with peaks and low points at an interval of maybe a couple of years. Now, however, we have a steady demand of new personnel for many years



**// We now
have more
shipbuilding orders
than ever before.**



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onwards, and hopefully even beyond the year 2024.”

“Therefore, we are specifically looking for professionals who would be interested in long-term careers in shipbuilding in southwestern Finland,” Mylly explains.

INVESTMENTS FOR GROWTH

In the vicinity of Meyer Turku shipyard, construction work is being started for a new large-scale industrial park designed for the maritime cluster. According to estimates, the park may eventually provide workspace for over 100 different subcontractors and related companies.

“The industrial park is a promising concept. If the facilities of our subcontractors can be situated just outside the shipyard, there will be many synergy benefits in logistics and in various other areas,” mentions Mylly.

In recent times, Meyer Turku has also made a number of serious investments of its own.

// The largest investments include new digitally controlled production equipment for the steel factory.

“The largest investments include new digitally controlled production equipment for the steel factory. The shipyard’s steel halls will have a new plate cutting line, a new profile cutting line, and a new panel line.”

“Also, we have rebuilt the cabin factory at nearby Piikkiö, a new facility for the storage and pre-handling of plates, and a large-scale new crane for heavy shipbuilding duties. Some of these investments are almost ready and the rest will be taken into use in 2019. These will make up a large

part of our current investment budget of 200 million euros,” Mylly adds up.

The shipyard works in close cooperation with Meyer’s German-based shipbuilders, for instance in the domain of procurements.

“It makes sense economically and logistically to make joint orders for such materials as steel and for various types of ship components, particularly if similar kinds of ships are simultaneously under construction in Finland and in Germany,” Mr. Mylly explains. ■

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Seatrade Cruise Global 2019 Nears Return to Miami Beach

by: UBM

Seatrade Cruise Global 2019 is fast approaching and headed back to Miami Beach. With the entire industry eagerly anticipating its return to South Beach and the newly renovated Miami Beach Convention Center April 8–11, this year's conference is anything but business as usual. Last year's gathering drew more than 11,000 registered attendees, over 700 companies from 113 countries and over 250 international journalists. 2019 promises to be the largest to date.

Setting the course on April 9, the State of the Global Cruise Industry keynote will include a special conversation with Zurab Pololikashvili, Secretary-General of the World Tourism Organization (UNWTO), who will discuss the future of sustainable tourism. The heads of the world's largest cruise companies, Norwegian Cruise Line Ltd, Carnival Corporation, Royal Caribbean Cruises Ltd and MSC Cruises, will then take the stage for a panel discussion moderated by BBC World News' journalist Lucy Hockings. Hockings will drive the conversation to cover sustainability, tech-



nological innovations, environmental initiatives, emerging markets and much more.

Beyond the headlining State of the Global Cruise Industry, a full itinerary of 30+ panels and 50+ hours of roundtables and discussions will take place over four

days. Attendees can also look forward to experiencing the world's largest b2b cruise conference taking place all on one single exhibition floor. The impressively large, state-of-the-art space will not only unite the entire cruise world, but also feature dedicated neighborhoods for each sector allowing for attendees to quickly navigate and identify what is new for 2019. Across the floor, attendees will be presented with opportunities to establish new business relationships and discover new trends shaping the cruising seascape.

"The unparalleled scope of Seatrade Cruise Global make it the most significant cruise conference in the world," shares Chiara Giorgi, Brand Director of Seatrade Cruise Global. "It is the only event that brings the entire industry together under one roof to share ideas and innovation, propelling it into the future."

For registration and information on Seatrade Cruise Global 2019 visit www.seatradecruiseglobal.com/register and use promo code SEATEC for 10% off your pass. ■



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photo: KATRI MÄENPÄÄ



Installation engineer in charge Teemu Jauhiainen (L), head of technologies Rami Mäkipää and Managing Director Jaana Hyttinen at a site meeting.

Hydraulics and electrification of machineries are the specialties of Averfin Oy

by: KATRI MÄENPÄÄ

Averfin Oy, starting as a maintenance company for earth-moving machinery 20 years ago, is currently an international partner in the shipbuilding industry. The company designs and installs hydraulic, electrical and control systems to machines.

Operating since 1998, Averfin Oy began its business as an earth-moving machinery maintenance provider. The shift in focus towards maritime industry started nevertheless many years ago through cooperation with WasaDredning. Averfin helped in maintaining Hitachi dredgers on one of their ferries.

"Since the ferry operated at sea, we were taken aboard in the morning and were brought back in the evening. During the time in between we had some spare time, so we serviced also the ferry," recalls Managing Director Jaana Hyttinen the early days of cooperation of Averfin Oy.

Little by little the demand became more focused on designing and building new systems.

"In the last five years we have concentrated even more on the maritime industry. Last year, for example, there were two new hopper barges completed, where the hydraulics and control systems of the hydraulics were entirely designed and built by us," Hyttinen tells.

CORE ACTIVITIES IN HYDRAULICS AND ELECTRIFICATION OF MACHINERIES

Designing and installation of hydraulics and electrification of machineries are the core activities of Averfin. Over the years Averfin has delivered more than a thousand hydraulic applications.

"We also build control systems and measuring instruments

both for existing equipment and completely novel inventions. On top of that, we design singular devices, small production batches as well as tailored products besides ready hydraulic systems,” Jaana Hyttinen lists.

The field undergoes constant development and current control systems of hydraulics frequently utilize radio control. Hyttinen believes that radio control is an increasing trend in the future and the company is already prepared for this.

“We have already modified and built a couple of demolition robots for sites, where the job cannot be completed by men. These Bobcats can be controlled through a camera, whereby visual contact is not necessarily required. The range, however, is short, meaning that the operator cannot be very far from the machine. Completely unmanned boats are yet to be achieved, but in principle, the technology for this already exists and this is the future.”

THE 20-YEAR OLD COMPANY FOCUSES ON DEVELOPMENT

Averfin Oy, which was founded in 1998, is celebrating its 20-year anniversary this year. Managing Director Jaana Hyttinen is pleased with the enthusiasm manifested in the current development of the company.

“Going into the shipbuilding industry has been quite new for us, but overtaking the new sector has also given us more motivation to develop the operations of the company. The prospects of the maritime industry are promising, therefore we will work there even more. This has given us a fresh impetus and everyone is eager to constantly contribute and develop,” she tells enthusiastically.

In addition to the shipbuilding industry, Averfin has developed consultation services and condition inspections. The company conducts inspections to machineries both in Finland and other countries.

“We can inspect machines, which the client considers buying, already during the purchase stage. Our experienced inspectors are specialised in the inspection of hydraulic components and wear parts. The equipment we can use includes mobile devices for measuring and recording pressure, flow and temperature. Inspection of machines and equipment helps the client to avoid making mistakes with procurements,” Managing Director Jaana Hyttinen explains. ■

More information: www.averfin.com

Boann & Sinann Waterhuizen –Holland 2017.

photo: ALFI-X PHOTOGRAPHY

AVERFIN OY

Founded: 1998

Place of business: Pori

Field of activity: Design and construction of hydraulics, machinery electrification and control systems

Provides employment to: 4 permanent employees and installation mechanics as needed

Turnover in 2017: MEUR 1.1

Champion Door's Special Doors for Shipyards

Champion Door Oy has delivered new large doors to shipyards around the world. The doors supplied are very large, with a width of 30–60 m and up to 50 m in height.

The construction of the Champion Door door is lighter than ordinary fabric foldup doors, so heavy oversized structures are not required for the main building. This will bring significant savings on the building costs of the hall. Doors can be manufactured in different strengths. The door frame strength is determined by door size and wind load requirements. Despite the lightness of the structure, the doors are designed to withstand strong wind loads. Wind resistance has been tested in a research facility.

Shipyards are usually located on the seacoast where corrosion protection of the components is paramount. The metal parts of the Champion Door shipyard doors are corrosion protected and they withstand dust, dirt and moisture well. Thanks to its simple structure, the doors are virtually maintenance-free. All these factors increase the lifetime of the door, and thus its lifecycle costs remain reasonable.



Champion Door Oy has invested in thermal insulation in their product development of shipyard doors. Good thermal insulation reduces heating or cooling costs and increases working comfort. ■

More information: www.championdoor.com





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solutions designed to meet each individual requirement. Weber offers the lightest solutions, combined with the highest performance and best properties, to the market. Our solutions offer potential weight savings of 35–68%. With Weber's primary deck coverings and self-levelling compounds, weight can be reduced by up to 68%. Products are pumpable, with a capacity of up to 20 tons per hour. They are fast-setting and curing. Already within 1–3 hours after installation, the floors are ready for foot traffic and can be used so the general work and outfitting can continue.

There are stringent requirements for thermal, acoustic and fire insulation on ships and offshore installations. Flexibility and weight are two extremely important characteristics. Our optimum solution is called ISOVER U SEAPROTECT. It is a preferred insulation material on board ships and offshore installations. Combined with Weber's floating floors, it produces effective weight savings without compromising on quality, properties and performance. ■



For international contacts, please visit:

www.isover-technical-insulation.com

www.weber-marine.com

For further information in Finland, please contact:

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SEATEC PREPARES ITS 2019 EDITION:

ITALIAN TRADE AGENCY DOUBLES THE NUMBER OF FOREIGN DELEGATES INVITED TO THE JOINT TRADE FAIRS SEATEC AND COMPOTEC

The increasingly strong, effective and productive collaboration between Italian Trade Agency and IMM-CarraraFiere will bring to Seatec-Compotec 100 international buyers from 25 countries and a delegation of foreign journalists from 6 countries. The panel of conferences will be focused on technologies for reducing emissions for a better environment, on tourism port systems and Cyber Security and on the situation of refitting in the Mediterranean area.

The long-standing and consolidated collaboration between Italian Trade Agency, committed to the promotion and to the internationalisation of Italian companies, and Seatec, the exhibition of technology, components, design and subcontracting applied to yachting, is once again renewed. Seatec, conceived and organised by IMM-CarraraFiere, is the only trade event dedicated to the sector in Italy and southern Europe, and in 2019 will further amplify its international appeal thanks to the contribution of Italian Trade Agency to select a larger delegation of foreign buyers taking part in its incoming programme. 100 delegates from 25 countries will – in fact – attend the Seatec-Compotec delegation. For Seatec specifically, buyers will come from: Croatia, Denmark, UAE, Egypt, Estonia, Finland, France, Germany, Iran, Latvia, Lithuania, Morocco, Norway, Holland, Poland, Russia, Slovenia, Spain, Sweden, Tunisia, Turkey, Ukraine, UK, Hungary, USA, all of these countries currently and actively engaged in boats and yachts building.

The incoming programme by Italian Trade Agency will further broaden the opportunities for business encouraged by the B2B meetings arranged among with the exhibitors of the fair and the representatives of the international nautical industry in order to favour the internalisation of Italian companies in the perspective of increasingly globalised activities in the sector.

Alongside the delegation of buyers, Italian Trade Agency will also invite a delegation of nautical journalists to represent the most prestigious and qualified newspapers of France, Germany, Spain, Turkey, UK and US. The journalists invited by Italian Trade Agency will join the rest of journalists, Italian and foreign, directly invited by IMM-CarraraFiere. ■

More information: www.sea-tec.it

company directory

Photo: RAUMA MARINE CONSTRUCTIONS



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Managing director
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Facts & Figures

Turnover: EUR 8,6 million
Personnel: 15
Established: 1987

Specialty Areas

Steel and Aluminium structures
Shipbuilding – Shiprepairing – Conversions – Outfitting
LifeCycle Services
Large capacity

ANTTI-TEOLLISUUS OY, ANTTI MARINE

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**Contact Person**

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Specialty Areas

Antti Marine accommodation & interior doors for ships & offshore
B ja C-class fire doors
Sound reduction doors up to Rw=48dB
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www.caverion.fi

**Contact Person**

Marine business unit
Markku Salonen
markku.salonen@caverion.com

Facts & Figures

Turnover: EUR 290 million approx.
Personnel: approx. 2 200
Established: 2013
Parent Company: Caverion Oyj

Specialty Areas

Marine Industry unit:
Electrical and mechanical outfitting projects
Turnkey deliveries for technical areas
Prefabricated pipes, pipe-packages and process modules

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www.ensto.com

Contact Person

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Sales Director
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Facts & Figures

Turnover: EUR 260 million
Personnel: 1600
Established: 1958
Parent Company: Ensto Group

Specialty Areas

Ensto's marine lighting products are designed for ship installations and can be customised to Customer's needs.

HOLMET OY

Keskikankaantie 27
FI-15860 Hollola
Finland
Phone +358 40 168 3339
info@holmet.fi
www.holmet.fi

**Contact Person**

Eerik Seppänen

Facts & Figures

Turnover: EUR 4-6 million
Personnel: 50
Established: 2004

Specialty Areas

Steel doors and hatches for ships, also stainless steel and aluminium
Hydraulically operated hatches
Bolts, clamp devices, and other ship accessories
Prefabricated steel- and metal structures
Design-, acquisition-, laser cutting-, edging-, machining-, welding-, surface-finishing- and installation work

JTK POWER OY

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Managing Director
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Facts & Figures

Turnover: EUR 26 million
Personnel: 93 in Finland, 22 in China
Established: 1998

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.

JUKOVA CORPORATION OY

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Contact Person

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Specialty Areas

Modular balconies
Sliding doors
Balcony divider walls
Glass railings
Windshields and other glazings

KAEFER OY

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www.kaefer.fi

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Facts & Figures

Turnover: EUR 30 million
Personnel: 75
Established: 1977
Parent Company: KAEFER GmbH

Subsidiaries & Representatives

KAEFER GmbH

Specialty Areas

Interior outfitting in passenger vessels
All type of insulation solutions in marine industry

KESKIPAKOVALU OY

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**Contact Persons**

Keijo Koivisto
Asmo Rantanen
Risto Rönkkä
Marko Haapala

Facts & Figures

Turnover: EUR 4,9 million
Personnel: 33
Established: 1956

Specialty Areas

Bronze foundry and machine workshop. We supply fully mechanised sliding bearings, plates and bushings, as well as pre-mechanised preforms and component tubes & rods, for the use of maritime and offshore industries. Our service range includes customer-specific storage of products, plus express shippings of mechanised parts to the repair locations, in accordance with the customer's blueprints.

KOJA MARINE

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Phone +358 3 282 5111
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www.koja.fi

Contact Person

Esko Nousiainen, Director
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Facts & Figures

Turnover: EUR 60 million
Personnel: 232
Established: 1935
Parent Company: Kojä 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.

OY LAUTEX AB

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Antti Holappa, Sales Manager
antti.holappa@lautex.com, Phone +358 50 386 1213

Facts & Figures

Turnover: EUR 8 million
Personnel: 60
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.

LLOYD'S REGISTER EMEA

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FI-00100 Helsinki, Finland
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helsinki@lr.org
www.lr.org

Contact Persons

Päivi Björkestam, Field Operation Manager
Niklas Rönnerberg, Business Development Manager

Facts & Figures

Personnel: 25
Established: 1957 (Finland)
Parent Company: Lloyd's Register Group Limited

Specialty Areas

Ship and offshore:
Newbuilding & periodical surveys
Industrial inspections and certification
Consultancy

2 3 6 7

MARINE DIESEL FINLAND OY

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Facts & Figures

Turnover: EUR 6 million
Personnel: 40
Established: 1992

Specialty Areas

Main- and auxiliary engine repair and service
Total overhaul of all type of engines
Turbocharger service and repair
On-site machining
Conservation works after engine room fire or flooding
Well-equipped workshop in Lieto.
CAT authorized service and repair, Kemel seals and bearings

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ONNINEN OY

P.O. Box 109
FI-01301 Vantaa
Finland
Phone +358 20 485 5111
Fax +358 20 485 5500
www.onninen.fi
www.onninen.com

Contact Person

Martti Lehti
Area Sales Director
martti.lehti@onninen.com

Facts & Figures

Personnel: 3000
Established: 1913

Specialty Areas

Onninen provides comprehensive materials services to contractors, industry, public organisations and technical product retailers. Onninen is member of Kesko Group. We have 3 000 employees in our Finnish, Swedish, Norwegian, Polish, Russian and Baltic operations.

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PARKER HANNIFIN MANUFACTURING FINLAND OY

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**

Tarmo Mäkelä
tarmo.makela@parker.com

Facts & Figures

Personnel: 65
Established: 1964
Parent Company: Parker Hannifin

Specialty Areas

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

4

PAROC OY AB

P.O. Box 240
FI-00181 Helsinki
Finland
Phone +358 46 876 8000
technical.insulation@paroc.com
www.paroc.com

Contact Person

Tommi Siitonen
tommi.siitonen@paroc.com

Facts & Figures

Turnover: EUR 410 million
Personnel: 1945
Established: 1952
Parent Company: Paroc Group Oy Ab

Subsidiaries & Representatives

Paroc operates in 14 European countries.
Please visit our website www.paroc.com for more information.

Specialty Areas

Stone wool insulation products for fire, heat and sound insulation to shipbuilding and offshore industries

2 3

PATRIA AVIATION ENGINE BUSINESS UNIT

Linnavuorentie 2
FI-37240 Linnavuori
Finland
www.patria.fi

**Contact Person**

Seppo Tamminen, Business Development Director
seppo.tamminen@patria.fi
Phone +358 40 869 2800

Facts & Figures

Turnover: EUR 30 million
Personnel: 190
Established: 1947
Parent Company: Patria Oyj

Specialty Areas

Maintenance and overhaul of high speed diesel engines and related equipment
Diesel engine test facilities up to 6 000 kW
Authorized MTU Service Dealer
Maintenance and overhaul of industrial and marine gas turbines
Special repairs of parts for diesel engines and gas turbines

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PEDRO OY

Tehdastie 4-6
FI-15560 Nastola
Finland
Phone +358 3 873 900
Fax +358 3 873 9010
www.pedro.fi

Contact Person

Juha Lehtonen
Managing Director
juha.lehtonen@pedro.fi

Facts & Figures

Established: 1988

Specialty Areas

PEDRO has expertise of 30 years of furniture to luxury cruisers, hotels and homes.

1. Consulting
2. Equipment
3. Machinery

4. Materials
5. Safety
6. Systems

7. Turnkey Deliveries
8. Yards
9. Other

2 | 6 | 7

PMC HYDRAULICS

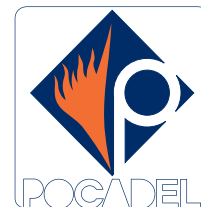
www.pmchydraulics.com

Specialty Areas

PMC Hydraulics is the Nordic leader in innovative hydraulic solutions for marine applications. By providing everything from customized systems to components and special products, we have the ability to offer our customers the best complete solutions.

PMC Hydraulics supplies complete hydraulic systems for all marine applications and has wide experience in hydraulics for harsh environments.

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POCADEL OY

Korpelantie 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.

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PORKKA FINLAND OY

P.O. Box 127
FI-33101 Tampere, Finland
Phone +358 20 555 512
Fax +358 20 5555 360
contact@porkka.com
www.porkka.com

Contact Person

Petri Hiilloste
petri.hiilloste@huurre.com

Facts & Figures

Turnover: EUR 30 million
Personnel: 170
Established: 1962
Parent Company: Huurre Group 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

1 | 4 | 5 | 7

RENOTECH OY

Sampsankatu 4 B
FI-20520 Turku, Finland
Phone +358 10 830 1600
rt@renotech.fi
www.renotech.fi

Contact Person

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

Facts & Figures

Turnover: EUR 1,5 million
Personnel: 10
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.

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S.A. SVENDSEN OY

Särkiniementie 3 B
FI-00210 Helsinki
Finland
Phone +358 9 681 1170
Fax +358 9 6811 1768
www.sasvendsen.com

Contact Person

Kimmo Räisänen
Managing Director
kimmo.raisanen@sasvendsen.com

Facts & Figures

Turnover: EUR 5,7 million
Personnel: 5
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

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SBA INTERIOR LTD

Hällsnäsintie 99
FI-10360 Mustio, 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

Facts & Figures

Turnover: EUR 16,5 million
Personnel: 100
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.

Another branch of SBA is subcontracting for metal industry.

1. Consulting
2. Equipment
3. Machinery

4. Materials
5. Safety
6. Systems

7. Turnkey Deliveries
8. Yards
9. Other

1 2 7

SEAKING LTD

Valimotie 13b B, FI-00380 Helsinki, Finland
 Phone +358 9 350 8840
 Fax +358 9 3508 8422
 sales@seaking.net

**Contact Person**

Pasi Suvanto, VP Sales, pasi.suvanto@seaking.net

Facts & Figures

Personnel: 400
 Established: 1985
 Parent Company: SeaKing International AG

Subsidiaries & Representatives

SeaKing France, SeaKing GmbH, SeaKing Italy, SeaKing Poland, SeaKing Inc.

Specialty Areas

Established in 1985, SeaKing is the Industry's leading provider of functional catering systems to cruise liners and other high-class passenger vessels. SeaKing supports its customers throughout the ship's life cycle with basic design, consulting, equipment deliveries, training, maintenance and upgrading of the catering systems. SeaKing has a large production facility in Poland specialised in stainless steel (including refrigerators, service counters, ventilation hoods and pre-fabricated pantries) and a second production facility in Ft. Lauderdale, aimed at responding to the Industry's growing renovation and repair activities.

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SEASIDE INDUSTRY PARK RAUMA

Suojantie 5
 FI-26100 Rauma
 Finland
 www.seasideindustry.com

**Contact Person**

Timo Luukkonen
 +358 40 550 1942
 timo.luukkonen@seasideindustry.com

Specialty Areas

Seaside Industry Park is the hub of the maritime cluster in Rauma. Successful principal companies in shipbuilding and marine production with wide and efficient supplier network operate in the park. The region is utilizing versatile infrastructure and comprehensive common services. Seaside offers an efficient manufacturing environment and cooperation network that also enables smaller companies to participate in major projects and achieve competitive advantages and added value. Additional information: www.seasideindustry.com

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OY SIKA FINLAND AB

P.O. Box 49
 FI-02921 Espoo
 Finland
 Phone +358 9 511 431
 Fax +358 9 5114 3300
 sika.finland@fi.sika.com
 www.sika.com

**Contact Person**

Kai Winqvist
 Business Development Manager
 winqvist.kai@fi.sika.com

Facts & Figures

Turnover: EUR 34,6 million (2017)
 Personnel: 47
 Established: 1985
 Parent Company: Sika AG

Specialty Areas

Sealing – Bonding – Acoustic Damping – Reinforcing – Protecting

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STEERPROP LTD

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

Specialty Areas

Azimuth Propulsors for demanding applications. Steerprop Ltd. combines the reliability of proven technologies with the efficiency of modern design to produce azimuth propulsors of exceptional quality and excellent reliability. Steerprop Azimuth Propulsors can be made up to 20 MW in power or even in the most stringent ice-classes.

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TEBUL OY

Luumäentie 2
 FI-21420 Lieto
 Finland
 Phone +358 50 540 6031
 sales@tebul.fi
 www.tebul.fi

**Contact Person**

Jussi Uusitalo
 Managing Director
 sales@tebul.fi

Specialty Areas

TEBUL OY has been designing and manufacturing watertight bulkhead sliding doors since 1961. Our self-tightening 24VDC fully electric watertight bulkhead sliding door is a fourth-generation product. The primary self-tightening is based on metal to metal contact with rubber seals for initial tightening. The higher the pressure, the larger the force exerted on the door. Tebul doors are approved to be installed into A-60 bulkheads. Tebul doors are available also in the Eex-version, for Explosion Hazardous areas.

NOTES

1. Consulting
 2. Equipment
 3. Machinery

4. Materials
 5. Safety
 6. Systems

7. Turnkey Deliveries
 8. Yards
 9. Other

NOTES



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