

The port is growing and developing rapidly

Terramare's efficient machinery won the contract p. 2

Finnpulp also chose Mussalo p. 4



The agreement is being signed by Project Director Jari Kontunen and CEO Kimmo Naski of Port of HaminaKotka Ltd, CEO Hannu Tomperi of Terramare and Director Jarmo Yletyinen of Terramare.

Terramare's efficient machinery won the contract

Despite the partial collapse of the breakwater, the dredging and guay project at Mussalo is making good progress.

The construction of a new quay and the dredging of the harbour basin constitute the bulk of the first stage of the expansion of the Mussalo Harbour in Kotka. Port of HaminaKotka Ltd signed a contract worth approx. 32 million euros with Terramare Oy in July. The work commenced immediately upon the signing of the contract.

The blasting and dredging work for the harbour basin will be completed by the end of 2018, and the building of the breakwater will be ready by the summer of 2019. The quay and Terramare Oy's contract in full will be ready by next autumn.

Daily blasting

According to Project Director Jari Kontunen, the location of the site and the construction of the breakwater 620 metres in length render the building of the new harbour basin challenging. The area is susceptible to variations in weather conditions.

Blasting and dredging are performed as underwater work. There is daily blasting in the area. The volume of soil material to be blasted in the harbour basin area totals approx. 220,000 cubic metres, and there are another 500,000 cubic metres of moraine and loose soil materials. These will be removed to make way for a deepwater fairway with a draught of 15.3 metres.

The soil material will be used for building the

breakwater, and excess material will be carried by barges to a dumping area at Palaskylänlahti.

Terramare has the best machinery

Terramare Oy, which takes care of the project at Mussalo, won the competitive tendering that covered the EU thanks to its high-quality machinery. Terramare's machinery is bigger in size than with any other contractor in the Baltic Sea area, and the operators of the machinery possess significant references.

"A project of this size usually takes two years. Now we will be ready in one," Jari Kontunen says.

Alongside quality, another selection criterion was price, but the main emphasis in the competitive tendering was on quality and risk management. Terramare Oy is part of the Dutch Boskalis aroup.

Breakwater to be reinforced

General Manager **Jarmo Yletyinen** of Terramare says that the Mussalo project has been launched with vigour. The site has a lot of machinery and personnel. He is hoping for a mild and late winter so that the work could continue for as long as possible

An unexpected event took place in the building of the breakwater when part of the embankment

collapsed. According to Jarmo Yletyinen, this has caused a delay of 4 to 5 weeks. New geotechnical plans have been drawn up for the breakwater, on the basis of which plans the structures will be reinforced and the soft material will be removed

"Port of HaminaKotka Ltd and our company have a long-term relationship, and we are doing this work in good co-operation," Jarmo Yletyinen saus.

For Terramare, the Mussalo project is very important, by far the biggest of all jobs in Finland.

Quay sections manufactured by slipform method

The concrete quay sections of the 233-metre quay in the D-area at Mussalo will be made using the slipform method in the B-area at Mussalo. The sections will be ready in early 2019. The heaviest sections weigh approx. 300 tonnes, and they are almost 19 metres tall.

The sections will be transported using a heavy-duty ferry crane along the waterway to the D-area and installed there next spring.

When completed, the first stage of the D-area will serve the pulp logistics centre which is under construction, with UPM and Steveco being the parties of the centre.

Sarens commences operations at the Port of HaminaKotka

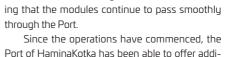
This year the Port of HaminaKotka has seen the start of operations for Sarens. Since the initial examining meetings took place in June 2015, over 3 years of planning, design and construction have now come to fruition.

The Port of HaminaKotka appointed Terramare OY to start the construction of the upgrade work to the berths and the yard areas in December 2016. The work on Palokangas 2 and 3 was completed in October 2017, closely followed by 4 hectares of reclamation and the new MCV berths bu the end of 2017. To complete the project, over 200,000 m³ of dredging has been completed, along with the installation of over 300 piles, 6,500 m³ of concrete and the construction of over 150,000 m² of upgraded pavement.

Operational mobilisation, planning and training took place at the Port in early 2018 and on the 16th July 2018, the first Ocean Going Vessel berthed at Palokangas 3 with the first modules.

The first two modules were then prepared and loaded out onto the MCVs by Sarens by the end of Julu 2018.

Since July 2018, modules have been delivered to the Port of HaminaKotka, stored and loaded out onto the MCVs for further transportation. The Port



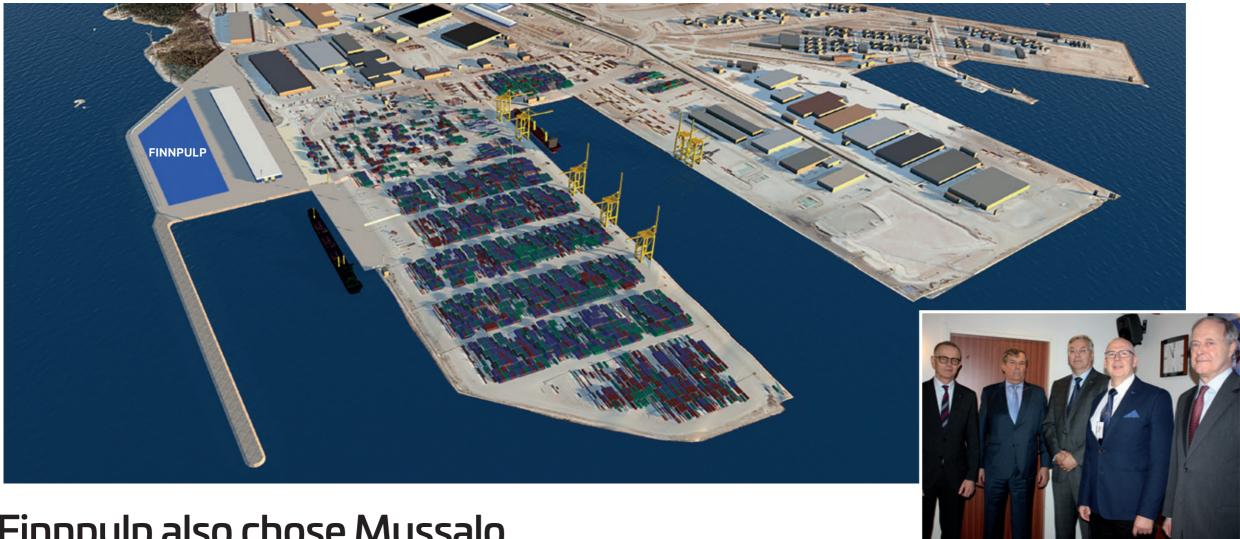




continues to work closely with the Client in ensur-

Since the operations have commenced, the

tional space for the storage of modules during the winter period. Work has since commenced with the demolition of the Centos warehouse and the creation of an additional 5 hectares of storage area, due for completion in early 2019.



Finnpulp also chose Mussalo

The new D-area at Mussalo was occupied much quicker than originally anticipated. The Port of HaminaKotka is becoming the biggest pulp port on the Baltic Sea.

The positive buzz of Port of HaminaKotka Ltd continues. The company has signed a significant letter of intent with Finnpulp Oy, stipulating that the pulp to be exported from Finnpulp's bioproducts mill being planned in Kuopio will be carried via the D-area at the Mussalo Harbour of the Port of HaminaKotka

Finnpulp's mill will be the biggest softwood pulp mill in the world and the biggest investment ever in the wood-processing industry in Finland. The volume of the mill is 3 to 4 times that of the Sunila pulp mill in Kotka

Almost all of Finnpulp's annual pulp production of 1.2 million tonnes will be exported.

New transport brings more transport

In March this year, an agreement was concluded between Port of HaminaKotka Ltd, Steveco and UPM on the construction of a large-scale pulp centre in the new D-area at Mussalo. As a natural continuum to this, Finnpulp's operations will be located in the same area

Together, these two major agreements render the Port of HaminaKotka the biggest pulp

port on the Baltic Sea. **Kimmo Naski**, CEO of Port of HaminaKotka Ltd, is glad not only about the increase in pulp transport but also about its reallu sizeable impact on port traffic in the form of ancillary flows such as returned containers.

"New transport always brings more transport." Kimmo Naski saus.

"Finnpulp's decision to choose us as its export port means a huge opportunity for the Port of HaminaKotka and will raise our exports of the products of the Finnish wood-processing industry to a whole new dimension."

"The decision to build the D-area has turned out to be profitable even before the area is actuallu complete '

Kimmo Naski saus that he could not foresee in his wildest dreams that the new D-area would be full by now – six months after the first operation agreement.

"Our strength is in the trust shown to us by our partners."

The swift filling up of the D-area does not result in an immediate need to expand the port areas. According to Kimmo Naski, the gas pipe transport from Mussalo and the transport of modules from Hamina to Kazakhstan are projects that will come to an end in due course and make snace available for other operations.

Pekka Posti, the Chairman of the Board of Directors of Port of HaminaKotka Ltd, points out that the leap of the port to a new size category will bring not only jobs and tax revenues to Kotka but also confidence in the future.

Good rail network and new area

There were certainly other ports interested in obtaining Finnpulp's pulp carriage, and the company contacted a number of Finnish seaports. According to Martti Fredrikson, CEO of Finnpulp, the Port of HaminaKotka was chosen as the companu's export port for three key reasons: it is closer to Kuopio than the other ports, its rail network is good, and a new D-area has been built at Mussalo specifically for the exports of pulp.

"We are in good hands here."

"It makes a huge difference to be able to operate in a good environment and at a high efficiency," Martti Fredrikson says.

Pekka Koskinen, who serves as Finnpulp's logistics consultant, gives further justifications Martti Fredrikson, CEO of Finnpulp Ou, Pekka Koskinen, CEO of Brave Logistics Finland Ou, Pekka Posti, Chairman of the Board of Port of HaminaKotka Ltd, Kimmo Naski, CEO of Port of HaminaKotka Ltd and Jyrki Yrjö-Koskinen, Commercial Director, Sales of Finnpulp Oy signing the letter of intent.

to the choice of Mussalo. Finnpulp will be able to build a new large warehouse close (40 metres) to the quay, which will facilitate the operations. A container area is also close by. Moreover, the deep-water fairway ensures that there is enough draught for the large ships sailing to China.

Kotolahti must be expanded

Well-functioning logistics play a crucial role in Finnpulp's project. Finnpulp's main warehouse will be located at Mussalo, and the pulp will be carried there by rail. In fact, rail carriage is the most vulnerable portion of the logistics chain.

The Finnish Transport Agency has made a pledge to Finnpulp that the rails can accommodate six trains with a length of 400 metres each (three laden trains and three unladen trains) per day even though the double rail would not be built in the near future

The Kotolahti railway yard, which is congested already, may become a bottleneck. The expansion of the railway yard has been necessary for a length of time, but government funding for the project has not been allocated

"Disturbances in logistics are a big drawback

for us. It would be a really bad thing if we had to shut down the pulp mill because of these," Martti Fredrikson saus

Kimmo Naski emphasises that it is now time for the government to step in to expand the Kotolahti railway yard. It is a small amount for the government to invest 20 million euros when it is compared to a mill investment of 1.4 billion euros made by private investors. The port company and its customers are preparing a joint letter to the government.

Softwood pulp to the Chinese market

increasing demand for pulp in the global market. Northern softwood pulp is an especially appreciated special product

Finnpulp's main target area is China with its softwood pulp market that is growing faster than anywhere else in the world. One of Finnpulp's owners is Hengan International, the biggest tissue producer in China, having 26 tissue machines in the countru.

Eastern Baltic Hub

Improving port access and hinterland connection of the Port of HaminaKotka in the ScanMed Corridor

The project improves efficient port infrastructure and hinterland connections, as well as providing safe maritime access for container and break-bulk cargoes. The improvements enable better service and handling of increased transhipments of the pulp industry and larger vessels. The project investments include capital dredging of the harbour basin and the construction of a breakwater, a quay and rail connection. The implementation period is April 12th, 2018 – December 31st, 2021. The project has been granted EU co-funding ca. 11 million euros.



Co-financed by the Connecting Europe Facility of the European Unio

Mussalo D-area

- Expansion (20 ha) by Port of HaminaKotka Ltd on the western side of Mussalo
- The blasting and dredging work for the harbour basin (with a draught of 15.3 m) will be complete in the autumn of 2019
- The breakwater (620 m) will be ready in the autumn of 2019
- The quay (220 m) will be ready in the autumn of 2019
- The contractor in the quay, breakwater and dredging project is Terramare Oy.
- Port of HaminaKotka Ltd is currently having a rail connection built in the area
- Steveco Oy is currently having a warehouse with an area of 20.000 square metres and a length of 400 metres built in the area.
- UPM will concentrate the transport of pulp produced by the Kymi and Kaukas mills to the warehouse; the port operator will be Steveco. The shipments will commence in early 2019.
- Finnpulp will concentrate the exports of pulp produced by its upcoming mill in Kuopio (production 1.2 million per year) to Mussalo. Finnpulp will build a large warehouse in the area. The port operation company has not been chosen uet.

Finnpulp's gigantic investment is a response to the



Construction of LNG terminal in full progress

The new terminal will serve transport and industrial manufacture.

The construction of an LNG terminal at the Chemical Harbour in Hamina is in full progress. All underground construction work is now ready, and preparations for slipform concreting are being made. The terminal will be brought to commercial operation towards the end of 2020.

The terminal is owned by Hamina LNG Oy, which is a joint venture of Hamina Energy Ltd, the Estonian company Alexela and Wärtsilä. The supplier of the terminal is Wärtsilä.

LNG is liquefied natural gas, which is an environmentally-friendly fuel. It can replace liquid fuels in road and maritime transport and in heating applications. The use of LNG does not result in any sulphur dioxide emissions.

The terminal will be built in two stages. The first stage consists of the construction of a storage tank that can accommodate 30,000 cubic metres of liquefied natural gas. The tank can be used for supplying gas to the distribution network of Hamina Energy and to customers outside the distribution network for the needs of road and maritime transport.

Fuel of the future

For Port of HaminaKotka Ltd, the LNG terminal is an important project in many ways. According to CEO **Kimmo Naski**, liquefied natural gas is a fuel of the future

Manu of the new ships ordered for the Baltic Sea recently are powered by LNG.

"The change is based on the sulphur directive set by the EU, but the attitude of shipping companies has also taken a turn towards an increasingly environmentally benign direction," Kimmo Naski saus.

The LNG terminal also fulfils the requirement of the EU that from 2025 the EU's key seaports, including HaminaKotka, must provide an opportunity for the bunkering of LNG. Initially, the terminal will supply more gas to ships than to industrial plants located within the port.

Later on, there are facilities to build another storage tank of 20,000 cubic metres.

The employment impact of the first stage is approximately 100 person-workyears. There will be dozen or so permanent jobs at the terminal in operation and maintenance duties from 2020 Moreover, the indirect employment impact will be dozens of jobs in functions such as sales and logistics

Planning of UPM's biorefinery project right on track

If implemented, the project would have a major impact on the economy and employment in the Kotka region.



UPM's biorefinery at the Mussalo Harbour is making good progress. **Petri** Kukkonen, who is responsible for the development of biofuels at UPM, points

out that the investment decision has not been made and the company does not wish to disclose anything about the schedule of the project at this point, but everything seems good at the moment

Petri Kukkonen is delighted about issues such as the approval of the renewable energy directive within the EU. As a result of the directive, the portion of renewable energy will rise to 32 per cent by 2030. Moreover, within the same period the portion of renewable energy in transport will rise to 14 per cent.

"There appears to be promising demand for our fuel, because emissions from transport can be cut down very effectively by using advanced fuels," Petri Kukkonen saus.

In addition to EU decisions, the goals of Finland to reduce transport emissions speak in favour of the construction of new biorefinery capacity in Finland.

Biggest investment ever

UPM is planning a gigantic biorefinery at the Mussalo Harbour

"If implemented, it would be the biggest investment ever at the Port of HaminaKotka,"

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The planned facility would have a highly positive impact on business and economy in the Kotka region. It would boost the transport volumes of the port considerably and bring hundreds of direct and indirect jobs. During the construction stage of two to

three years, the refinery is expected to employ some 1,500 persons, and in actual operation 150 persons directlu. The indirect employment impacts are even bigger than this.

Significant environmental implications

The biorefinery would produce approx. 500,000 tonnes of advanced transport fuels from several sustainable raw materials for use by road, sea and air transport. The products can replace



ILP-Group investing in the handling of products of mechanical wood-processing industry at Mussalo

Port of HaminaKotka Ltd, Keitele Group Ou and ILP-Group have concluded a long-term agreement on the exports of sawn timber and gluedlaminated timber from the Mussalo Harbour in Kotka. The agreement extending until the end of 2023 will create the preconditions for doubling the current transport volume, which would translate into 10,000 to 12,000 containers or 500,000 to 600,000 cubic metres of sawn timber and wood products per year

At the moment, ILP-Group handles and warehouses Keitele Group's goods in two areas at the Mussalo Harbour. As a result of the agreement signed in the spring, the handling of Keitele Group's products will be concentrated primarily at Palaslahti within the Mussalo Harbour, where ILP-Group has constructed a new terminal and additional handling areas. Moreover, the Port of HaminaKotka will build approx. 500 metres of new rails for cargo handling. The total value of these invest-

Ministerial visit at the Port of HaminaKotka

Petteri Orpo, Minister of Finance of Finland, visited the Port of HaminaKotka while laying the cornerstone of the LNG terminal of Hamina LNG Oy, and also learned to know the operations of the Port of HaminaKotka. CEO Kimmo Naski informed the government representative of the investment needs of the port

The photograph shows Minister Orpo wearing the work jacket of Juha Reila, Foreman of Port of HaminaKotka Ltd. As thanks for borrowing the jacket, Juha Reila got the minister's autograph for the jacket.



says **Kimmo Naski**, CEO of Port of HaminaKotka

fossil raw materials also in the chemical industry, for example in the production of plastics.

Sustainable and renewable raw materials together with efficient processes would give the products of the Kotka biorefinery a significantly smaller carbon footprint than what fuels and other products made from fossil fuels have

In accordance with the environmental impact assessment report, the project would also result in noteworthy positive impacts through issues such as increased utilisation of waste and residues, and decreased greenhouse gas emission. The reduction is as much as 16 per cent of the greenhouse gas emissions of Finnish road transport, which corresponds to the road transport emissions of three cities the size of Helsinki

Photo: Soile Turkulainen/Pöyry

ments is approx 2 million euros

"The investments now made and the longterm co-operation between Port of HaminaKotka Ltd, ILP-Group and Keitele Group have created a favourable situation for further investments in our group's services offered to the wood-processing industry," says Timo Petäjä, Chairman of the Board of Directors of ILP-Group.

Minister Häkkänen visited the Port of HaminaKotka

The Port of HaminaKotka had another minister-level guest on 8 October 2018, when **Antti Häkkänen**, Minister of Justice, visited the Mussalo Harbour.



Appointments at the Port of HaminaKotka



Petra Kuitunen, MA, started as the Marketing Manager of Port of HaminaKotka Ltd on 15 October 2018.

Petra Kuitunen worked previously as the Training Manager of the Kymenlaakso Chamber of Commerce. Before this, she worked in various positions at Steveco Oy.



Jari Kontunen, B.Sc. (Constr.), will assume the duties of the Technical Director of Port of HaminaKotka Ltd from 1 January 2019.

He will move to this position from the post of Head of Developer Operations of Sitowise Oy. Jari Kontunen has served in various management positions in the construction business for more than 30 years.

Season's Greetings and a Happy New Year 2019



This year, Port of HaminaKotka Ltd will donate the funds reserved for Christmas gifts to the "Save a piece of the Baltic Sea" campaign of the Clean Baltic Sea project run by the John Nurminen Foundation. The campaign launched two years ago raises funds for the efforts of the Foundation to benefit the Baltic Sea.

Christmas gift to the

Gulf of Finland

"The Baltic Sea is our home sea, which is why its good condition must be important to all countries surrounding the sea," says **Kimmo Naski**, CEO of Port of HaminaKotka Ltd.

The John Nurminen Foundation has worked for more than 10 years to fight the eutrophication problem resulting from nutrient emissions into the Baltic Sea. During this time the Foundation together with public sector parties, development banks and Russian partners has been able to reduce the phosphorus emissions, which cause eutrophication, by 75 per cent on the Baltic Sea. The action taken has also had a direct positive impact on the quality and clarity of water in the sea areas outside Hamina and Kotka.

"On our website, donors can see how their donation is allocated to the various Baltic Sea projects and how much algae their donation can remove from the sea. Many thanks to the Port of HaminaKotka for the Christmas gift and a Happy Christmas to all!" says **Marjukka Porvari**, who heads the Baltic Sea projects at the John Nurminen Foundation.

Read more about the efforts of the Foundation to protect the Baltic Sea: **www.haminakotka.com**

