

# THE NAVIGATOR



NEWS FOR OUR PARTNERS

November 2019



## REVIEW PARTNER OF THE YEAR 2018

MEYER presents awards to the best  
suppliers in Papenburg

## RAMP UP PROGRAMME AT MEYER TURKU

Ramp-up programme focuses on  
the problem areas of shipbuilding

## NEPTUN GETS FIT FOR THE FUTURE

Building 100% fully fitted FERUs, on  
time in the right quality

# 07/19

MEYER WERFT  
NEPTUN WERFT  
MEYER TURKU



ISSUE NO. 07



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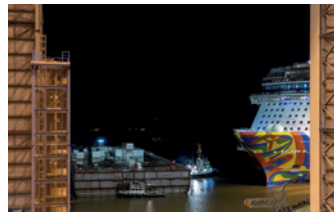
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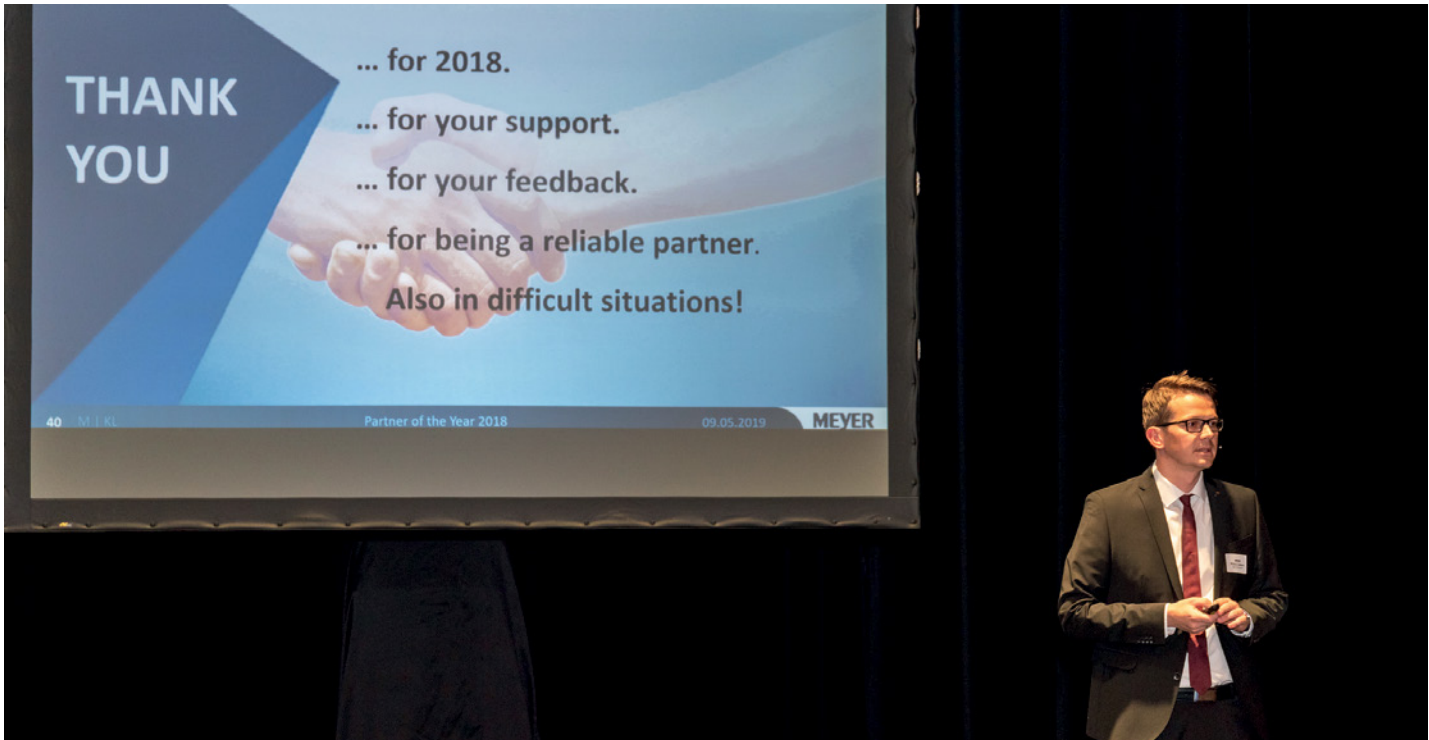
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EDITORIAL



REAL PARTNERS EMERGE NOT  
ONLY DURING GOOD TIMES IN THE  
COOPERATION PROCESS

Recent ship deliveries demanded a great commitment of our partners and colleagues and together we caught up the backlog in Papenburg. After the delivery of Spectrum of the Seas for Royal Caribbean International and Spirit of Discovery for Saga Cruises, we delivered with the Norwegian Encore the first time after several years again a third ship within one year. We managed to meet the schedule and the corresponding quality despite the extremely tight capacity and schedule situation. The challenges that we encountered showed us that the cooperation among all partners has been improved and by that our cohesion was strengthened.

In Turku we are facing a similar situation as in Papenburg a few months before. The Costa Smeralda will be delivered with delay and similar as in Papenburg, the shipyard and its partners work

overtime in order to commonly catch up the backlog for all ships currently being designed and built.

Together we have to learn our lessons about the challenges we have been facing in Papenburg, Turku and Warnemünde. We already held initial lessons learned workshops in Papenburg and resulting from that we initiated counter-measures. This process will be continued to consolidate across all our shipyards, so that the suppliers and the shipyards do not repeat their mistakes.

THE STRENGTH OF A PARTNERSHIP IS  
REVEALED WHEN TIMES ARE NOT EASY.

The past has shown us that we can overcome the difficult times if we are pulling in the same direction. This approach has brought us to the stage that next year we will be celebrating 225 years of MEYER

WERFT together with our colleagues in Turku and Warnemünde and with all our partners. We would have never got this far without you.

On the bottom line, we can say that there will always be challenges and that it is these challenges that make us stronger. The situation remains exciting, but together we can take the opportunities that arise in order to deal successfully with the tasks we are facing!

The following articles are also full of exciting news. We hope you enjoy reading this issue of the Navigator and look forward to working with you on the next joint projects!

*Klaus Lübbers*

Yours, Klaus Lübbers



# REVIEW PARTNER OF THE YEAR 2018

## MEYER PRESENTS AWARDS TO THE BEST SUPPLIERS IN PAPENBURG



On 9 May this year, the best suppliers of MEYER WERFT, NEPTUN WERFT, MEYER TURKU as well as of MEYER Group were awarded during a ceremony at the Old Shipyard in Papenburg. From a total of more than 6,500 suppliers, invitations had been sent to 200 to attend this gala evening.

Awards were presented to the following suppliers for their outstanding work over the last twelve months:

- MEYER WERFT:** Wocken Industriepartner
- MEYER TURKU:** Orsap Oy
- NEPTUN WERFT:** Potocco Spa
- MEYER:** Marine Service

Please simply use the following QR code to take a look at our impressions:



### SHORT PREVIEW PARTNER OF THE YEAR 2019

















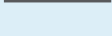


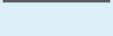

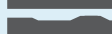



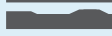






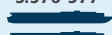


#### MEYER COMMENDS THE BEST SUPPLIERS ON A SHIP



To celebrate 225 years of MEYER WERFT, next year the MEYER Group will be inviting its best suppliers to a special venue for its official award ceremony. In contrast to recent years, the event will be held in autumn 2020, not in the spring.

Further details will follow at the latest in the next edition of the Navigator. All we can say at the moment is wait and see!



# Building Overview MEYER Group

MEYER WERFT	Hall 6	2019		2020		2021		2022		2023		2024		2025	
		1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half
		S.700  168,000 GT RCI	S.708  163,000 GT NCL	S.710  184,000 GT P&O	S.713  168,000 GT RCI	S.709  183,200 GT AIDA	S.705  135,000 GT DISNEY	S.716  184,000 GT P&O	S.718  135,000 GT DISNEY	S.717  183,200 GT AIDA	S.706  135,000 GT DISNEY				
MEYER TURKU	Dock 1	S.714  57,000 GT SAGA			S.715  57,000 GT SAGA			S.719  44,650 GT SILVERSEA		S.720  44,650 GT SILVERSEA					
NEPTUN WERFT	FERU Floating Engine Room Unit	2019		2020		2021		2022		2023		2024		2025	
		1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half
		S.710, S.713, NB 1396   		S.709, S.705, NB 1395   		S.716, S.718, NB 1397, NB 1400   		S.706, S.717, NB 1404, NN   		NB 1401, NN, NN, NN   		NB 1402, NN, NN, NN   			
NEPTUN WERFT	Vessels	S.569-572 S.576-577  River Cruise Vessel Viking		S.579-582  River Cruise Vessel Viking	S.583-584  River Cruise Vessel Viking										

 DELIVERED  PROTOTYPE

# INVESTMENTS CURRENT OVERVIEW

## MEYER WERFT



### NEW WAREHOUSE SYSTEM AT EMS MARITIME SERVICES

EMS Maritime Services has invested in a new warehouse system to make optimum use of its satellite storage facilities in Bunde. The new system utilises the complete building height of eight metres. The satellite warehouse is primarily used for deliveries to MEYER WERFT and also in some cases to NEPTUN WERFT, together with external production facilities. More than 60,000 items have been taken out of storage since January 2019.



### PROVISIONAL CAR PARK

The provisional additional car park for 600 vehicles is finished. Since the completion of the pedestrian bridge in end of July, the car park can be used. Access to the car park is via Bokeler Straße.

## EXTENSION BUILDING C, HALL 6

Central building 2 (building C) on the road side of hall 6 is being extended through to mid 2020 with further staff facilities, including showers and washrooms as well as office workplaces.

### LOGISTICS CENTRE

The construction of the new logistics centre began in August 2019. The necessary soil replacement work has already been carried out. Completion is planned for early 2021. The logistics centre is being constructed on Rheiderlandstraße (K 158) as a fully automated high-bay warehouse with capacity for 25,000 storage units. The article on page 21 provides further details about the new logistics centre.



### NEW TANDEM CRANES IN HALL 10

Two new 50 tonne cranes have been installed in hall 10 of the laser centre. The cranes are very flexible and offer scope for individual or synchronised operation. They can be used to support shipbuilding activities or for the time-consuming transportation of deck panels. But the greatest advantage for the production flow consists in the constructive way the new cranes work together with the existing equipment. It is now possible to perform simultaneous section transports at the front and rear on the production line, with considerable time savings.

## MEYER TURKU

### 40 RAMP-UP PROJECTS AT MEYER TURKU

With effect from 2022, MEYER TURKU will be handing over two ships a year to its customers. Corresponding adjustments are now being made at the shipyard which has launched about 40 so-called "ramp-up" projects. The aim is to double production volume by 2023 compared to the current level. Ramping up the production process from one to two ships is not just a case of doubling everything. On the contrary, the objective is to implement improvements that will reduce lead times and let colleagues work more efficiently. Many projects aim to put the processes on a corresponding footing in the long term for all future ships.

The article on page 17 provides further details about the ramp-up programme.

## NEPTUN WERFT

### NEW STAFF BUILDING

The first planning phase has been concluded and the building application has been submitted. The corresponding procedure by the building authorities usually takes three months. At the same time, other relevant studies are being completed for the building permit in consultation with the affected authorities. The rough layout has already been staked out on the intended construction site and the soil surveys have been carried out.



## NEW ROBOT WELDING PLANT IN THE LASER CENTRE

The module line in the laser centre makes walls and modules according to the assembly flow cycle.

In the past, all welding was done by hand, placing a great physical strain on the workers. In future, four fully automatic robots will weld the walls directly in the assembly flow cycle. This pioneering technology improves the ergonomic conditions in which welders have to work and also makes the line more productive. The robots are completely enclosed and the welding fumes are aspirated directly in the robot cells. The robots do not need to be programmed: the workflows are generated from the design models of the walls in a fully automatic process and transmitted to the robots.

Single-wire and double-wire welding is used. The double-wire torch welds at very high speeds. The torches are replaced automatically as stipulated by the program.

Work to install the robots began during the shipyard holiday closure and is now practically completed. All that remains now is to finish a few residual items of work, followed by initial commissioning. The first welding tests have already been carried out.

The project should be completely finished by the end of the year.



## NEW 16 TONNE CRANE IN HALL 6



A new 16 tonne crane called "Mangokautz" has been operating in hall 6 since the start of the year. The new crane has an adjustable jib, giving it roughly 10 metres more lift than our other arm cranes. This is important in view of the fact that components are getting higher and higher. Therefore in hall 6, crane operations are now possible up to deck 20 and 60 cm below the roof.

The new crane relieves the pressure on the 800 tonne crane called "Kaiseradler" and ensures better material availability on board. A new measuring system has been installed in hall 6 to monitor the crane movements and make sure they do not collide. The system defines the position of both cranes, measures the distances and ensures that there is always sufficient safety clearance.





# BME INNOVATION VENUE AT MEYER WERFT

Last year we won the BME innovation prize with our concept for risk-oriented supplier management. The BME (German Association Supply Chain Management, Procurement and Logistics) awards the innovation prize to companies for successful purchasing and logistics management. The intention is to reward innovative achievements and concepts to make purchasing and logistics more efficient in the long term.

As award winners, we were this year's hosts for the BME event day in July. BME members involved in purchasing and logistics were invited to attend. Altogether 59 participants took up the invitation as guests in our large auditorium. Our purchasing department gave a presentation of how purchasing works throughout the MEYER Group, looking at the challenges involved. We also presented our

risk-oriented supplier management, together with our logistics activities provided by EMS Maritime Services. The event was brought to a close with a final discussion session between speakers and participants.



## 8 BLOCKS IN 8 DAYS

On conjunction with our suppliers, this May we accomplished a great achievement. Within 8 days, 8 blocks were supplied in time in Papenburg. By comparison, throughout 2019 as a whole, 50 blocks will have been supplied.

The reasons for this unusual accumulation consisted on the one hand in the dredging work near the unloading point which was necessary for the Spirit of Discovery (S.714) to leave the docks. As a result, earlier deliveries were not possible. On the other hand, due to our building strategy all blocks in the second building phase for P&O Iona (S. 710) were delivered in a very tight schedule – which also happened to be parallel to the first blocks for the Spirit of Adventure (S.715). Furthermore, the weather and the tides also had to be taken into consideration.

### FACTS AND FIGURES IN BRIEF

PERIOD:	8 days
NUMBER OF PONTOONS:	5
NUMBER OF TUGS:	5
NUMBER OF BLOCKS:	8
NUMBER OF UNLOADING MANOEUVRES:	10
(caused by splitting some blocks)	
TOTAL WEIGHT:	5191 tonnes
(pure steel weight of the blocks, not including fittings or transport frames)	

## AN EXAMPLE OF COOPERATION WORKING WELL

# UPDATE ON REORGANISATION AT MEYER WERFT

PURCHASING	Dominik Sandmann
SHIPBUILDING	Christian Feimann
HOTEL	Anita Knoop
MACHINERY	Ruth Leffers
INDIRECT PURCHASING	Ruth Leffers

We are reorganising our shipyards with a clear focus on our three main processes of shipbuilding, hotel and machinery. The aim is to create clear, consistent responsibility and a strong project and line leadership with the concept of advanced industrial production being implemented across the entire shipyard.

The last Navigator explained the future alignment of our shipyard to the three main processes of shipbuilding, hotel and machinery. We would now like to give an insight into the steps that have been taken towards the new organisation, and which steps are still pending.

### ENGINEERING OFFICES

The previous departments have been allocated to the three main processes, resulting in new departments with their activities and heads of departments. We now have a leaner structure with reduced interfaces: the previous 16 groups have been turned into 11 new ones.

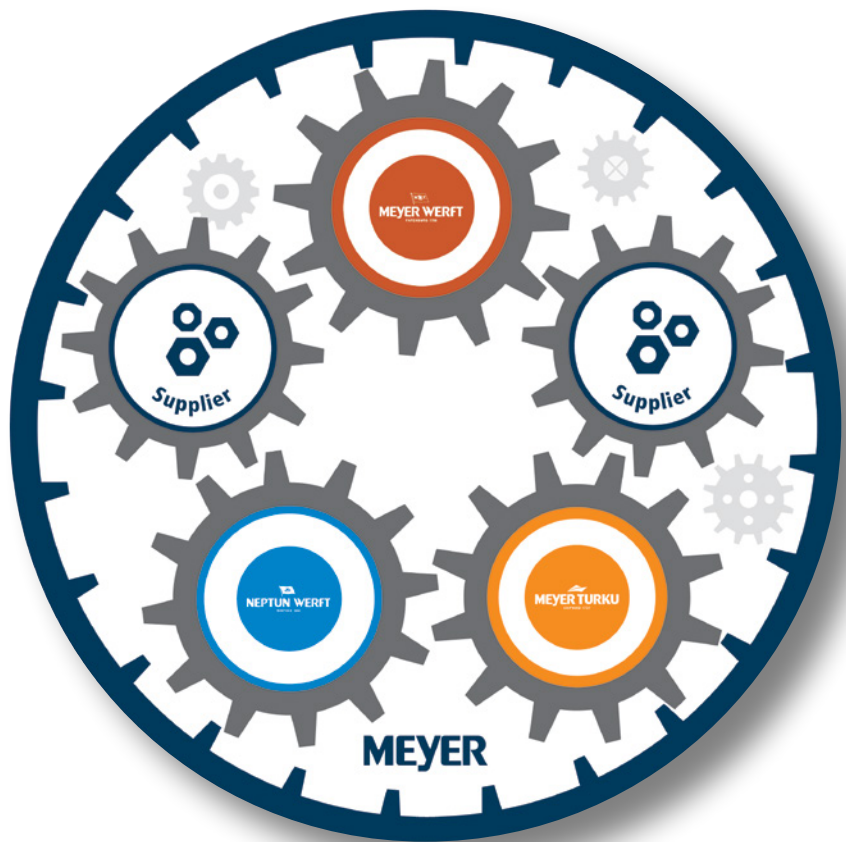
### PRODUCTION

The previous departments have been allocated to the three main processes and supporting activities. The heads of groups are elaborating the details for the new structure. The next step will be to define the new production groups with their activities, responsibilities and leading structures.

### PURCHASING

The close link between purchasing, production and engineering offices leads directly into a change in the structure of purchasing as well. The new structure following the three main processes is also reflected in the departments. Indirect purchasing (e.g. investment and services) will be centralized together in a fourth group.

For personal reasons, Dirk Lake will be handing over the management of the procurement department to Dominik Sandman as of 1 January 2020. Dirk Lake will remain with us as sub-project manager in purchasing. The purchasing sub-project managers act as the crucial interface to ships project management. Furthermore, the heads of group for the four units have been announced. The reorganisation comes into effect as of 1 January 2020.



# DEAR BUSINESS PARTNERS,

Today we look back on the challenging weeks and months since the last Navigator was published. In the meantime, here in Papenburg three ships have been handed over to their new owners, thus bringing us to a grand total of more than 390,000 GT in one year for the first time in the history of the shipyard.

In March, the Spectrum of the Seas (S.700) was brought down the river Ems to Eemshaven and handed over to the cruise line owner in April. The ship had suffered greatly from the delays encountered with the AIDAnova (S.696) at the end of 2018 and it was only thanks to the effort from all the many partners that the ship was in fact completed just on time.

The same applies to the Spirit of Discovery (S.714), which was brought to Emden in May and handed over to our new customer Saga Cruises in June.

Here again, the ship was completed on time thanks to the support from our partners.

The third ship, the Norwegian Encore (S.708), has just been handed over to the customer at the end of October. For the time being, this was the last ship on our order book for the Norwegian Cruise Line, which makes it even more important that we were able to deliver the ship in such good condition with limited outstanding items. The customer should and will keep us in mind as a reliable partner with a strong supplier network and hopefully places more orders with the MEYER Group again.

Even so, our current order book and several cruise line owners in our customer base will keep us very busy over the next few years so that we are looking forward to the on-going and pending exciting shipbuilding projects.

In Turku, Mein Schiff 2 (NB 1393) was handed over at the start of the year; since then we have been and still are focussing on getting Costa Smeralda (NB 1394) ready for delivery and on the ramp-up programme at this site. We have to cope with a number of challenges in this respect and we depend more than ever on good partnership with you, our suppliers. It is only due to the concerted effort made by all and everyone involved that we are able to get on top of the considerable delay with Costa Smeralda. Even though the delivery date had been postponed, we still have to pull together to meet the new delivery deadline and hand the ship over to the customer in the accustomed MEYER quality.

In Warnemünde, we have handed over altogether six river cruise ships since the start of the year, as well as delivering the engine room units for Iona (S.710) and Odyssey of the Seas (S.713) to Papenburg and the engine room unit for Mardi Gras (NB 1396) to Turku. At the moment, NEPTUN WERFT is working on two engine room units at the same time. The first will be sent to Turku in December, with the second one coming to Papenburg next spring.

In addition to the on-going projects, we are currently making investments at all our shipyards to improve the general conditions for our partners and to enhance our own workflow.

As well as constructing new buildings in Turku and Rostock and upgrading the staff facilities in hall 6 in Papenburg, we are always trying to enhance the prerequisites for even closer and more efficient cooperation in the team.

When we look at the world market, we see on the one hand ever growing economic pressure, and on the other hand general political conditions that are not necessarily getting more stable. Another major issue is the strategy being pursued by China and the way that country is gaining ground on the market, something that we are monitoring with caution. Competition is also strong in Europe but we are the frontrunner in LNG with our 88 % share of LNG ships on the order book.

We are highly motivated and look forward to tackling the next projects with you as reliable, strong partners at our side, taking a joint stand to deal with the challenging framework conditions!

- Iona (S.710) in May 2020
- Spirit of Adventure (S.715) in August 2020
- Mardi Gras (NB 1396) in August 2020
- Odyssey of the Seas (S.713) in October 2020

Ecological aspects are growing significantly, as indicated by the global Fridays for Future movement and the way all kinds of environmental issues tend to dominate the media. Apart from that we have picked up the topic even earlier.

Many of those who are opposed to cruising take this as an opportunity to shine a negative light on the industry with generalised platitudes and veritable cruise bashing. There is a frequent tendency to simply ignore the fact that it is in a shipyard's own interests to pursue more environmentally friendly technologies. Together with our partners, we started researching into LNG propulsion concepts already ten years ago, sparing no expense to get where we are today. These efforts have recently been commended by several environmental organisations, confirming that we are on the right path by forging ahead with our endeavours in conjunction with political and economic forces to achieve the zero-emissions ship, rather than simply resting on the laurels of existing technology.

Let us combine our expertise and develop a common strategy for long-term success!

Bernard Meyer, Jan Meyer, Tim Meyer, Thomas Weigend, Tapani Pulli

Managing Directors MEYER WERFT and MEYER TURKU



# LIFT ME UP

## SKY DOME FOR P&O IONA DEAD ON TIME

On 2 August 2019, great heights were achieved in a specially designated area at MEYER WERFT's outfitting pier: the Sky Dome measuring 970 m<sup>2</sup> was raised onto the floating part for our newbuild Iona (S.710). A 750 tonne mobile crane was set up specially for this purpose.

Here at MEYER WERFT we are familiar with huge dimensions and well used to handling extremely large components. But this particular case deserves a closer look.

The Sky Dome was designed in close cooperation between our shipbuilding engineering office and Frener & Reifer, a company from Brixen in South Tirol. The contract stipulated that the Sky Dome would be installed using a specially prepared covered area on the visitor's car park at the shipyard, right next to the pier.

The particular challenge consisted on the one hand in the delicate structure of this component with lots of glass and little steel. On the other hand, the Sky Dome was to be put in position on the top deck, which is where the ship's structure works most. This has negative implications for the whole centre of gravity of the ship and had to be taken into account during the design process. The big goal was for the Sky Dome to be fully equipped, i.e. fitted with loudspeakers, wiring, fire alarms etc. before raising it onto the floating part. Otherwise it would no longer have been possible to install any remaining items at the highest point 14 metres above deck using ladders or similar auxiliary equipment.

The high temperatures of up to 40°C during this particular building phase posed another challenge for the production process. But this was no deterrent for the workers from Frener & Reifer who continued their work regardless.



Close coordination between the Frener & Reifer staff and our colleagues in the shipbuilding engineering office together with the various production divisions made it possible to achieve the goal described above on time on 2 August 2019. This was the date that had been agreed eighteen months previously for lifting the Sky Dome onto the floating part.

According to our colleagues in the engineering office and production department, this success was due primarily to the excellent project management, together with the professional way this complex component was handled by our supplier, who by the way was working for MEYER WERFT for the very first time.

You can watch the Sky Dome being lifted up  
with the QR- code.





# NEW PROCUREMENT ORGANISATION AT MEYER TURKU FROM 1 OCTOBER 2019



MEYER TURKU will be reinforcing its procurement organization with effect from 1 October 2019. The new structure including the new department heads will look as follows:

**Samuli Kahala** will continue as Head of Warehouse Operations and Logistics.

**Kalle Koskela** will take on responsibility for the Procurement Department for Equipment, Systems and Indirect Purchases. Kalle joined MEYER TURKU

in spring 2016 as purchaser for HVAC equipment. In summer 2018 he moved permanently to Papenburg and joined the Procurement Department at MEYER WERFT in the position of strategic purchaser.

**Eva Laakso** will take on responsibility for the Procurement Department for Hull and Hotel. Eva joined MEYER TURKU early 2016 and has been working as purchaser for electrical equipment and systems. Recently she has been in charge of the Material Availability Improvement Ramp-up project. Eva will

continue her role as Procurement Project Manager for Royal Caribbean “ICON” newbuilds.

All three will report to **Jorma Holmström** who is the overall head of Procurement and Logistics at MEYER TURKU as Executive Board Member.

After two years at MEYER TURKU, Dominik Sandmann will return to MEYER WERFT in November 2019. As from 1 January 2020, he will take over the Procurement Department there from Dirk Lake.

The ramp-up programme focuses on the development areas of shipbuilding. The development work done in basic ship design facilitates and reduces the work that is necessary during hull production.

MEYER TURKU shipyard is currently in the process of implementing a ramp-up programme aimed at doubling the production volume. The programme has made major progress during the first half of the year, and its structure is beginning to become clear. At the moment, a group of 29 project managers is leading about 40 projects that focus on the main challenges of the shipbuilding process.

Throughout the spring and summer, the project managers have been finalising their project plans and working in close collaboration with other projects.

“I have gained the impression that the project managers, who come from many different departments, have grown together both as a team and as individuals. I’m very pleased about that,” says CEO Jan Meyer.

The CEO points out that the projects included in the ramp-up scheme arise from everyday challenges. For example, hull production encountered major challenges when working on Costa Smeralda (NB 1394), and the shipyard is now aiming to address these issues.

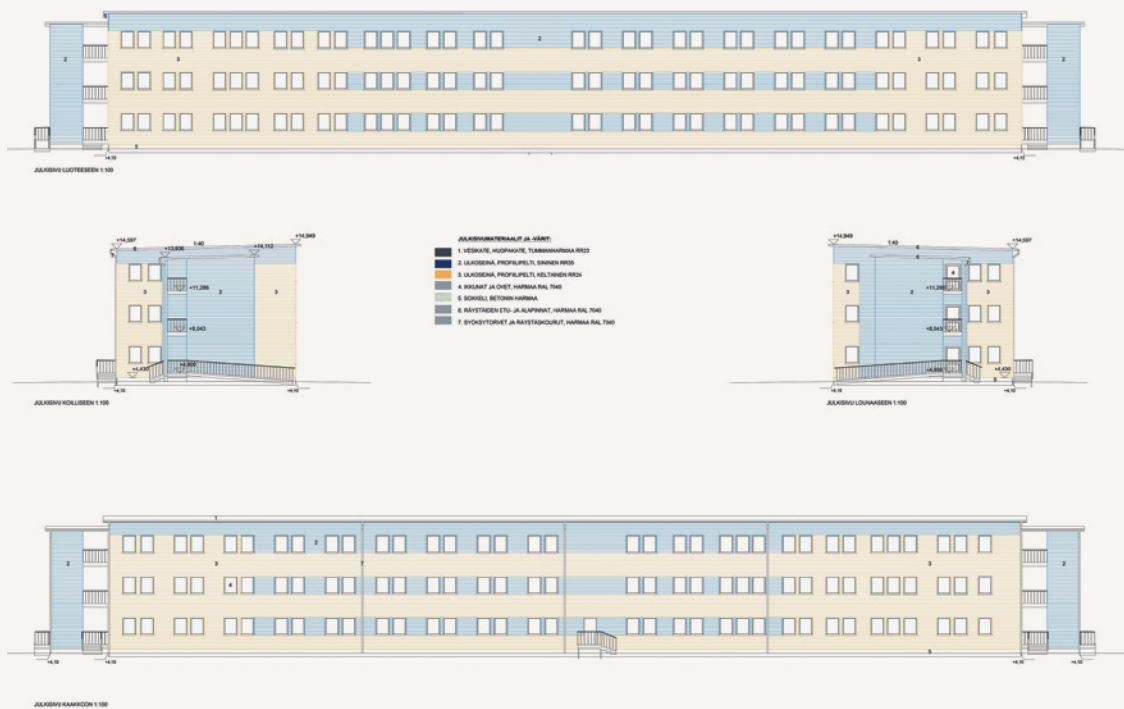
One of the projects focuses on how information is shared between basic ship design and production planning. The objective is to enhance the flow of information so that in the future, it should be possible for production planning to make the drawings right the first time. As a result, the cut outs can be made in the right place of the hull on the panel line straight away, without any need for reworking in the assembled hull.

“We encountered this particular problem in Costa 1, and now it has been remedied. It is important that we get these things right the first time, so that we become faster. At the same time, it makes it easier to build ships so that we can build even more,” Jan Meyer points out.



# RAMP UP





# INVESTING IN OUTFITTING LOGISTICS FACILITIES AND PROCESSES AT MEYER TURKU

The first part of this investment includes two new office buildings. The buildings will provide suppliers with modern office facilities including meeting rooms and high-speed internet. The buildings have a total area of 6,000 m<sup>2</sup>, of which 2,000 m<sup>2</sup> is reserved for the shipyard's own use over the next two years.

This supports the ramp-up in production volume together with an increasing need for office space. The target is for all suppliers to have an office in these buildings, making container offices superfluous. The first building will be ready by the end of 2019 and the second one during the first quarter of 2020.

The investment programme includes also new warehousing facilities for suppliers and subcontractors, replacing the current tents, barracks and containers. The warehouse building will cover an area of roughly 10,000 m<sup>2</sup> with 1,500 m<sup>2</sup> added for heated space plus a large outdoor area. The warehouse will be operated by a third-party logistics service provider. This warehouse with the project name TCC (Turn-key Consolidation Centre) will have a new road connection. This gives TCC its own street address so that the flow of materials is clearly separated from the one going to MEYER's own warehouses. Another definite benefit consists in better control of the incoming flow of material in general. TCC will be ready in autumn 2020.

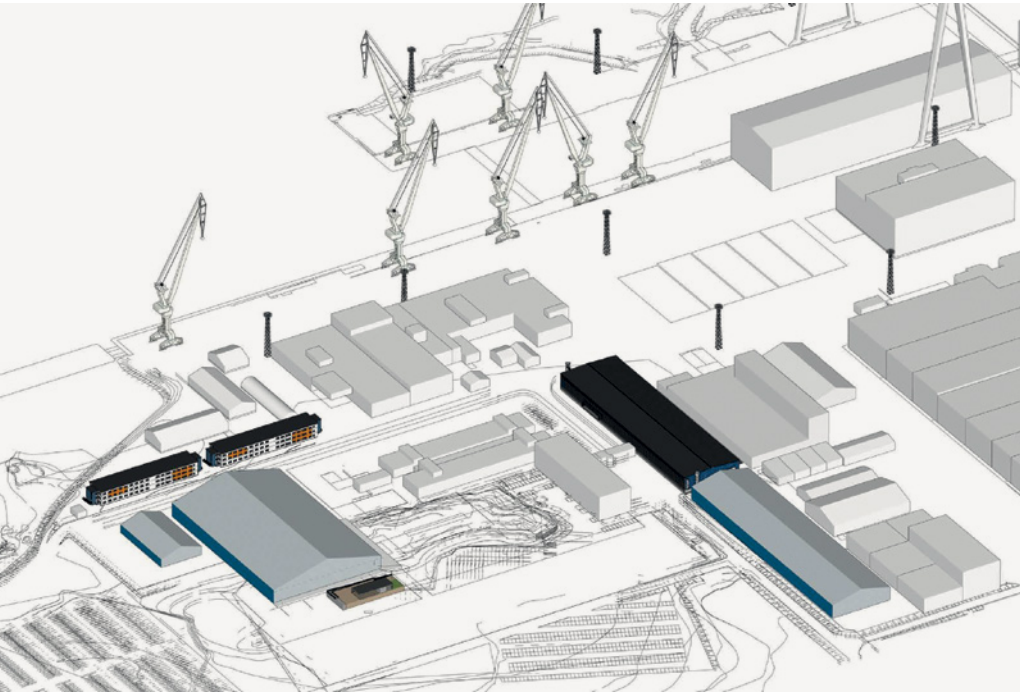
TCC will bring about substantial changes in the process, with the new warehouse handling the entire flow of materials from subcontractors. No pallet will be allowed to enter the shipyard without standardised labelling and a transportation request. However, cross-docking the materials straight to the production site will also be an option. Certain preconditions have to be fulfilled in this case, including pallet labelling and transportation and/or lifting requests. The TCC operator will also control the cross-docking process. Transportation from the TCC will no longer be done with the supplier's own equipment. The internal transportation service provider will take care of all movements by consolidating single tasks to larger units. The operator will also organise reverse flows from production back to the TCC.

Another remarkable planned process change is linked to work planning and the flow of material from the central warehouse to production. In the future model, all deliveries will be brought directly to the production sites without any intermediate buffer stocks inside the shipyard. This increases the quality requirements for detailed design and work planning, with the need for more accurate, complete work packages. Significant improvements will also be made to the warehousing facilities for MEYER's own materials and operations. Many materials and components are located outdoors at present. Furthermore, the external warehouse operators store many materials away from the shipyard itself. This is not efficient and there is always a risk of damage being caused to materials that are stored outdoors.

The first new building for the yard's own materials is a canvas covered light structure hall with an asphalt floor. This building has a total area of 6,800 m<sup>2</sup>. It is reserved for heavier and larger equipment and components which cannot be located on shelves but require indoor floor level storage. The ultimate target is to avoid outdoor storage completely. Construction of the second new warehouse building will be start immediately after the first one is completed. This will consist of a heated 6,000 m<sup>2</sup> steel construction hall. There will be multiple types of shelves standing on the concrete floor for efficient utilization of the total space. The first building will

be ready by March 2020 and the second one by the end of 2020.

All parties will benefit from this investment and the process changes, with clear transformations and improvements in the logistics facilities and operations. New requirements and working methods will of course have to be implemented to obtain the maximum benefit from the resources and effort invested. However, by taking these steps we are facilitating and assuring efficient logistics processes in order to support the increase in production volume.



MEYER TURKU has decided to invest in its logistics and warehousing facilities to facilitate the services needed for strong growth in production volume and to make logistics operations more efficient. The investment and development project also includes remarkable process changes.





## TWO FERUS AND BIFAS IN PARALLEL NEPTUN GETS FIT FOR THE FUTURE

Overriding target of the NEPTUN WERFT: to build 100% fully fitted FERUs, delivering them on time in the right quality.



This year a total of three floating engine room units (FERUs) have already left NEPTUN WERFT for delivery to Papenburg or Turku. The FERUs are the heart of our cruise ships, containing the main machines, piping systems, refrigeration and air-conditioning systems, generating units and other components. They also include the LNG system and three LNG tanks, which comprise one of the latest and most advanced propulsion systems for cruise ships.

For the first time this autumn, NEPTUN WERFT will be working on two FERUs at the same time. This is a unique step forward, as they were made in succession hitherto. The simultaneous production of two FERUs will result in new challenges for the shipyard and also for its partner companies. In addition, six new river cruise ships are being built, including four newly developed prototypes. The number of production hours has more than doubled in 2019

compared to recent years. It is only now after completion of the new shipbuilding hall 8a that two FERUs can be produced in parallel at the shipyard. The shipyard has taken on more than 100 new members of staff through a recruitment campaign at the start of the year.

NEPTUN WERFT is implementing a unique building program through to 2024. The construction of two FERU prototypes will create new challenges in 2020 that will once again put the commitment and motivation of staff and partners to the test.

Parallel to this challenging construction program, NEPTUN WERFT and NEPTUN LOGISTIK are aiming for certification in occupational safety and environmental protection management this year. NEPTUN LOGISTIK has also positioned itself for this phase and is a strong partner.

# MEYER WERFT LOGISTICS CENTER



## JOINING FORCES FOR SUCCESS

In cooperation with the various production departments, a target vision has been elaborated to drive even closer integration between logistics and production, thus ensuring that the logistics centre will not simply be a one-off investment. Specific steps are now being implemented to make production logistics fit for the future. In this way, logistics should contribute to improving the general conditions for building ships and play a major role in strengthening the Papenburg site.

## CHANGES IN LOGISTICS

Recent years have seen dramatic changes in logistics at MEYER WERFT. Since 2010, the number of goods being taken from storage has more than doubled. There has even been a quadruple increase in the quantity of items that the logistics department brings on board of the various ships every year.

Besides this huge growth in volume, the requirements that production makes of logistics are also changing. The aim is for smaller transport units to be moved in the medium term, while at the same time guaranteeing swifter reaction times and greater flexibility.

## LOGISTICS IN SYNC WITH PRODUCTION

A few years ago, the "Logistics 2020" project was instigated to warrant these various requirements, with a main focus on making logistics fit for the future to support the growth of the shipyard. The aim is for logistics to be in sync with production and capable of reacting dynamically to factors on the production side. The core investment comprises the construction of a new logistics centre with modern facilities and lean processes that make it easier to achieve this aim.

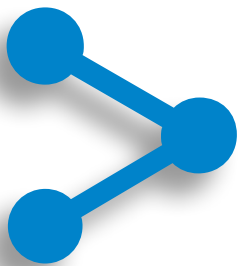
## THE LOGISTICS CENTRE: TECHNICAL EXCELLENCE

The logistics centre costing € 40 million is being constructed on roughly 10 hectares of land in the immediate vicinity of the shipyard. A fully automatic high-bay warehouse with space for 25,000 load carriers is a key part of the logistics centre, and will be equipped with the very latest technical facilities. For example, instead of conventional conveying systems, a far more efficient, scalable in-floor conveyor will be installed to bring material from the warehouse to the individual picking stations.

MEYER WERFT has entrusted BSS Bohnenberg with erecting the automatic warehouse. The company stands out with many years of experience in this sector and is also capable of covering the high demands that shipbuilding makes of logistics.



# MORE ABOUT MEYER



The MEYER Group's social network channels are a quick and easy way of sharing topics, information and pictures and are also suitable for dialogue. We look forward to your questions and contributions, feedback and suggestions. Inform yourself and exchange information with us and others on our social media pages – make valuable contacts.

## YOUTUBE

Take a look behind the scenes: Let yourself be impressed by the expressive pictures and thrilling videos.



MEYER TURKU YouTube channel

<https://www.youtube.com/channel/UCQ-lSupfB0ugjSnSIFjgcJ-A>




NEPTUN WERFT YouTube channel

<https://www.youtube.com/user/NEPTUN-WERFT1850>



MEYER WERFT YouTube channel

<https://www.youtube.com/channel/UCAq1VneWeuWrWX3wEt5glyg>



MEYER WERFT Instagram page

<https://www.instagram.com/meyerwerft/>



## INSTAGRAM

Even more great images, unusual pictures and special perspectives.

## FACEBOOK

Take a look behind the scenes at the shipyards and use this opportunity to get in contact with us and others.



MEYER WERFT Facebook page

[https://www.facebook.com/pg/meyer-werft/about/?ref=page\\_internal](https://www.facebook.com/pg/meyer-werft/about/?ref=page_internal)



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MEYER TURKU LinkedIn page

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MEYER WERFT Xing-Profile

[www.xing.com/companies/meyerwerftgmbh](http://www.xing.com/companies/meyerwerftgmbh)



## LINKEDIN AND XING

Our corporate profiles on Xing and LinkedIn supplement our social media activities. Here too you can find interesting news covering all aspects of the shipyards. Use the possibility for cultivating useful contacts through these channels.



# TOGETHER, WE ARE BUILDING THE SHIPS OF THE FUTURE

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# MEYER