

# BIGNEWS

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# INTRODUCTION

Dear Reader,

I am pleased to introduce issue number 24 of our company magazine BigNews to you.

Since the last edition, a number of interesting projects have kept us busy. New developments and intriguing engineering feats competed for our time.

Six months in, we can proudly say that Happy Sky is fulfilling our expectations; she is a fine, state-of-the-art Heavy Lift Vessel, able to handle all that is thrown at her. In this issue she can be seen transporting a Goliath gantry crane from Korea to Brazil. Her sister, Happy Star, is making good progress at the shipyard and we expect her to join our fleet in August.

Furthermore, you can read about Happy Buccaneer loading a large cargo of petrochemical pieces for the Sadara project in Saudi Arabia, 20 Automatic Stacking Cranes making their way to New York, the history and future of carousel transportation by BigLift and the small, but important cargoes for a power plant in the UK. Another interesting article gives you more insight into the use of the tutor bridge on our Happy D-vessels, which we use to train our future officers.

Once again, I think we have put together an interesting overview of the way our crew and staff enjoy the challenges that working for a heavy lift shipping company brings.

**Arne Hubregtse**  
Managing Director



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# 02 ALL BUT A SHUTTLE SERVICE

Happy Dynamic started with the first of four voyages from Gdynia, Poland, to Newark NJ, USA, at the end of September 2013. On each voyage five Automatic Stacking Cranes from Konecranes were carried on deck.

If Happy Dynamic had not been scheduled with in between cargoes, this project almost looked like a liner service to Newark.

Technically, a lot of preparation was necessary before the loading operation started. The ASCs are a considerable size at 32 x 17 x 26 m per piece and they weigh 190 mt each and as well

as this, they move on rails. While preparing the vessel to receive the cargo, Happy Dynamic's deck soon resembled a railway station. Tweendeck pontoons and pillars with railway tracks on them had been arranged in position to receive the cranes.

Cranes 2 and 3 lifted the ASCs on deck in tandem operations and positioned them in the rails. The first two ASCs were "driven" to the aft of the ship over the rails. As the trim and gravity were favourable, "human locomotion" could be applied and the ASCs were simply pushed into position by the crew. However,

when numbers 3 and 4 had been loaded, trim and gravity worked in the opposite direction and human strength had to be replaced by the electrical power of a portable winch, which pulled the ASCs into their forward stowage positions. This provided a narrow gap for the last ASC. This space was small and the ship's cranes were left with a restricted manoeuvring space, so the last ASC was placed directly on top of two pontoons sticking out over Happy Dynamic's starboard side.

The loading operations were rather impressive to watch and were carried out in close

cooperation between the ship's crew, Konecranes' representatives and Biglift's supercargoes. After completion of loading and lashing, Happy Dynamic looked spectacular. On the portside the crane tops stuck out 13.2 m and on starboard one ASC protruded 3.2 m over the ship's railing. The ASCs were lashed with push and pull bars and wires.

When everything was ready, Happy Dynamic sailed via the Great Belt, the North Sea and the English Channel over the North Atlantic to New York. Winter storms were numerous and did cause some delays but Happy Dynamic

safely sailed into the Bay of New York. She moored at the Global Container Terminal in Newark from where there was a spectacular view of Lady Liberty and Manhattan. The loading operation was performed in reverse order and all the cranes, once discharged, could be driven directly to their future working area.

The second and third shipment have meanwhile been executed to full satisfaction. The last five ASCs are underway.



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# FROM REELS TO CAROUSELS

## 03

Over the last 15 years or so, BigLift has regularly moved not only subsea cable on reels, but also much longer cables on carousels. Gilles Thomas, our agent in France, reflects on how the carousel, which was once completely unknown in the industry, is now a regular shipment on BigLift's fleet.

"During the year 2001, while I was visiting our good client COFLEXIP at their headquarters in Paris, we were talking about some jobs we had done for them, including one in Australia with the Heavy Lift Vessel Project Orient. I think that was around 1988 or 1989.

"We used the vessel not only to carry the heavy reels from their factory in Le Trait in France to Australia but also as floating storage, waiting in a bay in an area which was home to many crocodiles! The ship's crew was recommended not to swim in the bay, but instead stick to fishing from the deck. When the laying vessel came back from the offshore field, the HLV fed her with a number of full reels in exchange for empty ones.

"While exchanging some memories of those good old times, an engineer asked me if we would be able to carry a carousel instead of reels. 'A carousel? What is that?' I asked. He

explained that it was a kind of large basket of some 20 metres diameter installed on a turning device, with a carrying capacity of some 2000 mt of cable, which meant 2400 mt when full. Due to the diameter, it would not fit in the hold of our vessels but only on deck and with such a weight on deck, I was not too optimistic. However, I promised the man to double check.

"Back in the office, I started to talk with our technicians and engineers in Amsterdam and to my surprise they were more positive than me. Within a couple of days, they came back to me explaining that it would be possible in terms of deck strength and they showed some drawings

and stability calculations proving the feasibility of the transport. They also outlined the foreseen operation in which the product needed transferring from our carousel to the laying vessel's carousel, with both baskets turning at the same speed.

"I went back to the client proudly announcing the good news and we started serious technical and commercial discussions that resulted in two contracts for projects in Angola in 2002 and 2003.

"Since then, we have carried out many of these transports and ship-to-ship transpooling

operations, which enable the client to carry more product in longer sections than when the cable is coiled on reels. Thus they avoid their expensive laying vessels having to go on long ocean passages getting back from the oil fields to the factory in Europe to reload their own empty carousels.

"Now, with larger ships, we are able to propose similar shipments to our clients like Technip, SubSea 7 and Saipem, but with two and even three carousels in one go, if they wish."

Gilles Thomas  
Giant Marine



photo: Kees Wiersum

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# 04 KEY COMPONENTS TO CARRINGTON

BigLift was awarded the ocean transportation for the key components of Alstom's 880 MW gas-fired Carrington Power plant located at Trafford in the U.K. The nearest port to Trafford suitable for heavy lifts is Ellesmere Port.

From Alstom's private berth in Setubal, Spain, in a port with shallow water and length restriction, 20 HRSG modules were transported in two shipments - 10 units per shipment, each

weighing between 130 and 205 mt. Two further shipments were carried to Ellesmere Port from Flushing in the Netherlands. A Tra vessel twice loaded a set of both a GT26B gas turbine (unit weight 385 mt) and a gas turbine generator (unit weight 302 mt) for the Carrington Power plant.

All four shipments were carried out by BigLift's Tra vessels. They crossed the North Sea and

Biscay between end November 2013 and early February 2014. Timely loading and arriving within the required 'discharge window', were vital. No delays were possible given the strict schedule for the site installation.

And so it happened.

Once in operation, Carrington Power station will provide power for about a million homes.



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## 05 GOLIATH GANTRY CRANE TO BRAZIL

BigLift's new vessel Happy Sky discharged a 1,800 mt Konecranes Goliath Gantry Crane in Salvador, Bahia in February. The Gantry Crane had been built mainly in Mokpo, South Korea and partly in Dalian, China, under the supervision of Konecranes International.

Konecranes was awarded the contract for the manufacturing and turnkey delivery of this crane from the Estaleiro Enseada do Paraguaçu Shipyard, a new yard under construction in the municipality of Maragojipe, approximately 43 km from Salvador, the capital of Bahia state. The shipyard is being built to develop complex naval engineering projects and is scheduled to start operations in 2014.

Goliath's loading took place under harsh winter conditions in South Korea. The long diagonal legs, sill beams and a lot of smaller items filled the hold and the deck was completely covered with the 160 m long girder. This girder was divided in six sections of up to 520 mt and one section was 50 m long. Because of her high crane pedestals Happy Sky was able to lift the 18 m high girder sections cleanly onto her weather deck.

Loading and seafastening took 10 days to complete. Then Happy Sky departed for her 35-day journey with only one stop at Singapore to take in bunkers. After Singapore, she sailed nonstop over the Indian Ocean,

around the Cape of Good Hope and over the South Atlantic Ocean to Brazil.

When Happy Sky arrived at Salvador, the concrete at the discharge jetty had just set and it was about ready to receive the cargo. Ergo, Happy Sky was the first ship to berth at the jetty. Timely delivery and safe transport were key factors to the success of this project.

The remaining parts of the Goliath crane were built in Dalian, China. Happy Dover loaded them as well as a jib crane in parts for the same project. Another 22,500 cbm was thus moved to Salvador to complete the Goliath Gantry Crane.

## EDUCATING THE OFFICERS OF THE FUTURE



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Have you ever wondered why our Happy D-types have an additional bridge on top of the regular bridge? The reason is because the Happy D-types are so-called 'tutor vessels'. To that end, they are equipped with extensive educational facilities, including a training bridge. These tutor vessels are part of a new training concept for nautical schools – the Tutor Vessel Project – in which the Spliethoff Group has been participating together with Maritieme Academie Holland. This cooperation stems from the pressing need for well-trained junior officers.

For the Tutor vessel project, four Spliethoff D-type vessels and BigLift's five Happy D-type vessels were equipped with these special facilities. Since 2010 some 56 third and fourth-year students have joined the Tutor vessels every year for a five-month apprenticeship. A tailor-made curriculum has been developed, based on the STCW 95 Training Record Books.

The project's aim is to offer students intensive coaching in order to guarantee a successful practical period and to help them finish their projects for the Training Record Book at a steady pace. On board, dedicated training officers advise and supervise them. If students are asked to do something they claim not to have learnt in school, the training officer can take immediate action. Previously, students were very dependent on the educational qualities and communication skills of the first officers or chief engineers who supervised them. Now, with the curriculum and training officers on hand, a student's progress can be monitored right from day one.

During every training period six to eight students are on board, working 40-hour weeks. Every working day students have

four hours instruction and they work on assignments under the supervision of a training officer, plus four hours watch-keeping with the officer on duty (engine room or bridge). It goes without saying that practical work is part of their training too. The timetable is worked out so that the students take turns and an individual approach is guaranteed.

Albert Mulder of the Research and Development Department of Maritieme Academie Holland says: "The Spliethoff Group is unique in this project. Worldwide, only a few ship owners have pupils on board in little groups for practical education, but nowhere in the quantity and with the ambition of the Spliethoff Group." Mulder continues: "Professional practical training is an important aspect of the students' development. Research into expectations, wishes and experiences of pupils about their practical training shows that pupils who did their traineeship on board a tutor vessel, experienced a more in-depth training environment than pupils who went to an 'ordinary' vessel." Mulder concludes: "Tutor vessel pupils are happier with their traineeships and therefore there is a larger chance of them choosing a career at sea; to find their chosen profession more satisfactory and last but not least, be much more involved in their profession. If you want to bring education and business together, this proves to be a very good way of doing it."

### Tutor bridge

The tutor bridge has all the equipment of the regular bridge: radar, Electrical Chart Display Information System (ECDIS), GPS, AIS, weather chart plotter, gyro repeaters, speed log, SSB radio, Inmarsat C terminal, etc. It all works, but the equipment can only

be used to receive information, not to send any. Navigation and signal lights can be operated, but the lights will not be switched on and functions that would influence the ship's sailing are disabled. But all books and charts present on the regular bridge are available on the training bridge as well. Apart from all this, the real bridge is also used for training the apprentices on duty in the same way this takes place on regular ships.

**Christian Kuipers, apprentice and third-year student Maritime Officer at Hogeschool Amsterdam, had such a good time during a six week holiday training period on Happy Delta that he decided to choose a Happy D-type vessel for his studies. He recently returned from five months of training onboard Happy Diamond. The training made him even more enthusiastic about the transportation of heavy cargoes and about our shipping company. "I experienced five wonderful months in which we worked very hard with a close-knit team, but always in a good, relaxed atmosphere. I learned a great deal and am considering applying to BigLift to be able to work there after my graduation." He continues: "In fact the whole period was one great high, but if I have to pick some extra special things, then they are the transportation of an enormous ship loader to Australia and my baptism by Neptune himself when I first crossed the equator".**



Happy Buccaneer loaded an impressive cargo of 23,000 cbm of petrochemical equipment at Kuantan, Malaysia for discharge at Jubail. This cargo is for the Sadara project, a joint venture between Saudi Aramco and the Dow Chemical Company. They are building an integrated chemicals complex at Jubail Industrial City II. Once complete it will be the largest petrochemical facility ever built in a single phase.

Part of the complex is a Propylene Oxide Project for which Foster Wheeler are acting as Project Procurement Managers and DB Schenker UK as the appointed project forwarder. The main heavy lift pieces for this shipment were fabricated by KNM.

Happy Buccaneer once again showed her true calling as a Heavy Lift Vessel in loading these large and heavy separation and methanol recovery towers. A polypropylene propane splitter tower of 82.75 m long was stowed under deck, together with ladders and platforms and other pieces. Further substantial cargo was loaded on deck, the longest and heaviest being the huge recovery tower of 84 metres and 860 mt.

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# 07 SADARA TOWERS

## LAUNCHING CATAMARANS IN SICILY

Happy River moored twice in Messina, Italy, to launch two 312 mt catamarans from the quay into the water at the Rodriques Shipyard, which built the catamarans.

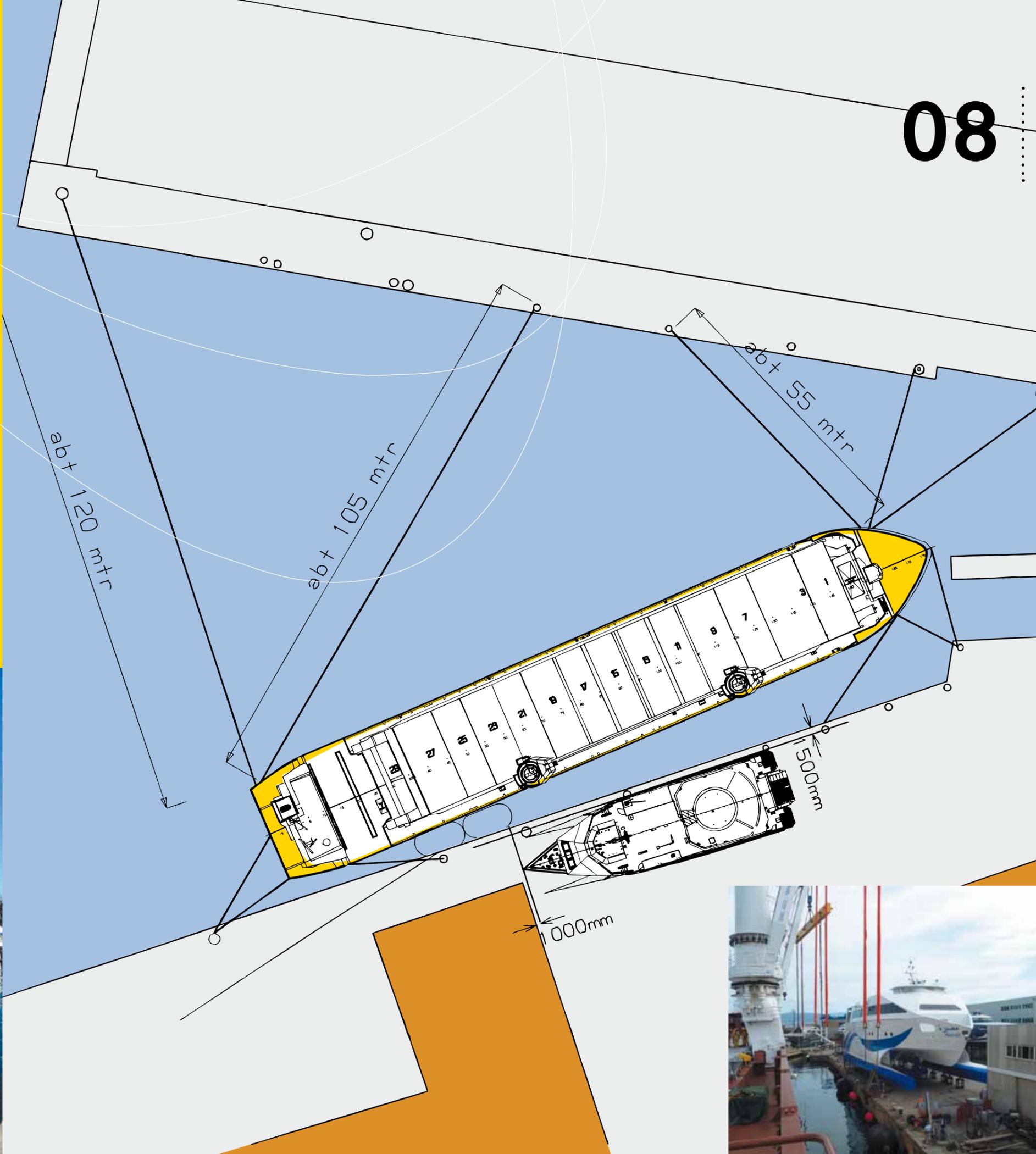
The two catamarans are quite large at 51.8 m long and 15.5 m wide. But because the space on the quay where they were built is very restricted, no harbour cranes are present that could lift the catamarans into the water. Therefore, BigLift was contacted to solve the matter.

This was quite a challenge because it is not only the quay-side that is restricted at Messina harbour.

Happy River had to moor in a small, shallow corner of the port and because there was not sufficient water for the vessel's 4.7 m draught, she was unable to moor directly against the quay. However, by mooring the vessel at an angle and using the maximum outreach of her cranes, the shallow draught was no hindrance to the operation.

With the catamaran in Happy River's cranes, Happy River pulled herself to the opposite side of the basin, thereby making space for the catamaran to be lowered into the water. The illustration shows the limitations of this operation.

By thinking of possibilities instead of problems and by being flexible, BigLift was able to make another customer happy.



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## HARBOUR CRANES TRAVEL BY TRAVELLER

Last February, Traveller was booked to carry two brand-new harbour cranes, type 6507A, from Antwerp, Belgium to Puerto Cortez, Honduras. Although the cranes were very large, they fitted exactly on the vessel's upper deck.

Since the under deck space was still available, the Atlantic Department of BigLift's sister company Spliethoff could use this space for its regular steel trade to the Gulf of Mexico.

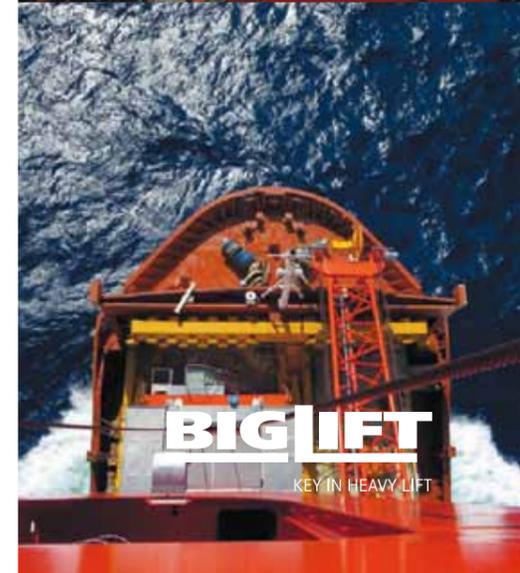
In Antwerp, Traveller first loaded thousands of tonnes of steel products in her hold. Then her deck was prepared to receive the first of the two Gottwald harbour cranes. Once placed on deck, the first Gottwald had to be driven all the way forward to make sufficient space for the second Gottwald crane.

Highly skilled manoeuvring was required both from the ship's crew operating the vessel's cranes and the operator driving the cargo to its final stowage position.

Before the start of the loading operation, BigLift had already gone through some detailed preparations in the office, using its advanced 3D CAD system to ascertain that there would be sufficient space between the cargo and vessel's cranes. The actual situation showed that the study had been accurate; With only centimetres to spare, the Gottwald jibs could be lowered onto their support frames.

Apart from the loading operation requiring skilful preparations and handling, the seafastening and actual seamanship are also important aspects of heavy lift transportation. As soon as Traveller left Antwerp she encountered severe weather conditions and the captain rightfully decided to seek shelter, waiting for the weather to improve.

Further winter storms were experienced en route to Honduras but BigLift's unique lashing system once again proved its effectiveness as ultimately, the cargo was safely delivered in Puerto Cortez.



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## BIGLIFT STAFF



Koen Stolk started his career as an apprentice with BigLift in 2004. He sailed on several BigLift vessels as 3rd engineer. Later he went to work in the

offshore sector as crane service engineer. Koen moved on to Vroon Offshore Services to be an engineer on Diving Support Vessels and later switched to a shore-based job as a Technical Superintendent and QHSE Officer, in which capacity he was active in improvement of safety awareness, accident investigation and audits for vessels.

In November 2012 Koen started with BigLift as the QHSE Manager.

## NEW AGENT FOR SPAIN

It is our pleasure to announce the appointment of MIT SUD as exclusive agent for BigLift Shipping in Spain. The combination of BigLift's state-of-the-art heavy lift fleet and the experience and long track records in the heavy lift market of both BigLift Shipping and MIT SUD offers a reliable solution for the demanding Spanish market.

MIT SUD is a maritime broker specialized in heavy lift shipments. MIT SUD's knowledge of the market ensures the best solutions for all abnormal maritime transportations. Its long-time partnership with European ship owners will grant access to a modern fleet of vessels, tugs and barges for all your heavy lift operations worldwide.

More information on MIT SUD can be found on [www.mitchartering.com](http://www.mitchartering.com).

## LAUNCH HAPPY STAR

BigLift Shipping's second S-type vessel, Happy Star, was launched successfully by Ouhua Shipyard in Zhousan, China on 20 January 2014. Further outfitting and commissioning will take place at Ouhua Yard. Subsequently, the 2x900 mt heavy mast cranes will be fitted at the Huisman factory in Zhangzhou.

Happy Star will be ready to join the BigLift fleet in August of this year.

## EXHIBITIONS & CONFERENCES:

MEET US AT

OTC Houston  
May 5 - 8

Breakbulk  
Antwerp  
May 14 - 16

ONS Stavanger  
August 25 - 28

Breakbulk Americas New  
Orleans  
September 29 - October 2

Offshore Energy  
Amsterdam  
October 28 - 29

## LOCOMOTIVES BY SEA

BigLift has a good reputation when it comes to the shipment of railway-related cargo. Recently our Transporter shipped 11 locomotives and one special train - equipped for cleaning rails - from Norfolk, USA, to Port Hedland, Australia. Last month, Happy Diamond sailed the same route with 12 more locomotives.

**BIGLIFT**

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## HAPPY STAR

DELIVERY Q3 2014



length o.a.	156.00 m	registration Netherlands
length p.p.	147.60 m	2 cranes each 900 mt
breadth mld	29.00 m	class LLOYD'S ✕100A1
deadweight	20,000 mt	Finnish Ice class 1A
under deck	20.150 cbm	Open sailing
on deck	3.400 sqm	

## HAPPY SKY

YEAR BUILT 2013



length o.a.	154.80 m	registration Netherlands
length p.p.	145.20 m	2 cranes each 900 mt
breadth mld	26.50 m	class LLOYD'S ✕100A1
deadweight	18,680 mt	Finnish Ice class 1A
under deck	20.500 cbm	Open sailing
on deck	3.250 sqm	

## HAPPY BUCCANEER

YEAR BUILT 1984



length o.a.	145.89 m	registration Netherlands
length p.p.	134.00 m	2 cranes each 700 mt
breadth mld	28.30 m	ro-ro width 20.30 m
deadweight	13,740 mt	ramp capacity 2,500 mt
under deck	19,908 cbm	class LLOYD'S ✕100A1
on deck	3,067 sqm	Open sailing

## HAPPY DELTA HAPPY DIAMOND HAPPY DOVER HAPPY DRAGON HAPPY DYNAMIC

YEAR BUILT 2011



length o.a.	156.93 m	registration Netherlands
length p.p.	147,75 m	2 cranes each 400 mt
breadth mld	25.60 m	1 crane 120 mt
deadweight	17,518 mt	class LLOYD'S ✕100A1 LA
under deck	20,892 cbm	Finnish Ice class 1A
on deck	2,736 sqm	Open sailing

## HAPPY RIVER HAPPY ROVER HAPPY RANGER

YEAR BUILT 1997/1998



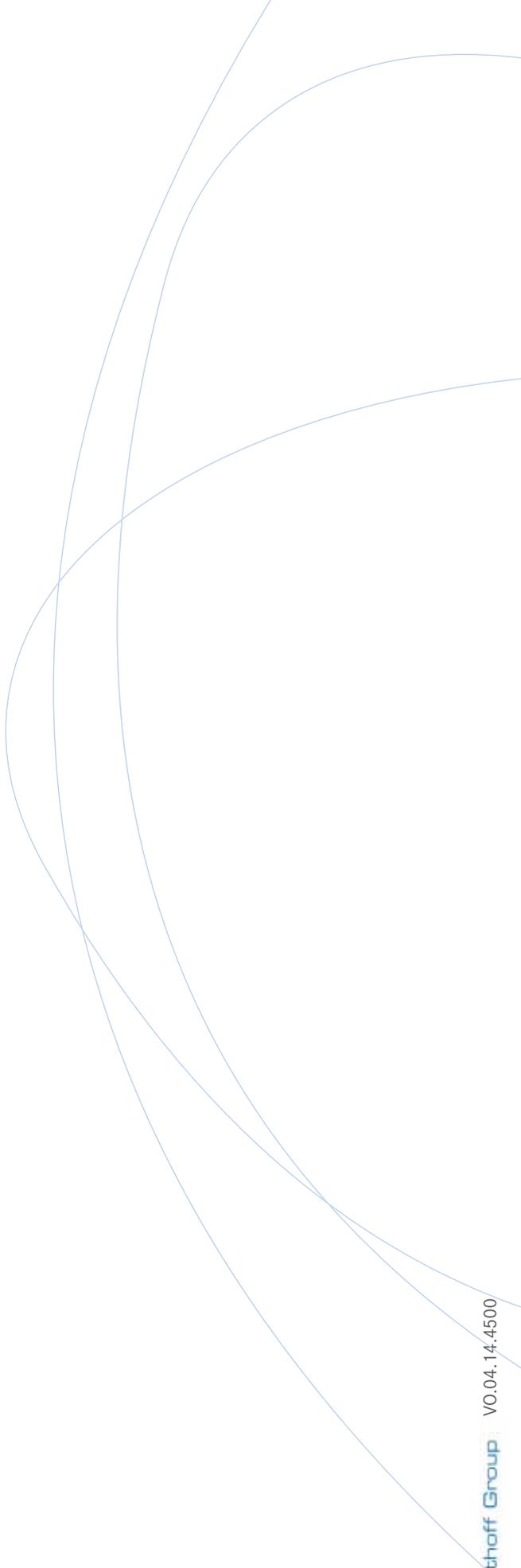
length o.a.	138.00 m	registration Netherlands
length p.p.	127.14 m	2 cranes each 400 mt
breadth mld	22.88 m	class LLOYD'S ✕100A1
deadweight	15,634 mt	Finnish Ice class 1A
under deck	17,863 cbm	Great Lakes fitted
on deck	2,450 sqm	Open sailing

## TRACER TRANSPORTER TRAMPER TRAVELLER

YEAR BUILT 1999 / 2000



length o.a.	100.50 m	registration Netherlands
length p.p.	96.50 m	2 cranes each 275 mt
breadth mld	20.40 m	class BV 1 3/3 E
deadweight	8,600 mt	Ice class 1C
under deck	10,530 cbm	Great Lakes fitted
on deck	1,330 sqm	



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