

VOLUME 13 | EDITION 1 | APRIL 2018

PortNews

Covering the port area of Vlissingen, Terneuzen and Ghent

Leading in breakbulk

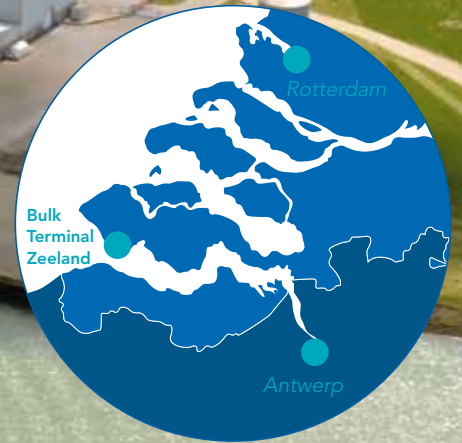
Breakbulk Europe 2018

680 years of Stukwerkers

New tank terminal in
the port of Vlissingen



Your partner for customised cargo operations



Why Bulk Terminal Zeeland?

- Dedicated terminal for the handling and storage of
 - Breakbulk
 - Project cargo
 - Bulk cargo
- 35,000m² warehouse storage
- 75,000m² open storage
- 225m quay
- 11.5m of draught
- One hour sailing time from the North Sea; no locks
- Excellent multimodal and congestion free hinterland connections
- Complete customs clearance documentation service

- 24/7 service and ISPS security
- Fully equipped for cleaning and repairs
- Customised processing, crushing, cleaning and repacking

Want to know more?

We are available 24 hours per day, seven days per week.

Bulk Terminal Zeeland B.V.

Visiting address:
San Marinoweg 10
4389 PS Ritthem (Vlissingen-Oost)
The Netherlands

Correspondence to:
Bulk Terminal Zeeland B.V.
P.O. Box 26, 4328 ZG Burgh-Haamstede
The Netherlands



IN THIS ISSUE



BREAKBULK

- 4 North Sea Port leading in breakbulk
- 6 680 years of Stukwerkers in Ghent
- 10 Breakbulk Europe 2018 – The world's largest event for the project cargo & breakbulk industry
- 15 Full throttle for BTZ
- 20 First choice multipurpose terminal

BULLETINS

52

COMPANY PROFILE

- 32 Entrepreneurial spirit

ENVIRONMENT & CULTURE

- 63 Eastern Scheldt lobster

INSIGHT

- 18 Challenge accepted

LIQUID BULK

- 28 New tank terminal in the port of Vlissingen

MARITIME LOGISTICS

- 24 Broadening the horizon

OFFSHORE WIND

- 36 A fine example

PORT SERVICES

- 31 Planning tool for inland navigation

PROCESS INDUSTRY

- 42 A bright future for top class whiteners

SUSTAINABLE INDUSTRY

- 39 Stora Enso welcomes wind turbines on Ghent paper mill site
- 40 The green bay
- 48 Bio Base Europe Pilot Plant

WINNING COMBINATIONS

- 54 New sounding boat for North Sea Port

ZPPC

- 14 25th anniversary

REGULARS

WELCOME

- 3 Henk de Haas, Chairman ZPPC

NEW PARTICIPANTS

55

PARTICIPANTS

- 57 Overview

PORT MAPS

- 60 Vlissingen, Terneuzen and Ghent

PUBLISHERS

- 64 About Portnews



ON THE COVER

Handling of rotor blades for wind turbines in the port of Ghent.

Photo courtesy of North Sea Port – Tom d'Haenens

EVENTS

North Sea Port and the Zeeland Port Promotion Council will be in attendance at various events and trade shows throughout the year. Below you'll find a snapshot of the upcoming events that might be of interest to you.

30 APRIL- 3 MAY 2018	OTC Houston	15-17 MAY 2018	Windforce Conference Bremenhaven	29-31 MAY 2018	Breakbulk Europe Bremen
					
5-7 JUNE 2018	Provada Amsterdam	12-14 JUNE 2018	TOC Europe Rotterdam	13-14 JUNE 2018	NWEA Wind Days Rotterdam
					
19-20 JUNE 2018	Global Offshore Wind Manchester	22-24 JUNE 2018	Zeeuwse Havendagen Terneuzen and Vlissingen	23 JUNE 2018	Open Havendag Zeeland Terneuzen and Vlissingen
					
27-29 JUNE 2018	Marine Maintenance Amsterdam	27-30 AUGUST 2018	ONS Stavanger	25-28 SEPTEMBER 2018	WindEnergy Hamburg
					
2-4 OCTOBER 2018	Cool Logistics Global Antwerp	22-24 OCTOBER 2018	Offshore Energy Amsterdam	12-15 NOVEMBER 2018	ADIPEC Abu Dhabi
					

“ Looking back and ahead

Welcome

On Friday, 23 March, I had the honour of hosting ZPPC's 25th anniversary in Cinecity XL Theatre in Vlissingen. 25 years is a good landmark to celebrate and to look back and ahead. A 25 year period is obviously too long to go into detail, but as a whole we can conclude that our ports have gone through a lot of changes in these years. We can ultimately consider our port area as a healthy and competitive cluster, resulting from the hard and dedicated work by everyone involved in this port area.

At the anniversary event, trendwatcher Richard van Hooijdonk held an eloquent introduction about future port developments. His vision shows that the rapid digital developments that we are dealing with today are not about to end soon. Digitalisation is key for many things going in our ports. One example is the recently introduced planning tool for inland shipping to improve smooth passage of the Terneuzen locks. North Sea Port authority was one of the initiators of this innovation.

The news was recently announced that the Dutch Government will be investing EUR 6.4 billion in new vessels for the Royal Dutch Navy. After years of decay, this announcement sounded very promising for the Zeeland industry, with Damen Naval Shipbuilding and many subcontractors and suppliers in and around the port area. A welcome opportunity for many!

This issue of PortNews is a literal example of change, as this is the first edition of our quarterly magazine covering the North Sea Port area. With the joint port area of Vlissingen, Terneuzen and Ghent, North Sea Port will be a valuable source of ample interesting stories to tell in PortNews. One of the upcoming events where North Sea



Port can reveal its strength will be Breakbulk Europe. You will read more about the event in this magazine. For the first time in history, the event will not be held in Antwerp, but in Bremen instead. Many companies will join North Sea Port in order to present themselves as Europe's leading breakbulk and project cargo specialists. ZPPC will certainly be there, too. I look forward to meet you at booth number 518.

A handwritten signature in black ink, which appears to read 'Henk de Haas'.

Henk de Haas
Chairman, Zeeland Port Promotion Council



Photo courtesy of BOW Terminal



Photo courtesy of North Sea Port

Dedicated breakbulk terminals with flexible, cost-effective workforce, such as:

- BOW Terminal
- Bulk Terminal Zeeland
- Kloosterboer
- Mammoet Terminal Westdorpe
- Pacorini Metals Vlissingen
- Supermaritime Nederland
- Stukwerkers
- Verbrugge Terminals

RoRo facilities

- Cobelfret
- DFDS



Photo courtesy of SDW Shipping



Photo courtesy of North Sea Port

North Sea Port leading in breakbulk

North Sea Port plays a leading role in breakbulk. With a throughput of 11.6 million tonnes, the port is number one in the Hamburg-Le Havre range, outnumbering the ports of Antwerp and Rotterdam.

This top ranking is of course a result of the merger of Zeeland Seaports and the Port of Ghent but having said this, this does not make the achievement behind this figure any less impressive. At the heart of the Antwerp – Rotterdam region, specialist breakbulk terminals with modern handling equipment and high-capacity storage facilities annually handle a broad range of goods such as forestry products, metals, fresh produce and project cargo. North Sea Port has as a result developed rapidly, becoming a major breakbulk player in little more than fifteen years. Today, North Sea Port is Europe's number one for forest products, and with regard to offshore wind components, it is the number one Dutch port for traditional

“ Breakbulk has throughout the years been an important commodity that adapts well to changing circumstances.

fruit, and one of the world's leading ports for the storage of aluminium. There is still ample room for further growth, so the ambitions for further expansion are beyond dispute.

Important commodity

At company Stukwerkers NV in Ghent, breakbulk activities date back to the fourteenth century. Breakbulk has throughout the years been an important commodity that adapts well to changing circumstances. And even though most goods today are transported in containers, conventional packaging and transported goods remain important for the merger port. The leading position in fact becomes even stronger when taking project cargo into account. The volume of this type of cargo handled in the port is not included in common breakbulk figures. With the growing volume of heavy lift goods such as offshore wind components, the share of project cargo increased over the past ten years. The port of Vlissingen has developed into a real offshore port, with facilities that take care of the

production, handling, and transport of heavy lift goods for the oil & gas and more recently, for the renewables industry as well. With new offshore wind projects planned in Vlissingen's backyard, the role of North Sea Port in offshore wind is expected to further expand in the upcoming years.

Dedicated terminals

In the ports of Vlissingen, Terneuzen and Ghent, abundant dedicated terminals offer facilities for the handling, warehousing, and open storage of a broad range of breakbulk goods. On top of this, RoRo facilities in Ghent and Vlissingen are available for loading and unloading goods into trailers, cars, trucks, and other types of rolling stock. Though the facilities in the port area are just one part of North Sea Port's breakbulk success. The ports enjoy an ideal location in the Western Scheldt river estuary region alongside the Belgian-Dutch border. North Sea Port has direct access to the open sea and connects inland to Dutch, German, Belgian and French rail, road and waterways that lead to an impressive 50% of Europe's purchasing power within a range of 500km. The growing number of transatlantic and shortsea (reefer) liners services show that more and more shipping companies are convinced by North Sea Port's strong market position.

I. WWW.NORTHSEAPORT.COM

MORE INFORMATION

North Sea Port – Breakbulk

Marcel Pater

Commercial Manager

T. +31 6 3034 6342

E. marcel.pater@northseaport.com



North Sea Port – Breakbulk

Danny Vancoppenolle

Commercial Manager

T. +32 474 058 709

E. danny.vancoppenolle@northseaport.com



BREAKBULK

STUKWERKERS DEALS WITH STEEL IN ALL ITS MANIFESTATIONS:
COILS, SLABS, LONG PRODUCTS, WIRE, AND PLATES.



All photos courtesy of Stukwerkers

680 Years of Stukwerkers in Ghent

Cargo handling through the ages

The origin of Stukwerkers stevedoring company in Ghent lies in the ‘Generaliteyt der Cooplieden’ (Generality of Merchants): an organisation that was founded to ensure the proper selection and training of workers, so that they could aptly handle and unload all merchant cargo. This organisation developed into the ‘Generaliteyt haerlieder aerbeyders ofte Stuckwerkers’ (Generality of workers or cargo workers; the Stukwerkers Corps) in 1338.

In the seventeenth century, the Stukwerkers loaded and unloaded cargo along the Lieve, Leie, Schelde, Sassevaart, and Brugse Vaart. The ‘confreers’ (members) of the Stukwerkers Corps were given a part of the profits on a weekly basis, as an advance payment on the annual profit distribution. Every member had their own identification number. A dice rolling system determined who had to do which tasks, to avoid favouritism and fraud. The organisation was well ahead of its time in the seventeenth century: elderly members that could no longer realise full profits were not abandoned, but received half of the regular wages. When a Stukwerker passed away, the heirs were entitled to a contribution towards funeral costs and, if the treasury allowed it, a share in the Stukwerkers Corps.

From 1753 onwards, cargo was unloaded along the Coupure, which connects the Brugse Vaart and the Leie, and transported to the warehouse on the Koornmarkt. King Willem I of the Netherlands ordered the improvement of the canal between Ghent and Sas van Gent in 1824, as well as the construction of the next part of the Canal to Terneuzen. A quayside stretching from the Muidepoort to the Dampoort was built: the current Handelsdok. The Stukwerkers followed the cargo and moved their activities to the new dock.

Interpersonal disputes cause a number of members to leave the Gecommissioneerde Stukwerkers (Commissioned



Stukwerkers) in 1841 and found their own Corps, the Nieuwe Korps der Stukwerkers (New Corps of Stukwerkers). The two companies became rivals. This type of competition was virtually unknown in those days. The City Council of Ghent finally intervened and merged the two companies back together under the name Stukwerkers. When octroy (local tax) law was abolished in 1860, the Stukwerkers organisation became independent. In 1878, Stukwerkers started hiring casual labourers on a project basis. Meanwhile, the social

Stukwerkers Flag

The Stukwerkers Corps was given a personal flag by Mr Van der Eecken, valuer in Ghent, to fly at the formal inauguration of the Canal Ghent-Terneuzen in 1827. The emblem for the Corps was a red lion with black tongue and claws on a shield of gold and silver stripes. The Corps' founding year was also portrayed.



When the colours needed brushing up around the year 1900, the job was entrusted to a liberal Stukwerker. Since the colour of his preferred political party was not on the flag, he painted the tongue and claws blue.

The flag of the Stukwerkers Corps (110cm x 170cm) was the showcase for the company for a very long time. The last time it was used for official purposes was in 1913, as background for the group photo of the Stukwerkers stakeholders.

Since then it is kept at the Stukwerkers headquarters, where it has a prominent place behind glass in the conference room. The conference room where visitors and guests are invariably welcomed, is the perfect location for the flag and other treasures from the Stukwerkers' past to be on permanent display, thereby illustrating the company's historical character.



OVER THE YEARS, STUKWERKERS HAS DIVERSIFIED INTO HANDLING VARIOUS TYPES OF CARGO, SUCH AS PROJECT CARGO (PICTURED), BREAKBULK AND CONTAINERS.

security benefits remained in place. Moreover, the company started its own health insurance, paying ill workers eight Belgian Francs a week. The retirement age of 65 was laid down in the company's articles of association in 1904.

Evolution on the quaysides in the meantime continued. The Voorhaven, equipped with steam cranes, came into operation in 1886. After the First World War, depots were erected on the Port Arthurlaan for the storage of bales of raw cotton. The Stukwerkers company to this day remains active on the same location.

During the six-hundred-year anniversary celebration on 22 January 1938, the dean proudly concluded that Stukwerkers was the only workers corps in loading and unloading vessels that had stood the test of time. He also emphasised the pioneering role that Stukwerkers played in terms of social security, which was becoming increasingly implemented by the government at the time. The 'Samenwerkende Vennootschap De Stukwerkers', or Cooperating Company of Stukwerkers, that was registered in 1896 became a fully-fledged limited-liability company in 1949, and has remained that way ever since.

Stukwerkers continues to grow. Over the ages, the company has continued to adapt to the ever-changing market situation. Not just by taking into use new quaysides such as the Sifferdok, Mercatordok, and Kluzendok, but also by diversifying the cargo the company handles: from traditional cargo to project cargo, and from bulk cargo to containers. The most recent evolution was the development of various container freight activities. Another focal point for the company in recent years has been the multimodal logistics of all Stukwerkers quays, making them accessible by both seagoing and inland vessels, trucks, and trains.

I. WWW.STUKWERKERS.COM

Stukwerkers

Company profile

Stukwerkers was founded in 1338 in Ghent, making it one of the oldest stevedoring companies in Europe. Stukwerkers is active in the Ports of Ghent, Brussels, and Zeebrugge, as well as in La Louviere. They handle about 2,5 million tonnes of cargo per year.

Stukwerkers has five different deep-water terminals in the Port of Ghent, with a combined quay length of over 4 km. The open quay surface totals 500,000m², with an added 100,000m² of covered warehouses. Seven mobile harbour cranes (currently up to 144t lifting capacity, single lift) take care of loading and unloading. All terminals are multimodal; accessible by rail, truck, seagoing vessels and inland vessels.

The company's origins are in general cargo and over the years, they have diversified into handling various types of cargo. Next to breakbulk and containers, general cargo remains their main activity.

The largest amount of their cargo flows take place within Europe. Approximately two thirds of all cargo handled is breakbulk, but this varies per year. In terms of breakbulk, a large part of the cargo that the company deals with is steel, in all its manifestations: coils, slabs, long products, wire, and plates. Their 7,000m² specialised steel terminals have lift trucks with a lifting capacity up to 45t, mobile harbour cranes with up to 144t capacity in single use, which can be doubled, as well as a 45t roller bridge crane and magnets for steel handling. They are temperature and humidity controlled and especially designed and equipped for the handling and storage of high value coils. Stukwerkers also deals with a lot of forest products such as pulp, paper reels, plywood, and timber. Apart from specialised steel terminals, Stukwerkers also offers terminals equipped for the distribution of forest products, fertilizers, dry bulk products, automotive cargo, general cargo, and containers.

Container handling is a growing part of business. The company is working towards stripping & stuffing services in the future. They see potential in creating smarter connections, such as



STUKWERKERS HAS FIVE DIFFERENT DEEP-WATER TERMINALS IN THE PORT OF GHENT, WITH A COMBINED QUAY LENGTH OF OVER 4 KM.

reloading empty containers and redistributing them. Wherever possible, the company has a 'first and last mile only' policy for trucks. For that reason, they use a lot of barges when transporting goods to and from ports such as Rotterdam and Antwerp. By facilitating storage and transshipment, hundreds of trucks can be kept off the congested Belgian roads. The company also puts its rail connections to good use: there is a daily train connection from Ghent to Mortara, Italy, and a direct service to China every second or third day.

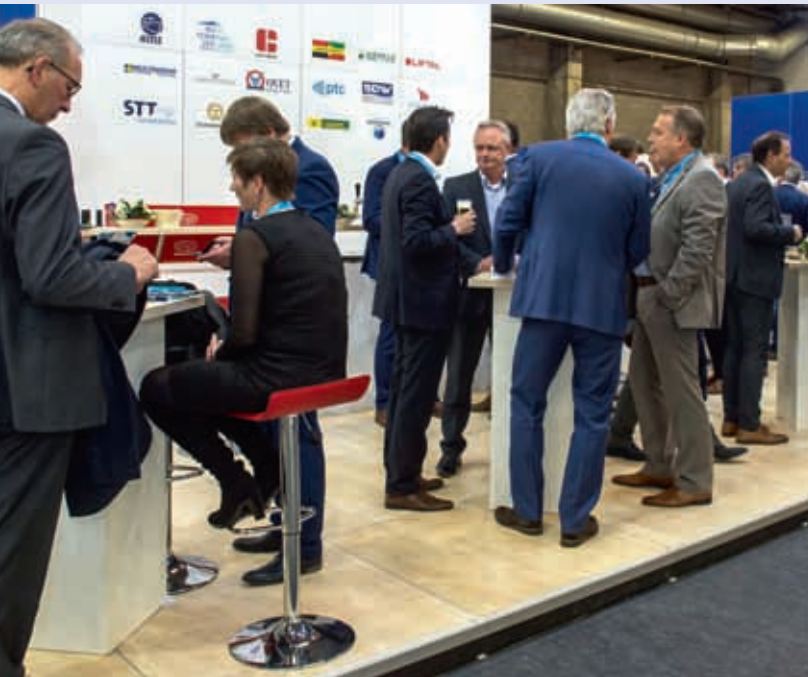
Complementary to the main activities of cargo handling and storage, Stukwerkers furthermore provides forwarding, logistical, and customs formalities. Their port agency, De Baerdemaecker NV, annually handles around 420 vessels. De Baerdemaecker offers liner agency, tramping, protective agency, forwarding, customs agents, and custom clearances via an EDI link with authorities and fiscal representation.

Stukwerkers wants to remain diversified. Perhaps the company's long lifespan can even be attributed to its versatile deployability. When one commodity was slow, they could focus on another.



CONTAINER HANDLING IS A GROWING PART OF STUKWERKERS' BUSINESS.

The leading project cargo and breakbulk event



Messe Bremen, Germany
29 - 31 May 2018

Breakbulk Europe has been the networking hub for project cargo and breakbulk industry professionals in Europe for over a decade. This year's event will take place in the Messe in Bremen, as Breakbulk Europe's traditional showgrounds, the Expo in Antwerp, is currently undergoing a massive renovation.

Exhibitors and sponsors include cargo owners, ocean carriers, freight forwarders, ports/terminals, heavy haulers, and equipment companies. With over 400 exhibitors and sponsors, Breakbulk Europe will provide a dynamic conference, along with a range of educational and training workshops. Industry experts, including leading shipping companies, can share their views in conference sessions, which vary from intensive all-day classes held the day before the exhibition opens, to many on-the-floor sessions. Needless to say, the event will offer exceptional networking opportunities for everyone involved in the industry.

[I. WWW.BREAKBULK.COM/EVENTS/BREAKBULK-EUROPE-2018](http://WWW.BREAKBULK.COM/EVENTS/BREAKBULK-EUROPE-2018)

Exhibitors at North Sea Port Pavilion Booth: 518

- Lalemant
- Mammoet Westdorpe
- Multirship
- North Sea Port
- Ovet Shipping
- PTC
- SDW Shipping
- Stukwerkers
- Supermaritime Group
- VDS Staal- en Machinebouw
- Verbrugge Terminals
- Zeeland Port Promotion Council

Lalemant NV

Booth: 518

Lalemant NV is headquartered in Ghent, Belgium, and has various branches spread throughout Europe. The company combines over 100 years of experience in agency, barging, chartering, and trucking. More specifically, the chartering desk handles cargo sizes ranging between 1,500-150,000 tonnes on a worldwide basis in both dry and liquid markets.

Kamsar Express, a joint venture between Lalemant Ghent and AMA France, connects Europe with Kamsar, Guinea, on a four to six week basis. The service is secured by dedicated multi-purpose tween deckers with various lifting capacities. Breakbulk, containers, and heavy loads are loaded and discharged in either Ghent and Kamsar or in any port enroute, as well as on inducement.

[I. LALEMANT.COM](http://WWW.LALEMANT.COM)



Mammoet – Westdorpe

Booth: 518

Mammoet's terminals take chain optimisation one step further. Factory-to-foundation projects require accessible ports with connections to all other modes of transport, sufficient ground bearing capacity, and heavy lift facilities. The Mammoet Terminals in Westdorpe are ideally located in the international ports of Terneuzen, Ghent and Antwerp. The terminals offer unique, 24/7, tailor-made solutions for your supply chain management, varying from small one-off services to fully completed services.

The Multipurpose Terminal Westdorpe provides:

- Moving Loads (sledding, jacking, SPMTs) and also via RoRo quay;
- Lifting work (loading, unloading and transshipment);
- Transport by rail, road, and water;
- Storage facilities (8,000m² covered storage, 80,000m² outside storage);
- Assembly / disassembly (modules, bridges, cranes, windmills);
- Just-in-time delivery;
- Feeder services;
- Container and bulk handling.

I. WWW.MAMMOET.COM



Multraship

Booth: 518



Leading towage and salvage specialist Multraship is a division of the Muller Maritime Group, jointly owned by the Muller family from Terneuzen and Hamburg-based Fairplay Towage. The company's core activities include harbour and terminal towage, salvage and wreck removal, sea towage, offshore services, and port services. Multraship operates a large, modern fleet of tugs, self-propelled floating sheerlegs, diving support vessels, as well as other units. The company's head office is situated in Terneuzen, the Netherlands. Other divisions and participations of the Muller Maritime Group are Antwerp Towage, providing towage services in the river areas of the port of Antwerp and CTOW, and a joint-venture with DEME and Herbosch-Kiere, providing services for dedicated maritime terminals worldwide, including all port operation activities.

I. WWW.MULTRASHIP.COM

OVET Shipping

Booth: 518

Ovet is a stevedore company with terminals located on both sides of the River Scheldt. Ovet has a 16ha open stock yard in Terneuzen, and a 31ha open stock yard and 6,000m² covered storage in Vlissingen. Ovet has over 60 years of experience in the transshipment of dry bulk, and has in recent years also become increasingly specialised in handling break bulk.

With four floating cranes, several mobile shore cranes, and extensive licenses, Ovet can cover a wide scale of products, from coal to agri-bulk, and from containers to steel coils. Moreover, Ovet is GMP+ and AEO certified and has ISPS facilities.

I. WWW.OVET.NL



SDW Shipping offers a monthly direct connection between Europe and the West Coast of South-America. Their fully chartered vessel can visit any port on route in both continents, and additional port calls are always possible. SDW Shipping handles all sorts of cargo, including IMO, and specialises in rolling material and project cargo, including heavy lifts. The company offers heavy lift and transport specialists, fluent Spanish speaking personnel, and direct contact both during and outside of office hours. The staff's local knowledge (language, import regulations, and customs issues) ensures an excellent service. With a strong background in shipping RoRo cargo, SDW Shipping can meet demands for shipping trucks, cars, machinery, and agricultural equipment. SDW Shipping also supplies suitable container types for any kind of cargo.

I. WWW.SDWSHIPPING.COM



Stukwerkers was founded in 1338 in Ghent, making it one of the oldest stevedoring companies in Europe. Being located deep into the mainland and in the heart of the port of Ghent, Stukwerkers offers a considerable advantage in terms of transportation and distribution logistics.

Stukwerkers customers are carriers, producing companies, traders, and cargo-owners seeking a competitive port with a good draught and an excellent entry/exit point to the European Union.

Stukwerkers' major activities are storage, warehousing, and handling of goods. They offer specialised terminals equipped for the distribution of steel, forest products, fertilizers, dry bulk products, automotive, general cargo, and containers. In total, the Stukwerkers group has 500,000m² of open quay surface and 100,000m² of storage space.

Complementary to the main activities of cargo handling and storage, Stukwerkers provides all agency services, forwarding, logistical and customs formalities.

I. WWW.STUKWERKERS.COM

With a strong focus on Sub Saharan Africa, the Supermaritime Group offers vessel agency and logistics services. Customer dedication, extensive local and global experience, and tailor-made solutions are the company's key differentiators. Operating 36 offices in sixteen countries (ten in Africa), the group is managed by a team of dedicated and experienced shipping and logistics professionals. Their teams in Rotterdam and in other global locations manage complex and challenging projects on a daily basis. The Project Logistics Specialists team is renowned for its proactive and dependable approach. Supermaritime Nederland, with its deep-sea terminal located in Vlissingen, can efficiently handle all types of cargo, but specialises in project cargoes such as oil & gas, offshore wind, dredging, and energy equipment.

I. WWW.SUPERMARITIME.COM



VDS Staal- en Machinebouw

Booth: 518

VDS is a privately-owned company serving the offshore oil/gas & wind, petrochemical, machine and civil industry, as well as ship building and repair. Their services include logistics, engineering, procurement, construction, manufacturing, preservation, coating/painting, assembly, start up, and installation. They operate fully equipped offshore terminals 24/7 with harbour cranes, SPMT trailers, forklifts, heavy lift cranes, and reachstackers. They offer a berth for logistics and mobilisation / demobilisation of offshore vessels (or barges at the North Sea with jack-up facilities). VDS has its own in-house engineering department. VDS is a one-stop manufacturing shop with bases in Vlissingen, Rotterdam, and Eemshaven, catering for all sort of projects.

I. WWW.VDSSTAALBOUW.NL



Verbrugge

Booth: 518 & 1529



Verbrugge is a leading logistics services provider with terminals in the ports of Vlissingen, Terneuzen, and Zeebrugge. Verbrugge Terminals handles over 14 million tonnes per year in Terneuzen and Vlissingen. Verbrugge Terminals focuses on a selective number of product markets, including metals/lumber/steel, energy project cargo, noble bulk products, and paper and wood pulp. The company also offers a wide range of key support services including short- and deep-sea chartering, port agency, cargo agency, liner agency, freight forwarding, road transportation, and customs services.

I. WWW.VERBRUGGEINTERNATIONAL.COM

Zeeland Port Promotion Council

Booth: 518

Zeeland Port Promotion Council (ZPPC) is a non-profit organisation, whose main objective is to promote the port of Zeeland and ZPPC participants. ZPPC currently has over 120 participants, which are companies that mainly originate from the port sector in Zeeland and are active in maritime services, transport and logistics, or industry. The foundation strives to enhance the position of the port of Zeeland. Companies and institutions with a direct or indirect interest in this objective can become a participant. ZPPC offers a platform for all parties concerned with the port of Zeeland for connecting, networking, exchanging information, and for engaging in business.

ZPPC acts as a port ambassador on behalf of its participants. The foundation's activities consist of organising the port network, promoting the port both nationally and internationally, as well as creating, enhancing, and maintaining public support for the port within the region.

I. WWW.ZPPC.NL



25th Anniversary

1993-2018

On Friday 23 March, ZPPC celebrated its 25th anniversary. About 130 invitees enjoyed an inspiring afternoon at CineCity XL Theatre. After ZPPC Chairman Henk de Haas took the audience on a trip through the past and current port, trendwatcher Richard van Hooijdonk looked ahead to future port developments. The dinner enjoyed afterwards was a pleasant network occasion for sharing thoughts on the speakers' introductions.

You can find more photos of the event on www.zppc.nl.



All photos courtesy of Scherpl! Fotografie

Full throttle for BTZ

Continuous growth figures for young terminal

With a strategic location in Northwest Europe and excellent hinterland connections, the industrial and logistics companies in the port area are profiting from the combination of unhindered seaport access and multimodal hinterland connections.

With easy access from the North Sea, the ports connect to Dutch, German, Belgian, and French waterways, with numerous transshipment choices and shorter shipping times. Highway access in less than ten minutes and an eight-hour shorter sailing time than to neighbouring ports of Rotterdam

and Antwerp are clearly reasons why many companies are grounding in the ports.

Customised solutions

Bulk Terminal Zeeland (BTZ) decided to lease two hectares of land, connected to a 250m quay in the Quarleshaven in Vlissingen in July 2015. This new facility was established to provide cost-effective and customised solutions for bulk processing and storage.

When entering the terminal just three years later, it is evident that a lot has happened. The terminal is enjoying a continuous growth, as existing and new customers are acknowledging the many pros of the facility. Time for an update with Ko de Kraker, Director and René Geleijnse, Commercial Manager at BTZ.

“Ever since the start of our activities in Vlissingen, there has not been a quiet moment for us,” Mr de Kraker says. “Last year we

MR GELEIJNSE (L) AND MR DE KRAKER (R)



All photos courtesy of Scherp! Fotografie

ROCKS FOR THE NORTHER AND RENTEL OFFSHORE WINDFARMS.



spent most of our working hours at the terminal,” Mr Geleijnse adds. “I think we have been away on business about three times. This is certainly not an ideal situation, as we want to pay our customers a visit every now and then, instead of inviting them to come over to Vlissingen. With the assignment of a new terminal supervisor, we hope to give ourselves some space.”

Multipurpose terminal

Starting as a terminal for bulk cargo, BTZ has grown into a multipurpose terminal. “From the start our customers were looking for multipurpose facilities on our terminal, so it was logical to enlarge our portfolio,” Mr de Kraker explains. “Considering dry bulk, we are now specialising in recyclable scrap. We are also one of the few agri bulk terminals specialising in bio grains and feed. We do not intend to compete with the terminals that handle general agri bulk, but with our bio-certified equipment and storage facilities we are a strong player in the handling, storage, and customised processing of this type of bulk.”

Mr Geleijnse adds, “We are experts not only in the discharging and loading of bulk cargo using a variety of cranes, but also in board-to-board handling. We ensure that every requirement is fulfilled using the correct equipment. Our terminal provides all the space needed for storage, handling, processing, and transshipment. We can crush, screen and repack bulk cargo in drums, big bags or containers, marking and weighing per unit or truck.”



EVERY REQUIREMENT IS FULFILLED USING THE CORRECT EQUIPMENT.

Offshore industry

In addition to scrap and agri bulk cargo, BTZ also offers handling and storage services for the offshore industry. Handled and stored goods range from rocks to cables and tools. Mr de Kraker, “We can at our terminal receive the large bulk vessels commonly used for rock transport. They can ship around 32,500t of rock in one load. With our equipment and, let us not forget, the huge flexibility of everyone in our

workforce, we are able to unload such vessels very fast. We received 120,000t of rocks for the Norther and Rental offshore windfarms. They were unloaded, stored, and reloaded within a period of just eight weeks. This really is an effort!" For reloading the rocks, Tideway's fall pipe vessels Flintstone and Rollingstone both visited the terminal five times.

Continuous expansion

BTZ today uses 60m of the 250m quay, but soon it will be possible to make use of the full length. The company will then be able to receive larger vessels, or allocate two vessels of 120m in one time. "These extra metres are a welcome addition to our facilities. This is not the only extension we are dealing with," Mr Geleijnse says. "We have constantly been expanding our terminal since 2015. We recently leased an additional 3.2ha from North Sea Port, so now we have a total of 11ha available for storage, 3.5ha of this space consists of warehouses." "The covered storage will soon be added to with an extra 6,000m². We have already bought the warehouse, but the problem is that the proposed building location on our terminal is currently occupied with bulk cargo waiting for transport," Mr de Kraker smiles.

Additional volumes

The growth of BTZ so far has been very fierce. But according to Mr de Kraker, this did not cannibalise on existing volumes in the port area. "It is a good thing that our growth comes from surrounding ports," Mr de Kraker says. "As our terminal is fully occupied most of the time, we regularly send our clients to our colleagues for storage, as we prefer to keep their business over here instead of in other competing ports. This may look risky

but we are convinced that in the end, our clients, as well as BTZ, will profit from our 'thinking along' attitude."

I. WWW.BTZEELAND.NL

BTZ is GMP+ as well as SKAL-certified. A quality mark of GMP+ International guarantees the reliability, quality, sustainability, and safety of feed. It means that Bulk Terminal Zeeland meets all local and international statutory standards in the feed industry. Being SKAL-certified proves Bulk Terminal Zeeland is qualified to handle and store organic food according to European legislation.



BTZ OFFERS HANDLING AND STORAGE SERVICES FOR THE OFFSHORE INDUSTRY. GOODS RANGE FROM ROCKS TO CABLES AND TOOLS.

BTZ CAN RECEIVE THE LARGE BULK VESSELS COMMONLY USED FOR ROCK TRANSPORT. THEY CAN SHIP AROUND 32,500T OF ROCK IN ONE LOAD.



Challenge accepted

Managing Kloosterboer's Vlissingen site



Gerben Paauwe took on the challenge as Kloosterboer's new Site Manager in Vlissingen.

When Jack Kloosterboer stepped down, Gerben Paauwe became Kloosterboer's new Site Manager. Kloosterboer's terrain in Vlissingen – with twelve coldstores, almost 2km of water-bound quayside, a complete logistic infrastructure with container-terminal, but also a juice-processing plant on 60ha of land – is quite a site to manage. PortNews asked Mr Paauwe about his ambitions and the challenges he faces.

Q: What exactly does a Site Manager manage?

A: Kloosterboer's prime activities are storage and transshipment of conditioned food products – frozen and refrigerated – but we also work with seeds or herbs, and with companies that are active in the metal industry for example. And it is not just storing and shipping that we do: there is also the repackaging, sorting, and quality checking. We have a large juice processing plant, which is rapidly expanding. A third party also conducts depot activities, such as Pre-Trip Inspections, for large shipping companies on our site: cleaning containers, offering them repair possibilities, and so on.

With around 400 dedicated colleagues, it is a lively setting. As Site Manager, I have the final responsibility for the site. Apart from forming an opinion on day-to-day business matters, I also try to keep a vision on the company as a whole: what can be improved, and how? What are the trends in our industry and how can we anticipate? The main focus points right now are sustainability, innovation and automation.

Q: What is your background?

A: I am a business economist, specialised in supply chain management. I previously worked as a logistics specialist, operations manager, supply chain manager, and have also fulfilled commercial roles. My affinity has always been in the field of logistics and the fresh supply chain. I find that to be able to handle final responsibility, you first need to have gained experience in a company's various disciplines. I started working for Kloosterboer three years ago as Business Unit Manager for juices and concentrates. After Jack Kloosterboer stepped down last September, I became the Site Manager.

Q: What has been your main focus since then?

A: Commercially, Kloosterboer is doing really well. The amount of cargo we handle for Chiquita, for instance, has almost doubled over the last few months, which results in 150 additional vessel calls every year. That has an impact on the organisation, as it requires more flexibility. We are dealing with these matters as we speak. Like many companies in Zeeland, we struggle with a vast shortage in people power. We are currently researching various smart solutions in automatization, such as unmanned vehicles and robotic arms in the terminals, as well as in customer service and truck handling: where we used to have desk clerks, we now have unmanned interactive kiosks. They do not replace our employees, they merely reduce their workload.

Q: What ambitions do you have for the future?

A: Sustainability is a major focal point throughout the Kloosterboer company. In Vlissingen, we have our own wind turbines, with which we supply 55-60% of our own energy demand. We are now looking at the opportunities of solar power.

Besides creating green power supply, Kloosterboer is

constantly searching for ways to minimise the footprint of cargo flows. The massive cargo flows on the Rotterdam-Vlissingen-Antwerp axis are ideal for transportation via inland waterways or by sea instead of by truck. Kloosterboer is committed to relieving pressure on land infrastructure, with inland cargo vessels sailing between Kloosterboer, Rotterdam and Antwerp on a daily basis.

The trucks that do unload at Kloosterboer are used by us for outbound flows: if they are already on the road, at least we can make sure we don't send them back empty. We also effectively plan our transports. Our truck drivers work with time blocks to avoid traffic peaks. The next step is in big data: monitoring the trucks via GPS. Our efforts are targeted at IT, with hardly any budget restrictions. Having effective IT systems that function on each level of the business and that customers can quickly plug into, will make all the difference.

Q: What makes the site in Vlissingen so successful?

A: Kloosterboer has been active in Vlissingen since the Eighties. We have a large footprint in the region, both in size and in employment opportunities. We participate in several interest groups and platforms. Kloosterboer is committed to Zeeland, and I think this commitment is mutual.

Between the loud roar of several large ports, Vlissingen still has a unique position. Customers are already diverting to Vlissingen, because the larger ports cannot cope with the demand. Vlissingen has fantastic hinterland connections, a deep-sea connection, rail connections, flexible solutions, and direct communication.

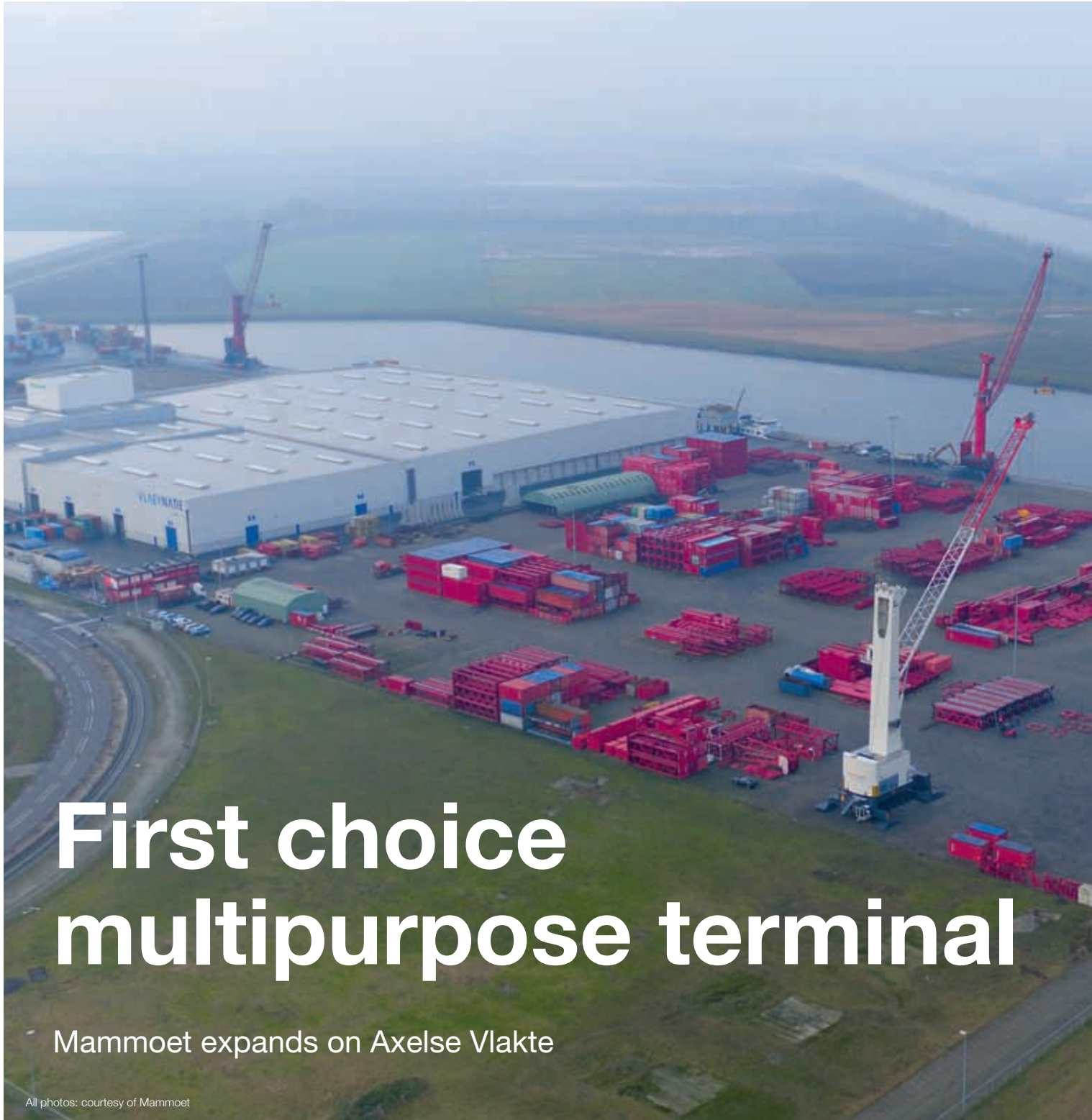
The merger of Zeeland Seaports and Port of Ghent has extended the playing field. I imagine this will lead to more industrial activity, and more uniformity with regard to mutual agreements. What is important, is that the companies in the port area cooperate and form alliances where possible. The port company's role in this lies in coordinating, cooperating, and facilitating.

Q: What challenges do you face at the moment?

A: The transition towards containerised cargo is unstoppable. Five years ago, 90% of our handled cargo was palletised. Give it another two or three years, and 90% of all cargo will be containerised. You need to be able to facilitate that, which is what we're working towards.

Growth is important. The challenge is finding enough qualified personnel and undergoing the right mechanisation and automation processes. For me personally, another challenge lies in improving the cooperation between companies. Forming alliances, and thinking more as a region and less as an individual company. We may be competitors in core activities, but we can also complement each other, and enhance the region's position by doing so.

I. WWW.KLOOSTERBOER.COM



First choice multipurpose terminal

Mammoet expands on Axelse Vlakte

All photos: courtesy of Mammoet

Ample activities can be noticed upon entering the Axelse Vlakte in the Terneuzen port area. Construction works are taking place for companies that are settling or expanding their existing facilities.

One of these companies is Mammoet. This company, well-known as one of the world's leading heavy lift specialists, is also located at the Axelse Vlakte. It was one of the first to settle down on this location in 2010. The terminal of 8ha and a 350m long quay (including a 50m long jetty) has grown into an important logistic hub for the company. But there is much more going on alongside the Ghent-Terneuzen canal. PortNews talks with Marlon Roels, Branch & Terminal Manager at Mammoet Terneuzen.

Third party cargo

"Many think of our terminal as a storage centre for Mammoet. But this is actually just a small part of our activities, Mr Roels explains. "Our terminal was built for the handling and storage of third party



ONE OF THE FIRST STEPS TAKEN IS THE LEASING OF AN ADDITIONAL PIECE OF LAND (SHOWN ON LOWER SIDE OF IMAGE), BORDERING THE EXISTING TERMINAL.



"WE HAVE THE RIGHT TOOLS, EQUIPMENT, AND KNOWLEDGE AVAILABLE."



ARTIST IMPRESSION OF THE NEW OFFICES AND MAINTENANCE SHOP.

project cargo, as both the quay and the terrain are suitable for heavy loads. The terminal soon grew from a storage facility into a (pre) assembly location. "Customers that we store cargo for soon found out that we are perfectly equipped for the assembly of, among other things, cranes," Mr Roels explains. Proof of this is the mega project that Mammoet executed in 2011. Back then, they used the Terneuzen terminal for assembling and testing three new PTC cranes. The three cranes, the biggest of their kind, were true landmarks in Zeeland. "Since our cranes left the terminal, they have been around the world for many projects, but one of them is now returning for a refit. At a client's request, it will be made suitable and tested for even heavier loads," adds Mr Roels.

Offshore wind

One of Mammoet's other clients is at present assembling a port crane on the terminal. Once completed, the crane will be shipped over sea to its working spot. Infrastructural pieces of cargo, such as bridges, are also stored, assembled, and transshipped on the Mammoet terminal. Although the port of Vlissingen has excellent offshore wind facilities, Mr Roels thinks that Mammoet can also play a role in this segment. "We often say about our working strategy that 'The biggest thing we move, is time'. In case of heavy offshore components, it can be interesting to select for us, instead of Vlissingen. During SPMT operations, for instance, we are unaffected by tide, saving a lot of time and money."

TERMINAL TERNEUZEN: 160.000 M2 PAVED TERRAIN

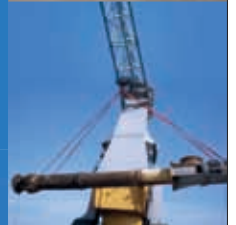
TERMINAL VLISSINGEN: 300.000 M2 PAVED TERRAIN

HANDLING DRY BULK AND BREAKBULK INTO SEAVESSELS, BARGES, TRUCKS AND TRAINS

COVERED AND FULLY VENTILATED STORAGE 45.000 M3

DRAUGHT: 16,50 M SW

GMP CERTIFIED



P.O. Box 1200
4530 GE Terneuzen
The Netherlands

Tel.: +31 115 676 700
Fax: +31 115 620 316
E-mail: info@ovet.nl

Contact: Mr. Bram Peters
Mrs. Ilona van Drongelen



> hoisting equipment > wire ropes > cranes > rigging > fall arrest equipment > hydraulic jacks

> chains and accessories > inspection > certification > dynamic loadtesting

LIFTAL

Location: Vlissingen-Oost
PO box 80
4450 AB Heinkenszand - NL
Groenlandweg 4, Harbor nr. 4056
4455 SN Vlissingen-Oost - NL

Phone: +31 (0)118-488 450
Fax: +31 (0)118-488 451
E-mail: vlissingen@liftal.com

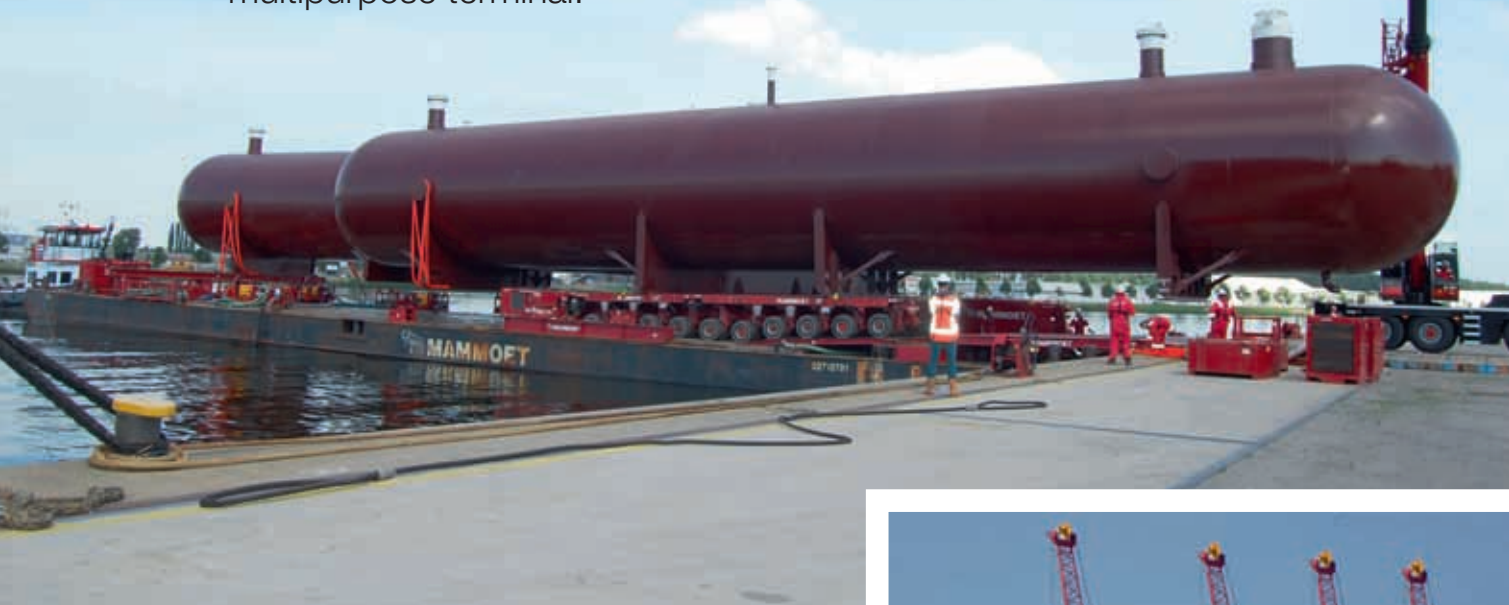
Location: Temse
Liftal NV
Industriezone TTS
Duitslandstraat 4
9140 Temse - B

Phone: +32 (0)3 - 7101182
Fax: +32 (0)3 - 7101184
E-mail: temse@liftal.com





Apart from the quay and terminal, we have the right tools, equipment, and knowledge available, making the Axelse Vlakte a true multipurpose terminal.



RORO FACILITIES FOR LOADING AND UNLOADING WITH SPTMS ARE NOT AFFECTED BY TIDE.

Cost and time-efficient

A lot is going on over here,” Mr Roels continues. “Mammoet has decided to concentrate its regional maintenance activities on our terminal. We have facilities in Terneuzen, in Ghent, and over here alongside the Autrichehaven. We have for efficiency reasons chosen to bring all maintenance activities for our lift and transport equipment to this terminal.” One of the first steps is to lease an additional piece of land bordering the existing terminal. “On an additional 2ha of land we are going to build new offices and a maintenance shop. The remains of the terrain will be added to our open air storage facilities, expanding this to around 10ha,” Mr Roels explains. When everything goes according to plan, construction of the new office and workshop will be ready by the end of this year. Mammoet is meanwhile searching for some extra mechanics to join their current team. Although the offices and workshop for the three locations will be concentrated on the Axelse Vlakte, this does not mean that activities will change. Mr Roelse explains, “Over here, we will stick to our handling, storage, assembly and testing activities and the Terneuzen branch will continue to provide heavy lift and transport services to their customers in the area.

Container handling

“When looking at the market demand for storing project cargo, I expect the extra hectares will soon be fully occupied, so for us it is important to use our premises as efficiently as possible.” Apart from project cargo, Mammoet also handles containers. “Until recently, we used our terminal for the handling, storage and transshipment of containers, but this activity has now moved over a few hundred meters to our neighbour Vlaeynatie, providing us with additional space for project cargo.” At Vlaeynatie and the new Zeeland Sugar Terminal, Mammoet takes care of loading and unloading. This collaboration (which also includes logistic service provider Swagemakers Transport) really proves that working together in a port leads to positive



THE TERMINAL IS PERFECTLY EQUIPPED FOR THE ASSEMBLY OF, AMONG OTHER THINGS, CRANES.

results for everyone involved. “When we need extra quay for operations on our terminal, we can make use of the Plantacote quay, Vlaeynatie’s fertilisers terminal, and this obviously works the other way around as well.” This is another fine example of good neighbourship.

Breakbulk Europe

“Many know Mammoet as a heavy lift and transport company. It is therefore important to promote our storage and handling capabilities, in order to become a first choice partner for this business as well,” Mr Roels says. “This is one of the reasons why we will be part of the North Sea Port Pavilion at the Breakbulk Europe in Bremen, so we can share our capabilities with the audience. Apart from the quay and terminal, we have the right tools, equipment, and knowledge available, making the Axelse Vlakte a true multipurpose terminal. With a 225t lifting capacity, heavy lift quay (20t/m²) and RoRo facilities for loading and unloading with SPMTs, there is not really much that we cannot do.”

WWW.MAMMOET.COM

Broadening the horizon

DFDS meets growing demands

The RoRo route Ghent – Gothenburg has gone from six to eight weekly departures. Since this year, two vessels depart from Ghent and two from Goteborg every week.

DFDS Ghent is experiencing growth. To meet growing demands, DFDS has increased its capacity over the years: the 200m vessels on the route Ghent – Gothenburg have been lengthened to 230m during a refit. Last year, the company deployed a fourth vessel on the route to further enhance the capacity.

Another four vessels are currently under construction at Jinling Shipyard in China. DFDS's current ships have a 4,800 lanemeters capacity, whereas the new vessels will have around 6,700 lanemeters capacity. Their dimensions are based on the limitations of the ports the vessels could be deployed to: they will be broader and higher, not longer. They will come close to the maximum measurements for the new locks in Terneuzen. The first newbuild is expected in the first quartre of 2019, the other vessels will follow with two months' time between them.

All vessels in one shipping pool

DFDS manages all its vessels in one shipping pool. Depending on shipping volumes, ships are deployed on different routes. So when DFDS' Mercatordock terminal in Ghent was extremely busy by mid 2017, Ark Germania was added to the sailing schedule at the last minute.

The collision between MSC Madrid and Primula Seaways on the Western Scheldt in March this year was another good example of the benefits of a combined shipping pool for all vessels: additional capacity was chartered within a day, and the shipping company found a permanent solution within a week while the Primula remains in the shipyard for repairs. Four routes were affected in total, on which ships were interchanged so that the maximum volumes were approached as closely as possible.

Avoiding traffic jams

The activities of DFDS Belgium have broadened during the last years. The company has expanded its multimodal services. Apart from their main activity as RoRo and LoLo Shipping Line with its own terminals, DFDS also ventured into container barge activities. This was a direct response to the growing need for container transport between Antwerp and Ghent. Belgium has a thriving industry, and, unfortunately, the congested roads



WHEN DFDS' MERCATORDOCK TERMINAL IN GHENT WAS EXTREMELY BUSY BY MID 2017, ARK GERMANIA WAS ADDED TO THE SAILING SCHEDULE.



APART FROM THEIR MAIN ACTIVITY AS RORO AND LOLO SHIPPING LINE WITH ITS OWN TERMINALS, DFDS ALSO VENTURED INTO CONTAINER BARGE ACTIVITIES.

THE RORO ROUTE GHENT – GOTHENBURG HAS GONE FROM SIX TO EIGHT WEEKLY DEPARTURES.



“ Container barge activity at DFDS has grown tremendously in a short time span and currently takes 30,000 trucks off the roads annually.

that come with it. Trucks experience long waiting times in and around the Port of Antwerp. The popularity of transporting goods on barges is increasing, as there is no risk of cargo getting stuck in traffic.

The fixed container barge lines established by DFDS have now been connected to cargo volumes headed in the opposite direction. Trucking companies support this development, because they also know that nobody makes any money while stuck in traffic jams, and they are happy to tend to ‘the last mile’ instead of the whole track.

Container barge activity at DFDS has grown tremendously in a short time span and currently takes 30,000 trucks off the roads annually. At present, DFDS has fixed container barges

lines on chartered ships to all major ports in the area: Antwerp, Rotterdam, Vlissingen and Terneuzen. Some of the cargo is first transported to Ghent by barge, and then linked onto the RoRo connection to Gothenburg.

Other connections

The shipping company also has fifteen weekly rail connections. Trains full of truck cabins are unloaded in Ghent, and depart to Sweden filled with palletised supermarket products. DFDS additionally loads and unloads steel trains and handles container trains for Volvo. On average 50-65% of DFDS'S cargo direct and indirect consists of Volvo parts, cars, and trucks. They also transport automotive cargo for other customers, as well as heavy machinery and chemicals in tank containers.

DFDS's growth is therefore linked to that of Volvo, in both cars and trucks. DFDS is virtually part of the Volvo production chain: they transport a lot of semi-finished products, which means the same vehicle (or parts thereof) is transported several times. There is a LoLo connection with a vessel sharing agreement between Antwerp and Ireland, a RoRo line between Zeebrugge

Top performance in refining

Zeeland Refinery is one of the most efficient refineries and performs as one of best in Western Europe. The refinery has a crude oil distillation unit and one of the largest hydrocrackers in Europe.

www.zeelandrefinery.nl



TPT is a chemical logistic service provider and contract manufacturer based in Terneuzen.

'VALUE ADD SERVICES'

www.tpt.nl | info@tpt.nl | +31(0)115 640 840

JK VAN KEULEN TRANSPORT MIDDELBURG



Van Keulen Transport celebrates its 75th anniversary

Van Keulen Transport celebrates its 75th anniversary this year. This Zeeland family business was established in March 1943 in the agricultural village of Biggekerke by Adriaan van Keulen. His son, Wim van Keulen, was determined to put the small-scale transport company on the map, and moved it to the Arnestein industrial estate in Middelburg in 1996. Today, Edwin van Keulen is the third generation of the family at the helm of the company. The former horse-and-cart service has evolved into a versatile logistics service provider with some sixty members of staff.

In addition to all kinds of agricultural transport, special construction transport, waste, pallet and joint cargo transport, Van Keulen is increasingly handling the transport of sea containers arriving at the port of East Flushing. Their fleet consists of 60 trucks and 80 trailers. In addition, the company also handles storage and transhipment.

A customer only has to call, and a truck is ready within an hour. That requires a lot of planning, but the ability to make quick changes is the strong point of this Zeeland family business.



WWW.VANKEULENTRANSPORT.NL

Uijterschootweg 3 | NL-4338 PN Middelburg | Tel. 0118 - 616200

DFDS MANAGES ALL ITS VESSELS IN ONE SHIPPING POOL. DEPENDING ON SHIPPING VOLUMES, SHIPS ARE DEPLOYED ON DIFFERENT ROUTES.



and Rosyth (Scotland), and a LoLo connection between Zeebrugge, Immingham (UK), and Norway. DFDS has been offering passengers transport to and from Sweden for many years, bicycles, motorcycles, cars, motorhomes and caravans included. From 15 May 2018, passengers can also embark on freight vessels between Zeebrugge and Rosyth, Scotland, providing passage in 23 hours.

Both the merger between Zeeland Seaports and Port of Ghent, and the construction of the new locks in Terneuzen are promising developments for the international company, as port unity can ensure streamlined processes.

DFDS believes the creation of North Sea Port could play an important role in employment opportunities. Like many companies in the port area, DFDS has a growing shortage in people power. The port authority could assist companies and those seeking employment cross-border. Apart from that, the new and unified port authority can provide substantial value in aligning the needs of the different port users by further optimising the lock priority rules.

1. WWW.DFDS.COM

Stepping up digitally

Following the implementation of new online booking systems for shipping, passenger, and logistics, DFDS has launched new apps for passengers, drivers, and freight customers. The digital developments will increase the flexibility and efficiency of DFDS operations in all areas. A new Customer Experience Management (CEM) platform, which will be launched during the second quarter of 2018, will further intensify the work. The digital ambition is to create a long-term transformation of the company, driven by smart data, automation, modularization, and connectivity, paving the way towards autonomous transport.

Digital developments are monitored by a new Digital Innovation Team that is part of DFDS' Digital department, which comprises sixty cross-functional team members.

ARTIST RENDERING OF ONE OF THE FOUR VESSELS (DESIGNED BY KNUD E. HANSEN) THAT ARE CURRENTLY UNDER CONSTRUCTION AT JINLING SHIPYARD IN CHINA.





A TOTAL OF 34 TANKS WILL BE CONSTRUCTED ON APPROXIMATELY 8HA.

New tank terminal in the port of Vlissingen

500,000m³ flexible storage facilities for liquids

Swiss company PSB Alpha is going to invest EUR 250 million in a new to build tank storage facility in the Port of Vlissingen through its 100% owned subsidiary Alpha Terminals BV. It is expected that between five and seven million additional tonnes of liquid bulk will be passing through the quays at North Sea Port as of 2020.

Since PSB Alpha announced their plans, a lot has happened according to Mike van Croonenburg, President at PSB Alpha. "After publication of our press release, our telephones have not stopped ringing," says Mr van Croonenburg. "Everyone is interested in our plans. Contractors, prospectors and job seekers are searching for information. This is no surprise, as it is not often that a new tank terminal is constructed in the Netherlands, let alone in this region."

After building the new tank terminal, the company will aim at niches in the market. Dr Konstantinos Ghertsos, Commercial Director at PSB Alpha, clarifies, "Most European tank terminals offer the same. They are often dedicated to a close-knit community of customers and commodities. The tanks are also sometimes used for strategic, long-term storage. This has caused the market to become rather two-tiered. Sometimes customers reserve additional space so terminal operators cannot provide the capacity to others. What we want to offer is flexibility and availability."



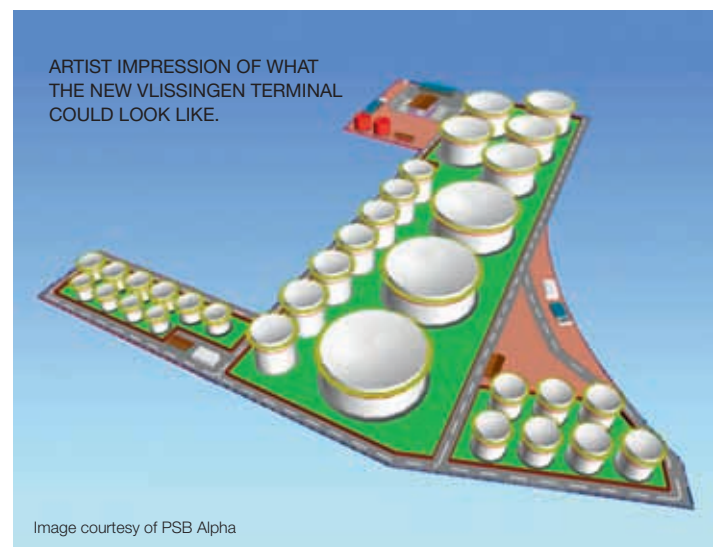
We want to build a future-proof terminal that is not restricted to a certain type of fossil liquid or gas.

“We compare our new planned terminal with an airport,” adds Mr van Croonenburg. “The aim of an airport is to get travellers in and out as fast as possible. And that is exactly what we want to do with our terminal. If a customer wants to store liquid for a short time period, then that is also fine by us.”

The future for storing liquids includes a big question mark. The demand of fossil fuels is likely to decrease, but the storage of other types of liquids, such as liquid biomass and other renewable liquid fuels, could grow. The same applies to, for instance, carbon neutral gas. This uncertainty is another reason for the proposed flexibility. Mr van Croonenburg explains, “We want to build a future-proof terminal that is not restricted to a certain type of fossil liquid or gas. We expect the split liquid/gas will be around 50/50. What we are going to build are tanks that can be used for a large variety of liquids and gasses. Fossil, but of course also renewable, carbon neutral products, in order to adapt to the climate change targets as set in the Paris Agreement for 2050. To realise this, it will also be necessary to be able to change fluids and gasses in our tanks swiftly, safely and with ease.”

With their plans in mind, it was not a difficult decision for PSB Alpha to opt for the port of Vlissingen, admits Dr Ghertsos. “Vlissingen really is an underestimated port. It has plenty of opportunities that provide our terminal with a good starting point. The location is perfectly positioned towards the North Sea and is also very attractive for the hinterland, certainly when

considering the new Seine Nord connection. What also works for Vlissingen is the fact that it is relatively close to the Thames area in the UK which, due to urbanisation, has a shortage of tank storage facilities.” Mr van Croonenburg adds, “With 16.5m, the draught was already excellent, and with the new additional dredging to take place at the entrance to the Western Scheldt River, the draught has increased to 17m. At high tide draught could even reach 18m, which is perfect for accommodating large liquid bulk vessels.”



MR VAN CROONENBURG (L) AND DR GHERTSOS (R). BOTH WELL-ALIGNED WITH NORTH SEA PORT.





THE LOCATION, CLOSE TO THE ENTRANCE OF THE PORT AREA, IS PERFECTLY POSITIONED TOWARDS THE NORTH SEA AND IS ALSO VERY ATTRACTIVE FOR THE HINTERLAND.



VLISSINGEN IS ONE OF THE FEW LOCATIONS WITH ROOM FOR BOARD-TO-BOARD LOADING. IF NECESSARY, THE NEW JETTY THAT WILL SOON BE BUILT CAN ALSO BE USED FOR BOARD-TO-BOARD LOADING

Vlissingen is one of the few locations with room for board-to-board loading. According to Mr van Croonenburg, board-to-board operations are a result of a lack of storage facilities, but if necessary, the new jetty that will soon be built can also be used for board-to-board loading, in case customers require this. "In fact, when compared to anchored board-to-board operations, this kind of activity is much safer at a jetty, as there is dedicated equipment for loading and unloading," says Mr van Croonenburg.

Mr van Croonenburg has already addressed ample compliments to the Port Authority of North Sea Port. "North Sea Port has so far been most collaborative in helping us to realise our plans. We are truly well-aligned in this project, which we feel very comfortable with."

The new terminal will be located close to the entrance of the port area in the so-called Sloehaven. A total of 34 tanks will be constructed. The terminal (approximately 8ha) will then have a capacity of 500,000m³. "The tanks will not be built in phases. We have instead chosen to complete the terminal in one go, as this is more efficient and cost-effective," explains Mr van Croonenburg. Dr Ghertsos adds, "We are now seeking the right contractor for the terminal's construction via a tender. There are three main selection criteria in this tender: performance and quality, price, and innovation. The latter might sound a little strange, but we need innovative solutions in order to make our storage facilities flexible and our loading installations fast, obviously without compromising on safety. We are also interested in sharing our vision for future storage products with the engineering industry, to assess what this sector views as global trends."

For PSB Alpha, the terminal in Vlissingen, which will employ approximately 60fte, is the first terminal they are going to operate. This does not mean that they are new to the market. Dr Ghertsos states, "Since we became involved in business as storage owners, we have learnt a lot about this side of the business. We have a valuable backup of one of our affiliates, Prometheus Partners, that has ample knowledge and expertise on the energy trading business. So we look at this project with confidence." Mr van Croonenburg concludes, "We have now reached an important stage in the development, as we are waiting for the necessary permits to be granted. We are aware that this stage can be time-consuming, but once we have passed this milestone, we will be ready to act fast."

I. WWW.PSBA.CH

Planning tool for inland navigation

Better access and easier flow at Terneuzen locks

From 2018 to 2022, the construction of a new lock (Nieuwe Sluis Terneuzen) will take place in Terneuzen. The new lock will provide better access and easier flow from the Western Scheldt to the Ghent-Terneuzen Canal and beyond.

In the short term, construction will obstruct shipping as the new lock will be built on the spot of the existing middle lock. Only two of the three locks will be available during construction, which will result in waiting times.

To avoid delays as much as possible, the existing planning tool for sea shipping is now adapted to be suitable for inland shipping. With the new planning tool, one can see in advance at what time, and in which lock chamber, one can pass. Barge masters can with this tool inform the system about their expected arrival time in Terneuzen.

Register via BICS, telephone or website

Barge masters can announce their arrival 24 hours in advance via BICS, telephone, or via www.sluisplanning.nl. The barge master can also on this site check at what time, and in which lock chamber his barge is expected. He can subsequently better adjust his travel plans, for instance by sailing slower and thus saving fuel. It also becomes easier to wait further away from the lock at less occupied waiting berths.

Not mandatory, yet recommended

Using the planning tool is not mandatory, but comes highly recommended. With this tool, barge masters will be allowed to pass through based on the first possible free position. A barge may have an earlier turn if it signed up, even if it arrives later than a barge that did not announce its arrival.

Certain rules apply for announcing the arrival time and any changes to this, the working arrangements made by North Sea Port, Kenniscentrum Binnenvaart Vlaanderen, Koninklijke BLN-Schuttevaer, Maritieme Dienstverlening en Kust and Rijkswaterstaat went into effect as per 1 January 2018.

Large scale

The passage of seagoing vessels has been planned since 2012, in order to reduce waiting times and smoothen the passing of locks. Never before in the Netherlands or Flanders has the passage of barges been planned ahead at such a large scale. For both companies and barge masters, the tool is an important application for an optimum planning.



TO AVOID DELAYS AS MUCH AS POSSIBLE, THE EXISTING PLANNING TOOL FOR SEA SHIPPING IS NOW ADAPTED TO BE SUITABLE FOR INLAND SHIPPING.

Photo courtesy of Patrick Vanhoppinus/Nieuwe Sluis Terneuzen.



All photos courtesy of Tanido BV

Tanido does things differently

Entrepreneurial spirit

Tanido has made it their mission to support the maritime industry in correctly assessing the weight of bulk and fuel loads on board both seagoing and inland river barges. The nautical-technical expertise bureau executes lightering of bulk carriers, draught surveys, bunkering, condition surveys, damage prevention surveys, laser gauging of inland vessels, and consultancy.



APART FROM DRAUGHT, DAMAGE PREVENTION AND CONDITION SURVEYS, LIGHTING OF BULK CARRIERS, LASER GAUGING AND CONSULTANCY, TANIDO SURVEYORS ALSO EXECUTE BUNKERING OPERATIONS.

'Big cargo problems make us smile', so it says on Tanido's website. The marine surveying company is proud of handling things differently – whether it is in cargo problems or in running a business.

Tanido was established by Jaap Beemster in 1986. In Dutch, Tanido is an acronym for 'Tot Aller Nut Is Deze Onderneming', meaning something along the lines of 'this enterprise is beneficial to us all', which is what Mr Beemster strives for with boundless dedication.

Individuality as key to healthy unity

Mr Beemster attributes the quality of Tanido's service to the drive of the people that work for the company who are legally speaking, not 'employees'. Tanido aims to ensure the careers of its surveyors by encouraging them, after three years of training in regular employment (provided they demonstrate their capability), to establish their own company. As self-employed

entrepreneurs, they legally connect their own company to the parent enterprise Tanido. According to the entrepreneur, this strengthens their self-respect, as they become directly responsible for their accomplishments. As a result, they are inspired and willing to go the extra mile.

Mr Beemster is an outspoken advocate for entrepreneurship. He does not believe in a business model based on employees, and encourages other business owners to share their company, and the responsibility that comes with it. Something he feels he should have done a lot sooner in life himself.

Mr Beemster established Tanido as a one-man business in 1986. In 1993, he got in touch with Arie Kleingeld, who also owned a one-man business and suggested the two should cooperate. Mr Kleingeld's company worked under a French parent company. Mr Beemster changed his one-man business to a private company with limited liability: Tanido BV,



TANIDO'S SPECIALLY DESIGNED INSTRUMENTS CAN BE USED TO MEASURE DRAUGHTS WITH AN ACCURACY OF ONE MILLIMETRE IN A SWELL UP TO THREE METRES.



JAAP BEEMSTER, FOUNDER OF TANIDO BV.

and founded a holding company called Tanido Beheer BV. Half of the Tanido shares belonged to Mr Beemster and his wife Ellen, and half to the French parent company. Things remained this way for 22 years. At a certain point, Tanido ended the cooperation with the French parent company and Mr Beemster bought back his company shares. He is now the only shareholder of Tanido Beheer. To safeguard the continuity of the company, he has separated profit shares of Tanido Beheer from control rights. The control rights are currently being transferred into a Trust Foundation, which is managed by a board consisting of the seven people closest to him.

A different business structure

He felt that being the boss first and foremost meant dealing with whatever was going on with his employees as a 'pater familias'.

“ Through the years, Mr Beemster has found the right format, which he now wants to share with others.

He barely got around to doing his actual job. After the financial crisis, during which Tanido lost 85% of its revenue, Mr Beemster and his wife decided they did not want to hire new employees. In 2009, they sought the advice of a tax lawyer, a jurist, and several leading entrepreneurs. Together, they created a concept for a different kind of business structure. The result was the establishment of an operating company under Tanido: the International Marine Surveyors Alliance Holland BV (IMSA). All of Tanido's work in the Benelux is now carried out by IMSA. People nowadays start out with a paid position at IMSA. They learn skills, and get to know both the company and the work. If both parties are still pleased after a period of at the most three years, the employee quits working for IMSA and founds a private company (BV) and holding of their own. Their own operating company becomes an IMSA stakeholder and participates in IMSA.

As these entrepreneurs work for one single company (IMSA), it is viewed as potential disguised employment. This is where Uniforce comes in. Uniforce is an independent organisation that has created the Declarabele Uren BV (DUBV), which is an entrepreneurial form for independent professionals. As employer, the DUBV is the contracting party towards the client. The entrepreneur can be seconded from the DUBV and work with all agreements (for services). In addition, they are covered by social insurance. Uniforce guarantees the government and

tax authorities that all these entrepreneurships will pay their taxes and premiums, and keep their finances in order. With so many entrepreneurships in their portfolio, Uniforce gets good deals with insurance companies for health care, disability insurance, and so on.

In Tanido's case, entrepreneurs are not allowed to work for parties other than IMSA. The surveying techniques that were developed in Tanido belong to the company. They can work for any IMSA division. In the future, another IMSA could be set up in a different port. IMSA II could be founded in Singapore, for example, or IMSA III in Richards Bay, South Africa. The entrepreneurs can choose which IMSA division (and thus Tanido) they want to work for. Once established, local people can be recruited for establishing their own entrepreneurships. Because these entrepreneurships exclusively work for IMSA, Mr Beemster feels Tanido has the obligation to offer them a future. A certain income needs to be guaranteed for the system to work.

Trial and error

Plenty of companies get bought out by competitors. They merge, or are simply taken off the market. The former owner receives a golden parachute, and the employees are out on the street. And this was exactly what Mr Beemster and his wife wished to avoid. He promised his late wife that in 250 years' time, Tanido will still exist. Everyone in the Tanido workforce now shares the responsibility. When one surveyor underperforms or has personal issues, others help out. Everyone is well aware that if they mess up, they will drag others down with them.

The development of this business model saw a lot of trial and error. Through the years, Mr Beemster has found the right format, which he now wants to share with others. Giving people more independence somehow increases solidarity. It is a light-hearted way of doing business, that makes Mr Beemster feel at ease, as an employer – his business card reads 'LWT, NP', which stands for 'Leader Without Title, Nice Person'. When Ellen fell ill in 2011, he was able to take care of her for eleven

Tanido House Rules

An organisation only becomes truly powerful when everyone's right for individuality is ensured. Copying one another does not get you anywhere, and comparison leads to failure.

Every right-minded organisation can use these focus points:

- When something disturbs you, say it. Discuss it with the person that can change this, instead of complaining to others about it.
- Dare to be open. Trust your gut.
- Talk to each other, not about each other. If a member of the team is brought up in a conversation, make sure this always happens in a positive context.
- Humor is allowed and encouraged. No problem can be solved without it.
- Take good care of yourself.
- Treat another with the same respect you treat yourself with.
- Nobody and/or nothing is 'crazy'.
- Try to listen. You want others to listen to you, too.
- Do not give 'advice' unless requested.
- It is an individual, fundamental right to change your opinion, to say "no" or to say "I don't know".

months, without worrying about his company. What boss, he asks, can say the same? He trusts the people he works with to make their own decisions. Clearly, guidance is needed, but when people make a wrong decision, he knows he will hear about it and deal with it. For the system to work, everyone involved needs to be honest. This is why Tanido has installed some house rules that everyone that works for IMSA knows and respects.

WWW.TANIDO.COM



TANIDO SURVEYORS PERFORM BUNKER SURVEYS ACCORDING TO THE STRICT SS-600 CODE OF PRACTICE, AND STAY ON BOARD TO SUPERVISE THE ENTIRE BUNKERING PROCESS.



TANIDO SURVEYORS DURING A DRAUGHT SURVEY.

A fine example

BOW Terminal –
full service partner for
the offshore industry



UNLOADING
JACKETS WITH
SPMTS.

Photo courtesy of BOW Terminal

Long-lasting projects are following each other at BOW Terminal, resulting in a matchless vigour in the Westhofhaven in the port of Vlissingen. The terminal currently shows a lot of activities related to the handling and storage of components for the East Anglia offshore windfarm.

From its very start, the terminal has experienced an explosive development. "BOW Terminal started in Vlissingen in 2010 as a marshalling yard for the storage and handling of monopiles and transition pieces, but we have since grown into a full service partner for the offshore oil, gas, and wind industry," Mr Reijntjes, Managing Director at BOW Terminal, explains. "Our activities have been expanding from the start, resulting in an impressive track record. One of our latest projects, the East Anglia One offshore windfarm, is a fine example of what we are capable of." Scottish Renewables chose the Dutch company as marshalling yard for the handling and storage of pinpiles and jackets for this 714MW windfarm. Mr Reijntjes continues, "Work started at the end of last year with the storage of the first 60 of a total of 306 pinpiles. The first of the 102 jackets recently arrived on Dockwise's Mighty Servant. They were unloaded onto our heavy load quay with SPMTs. If all goes according to plan, this project will be finished in Q4 2018, just in time for the start of another large project."

A new stage

With this new project, BOW enters a new stage in its role as service provider for the offshore wind industry. About two years ago, the enterprise was invited to talk with MHI Vestas about their plans on establishing a twin hub for their Esbjerg facilities in the southern North Sea region. Mr Reijntjes: "All of a sudden, we realised we could become involved in this part of the offshore wind industry as well." Finally, after months of negotiating, BOW Terminal and MHI Vestas reached a solid agreement and the deal was officially announced at the end of November last year during the WindDays event in Amsterdam. Starting Q3 2018, BOW will provide the Denmark-based company with ample space of up to 20ha, and the use of its 525m long heavy-load quay for transshipment, handling, storage, and assembly activities. Up to fifty local jobs will be created with this new agreement.

Leading position

According to Mr Reijntjes, the deal has been concluded for several years. "The agreement with MHI Vestas underlines



Photo courtesy of maritimephoto.com

THE FIRST OF 102 JACKETS FOR EAST ANGLIA ONE ARRIVE WITH THE MIGHTY SERVANT.

the leading position in the offshore wind industry that we have reached in just a relatively short period. With our dedicated facilities in Vlissingen, close to the North Sea, without tidal restrictions and with excellent multimodal hinterland connections, we are positioned extremely well for North Sea offshore wind projects. This, together with our team's broad experience in handling offshore wind components, has resulted in a great offshore wind track record."

Norther offshore windfarm

The first project for MHI Vestas in Vlissingen will be the Belgian Norther offshore windfarm. "MHI Vestas will start transporting the various WTG components in Q3 2018," say Mr Reijntjes. "Forty-four 8MW turbines plus accessory towers sections and blades will be discharged, assembled, and stored. Installing



With this new project, BOW enters a new stage in its role as service provider for the offshore wind industry.

WORK FOR EAST ANGLIA STARTED AT THE END OF LAST YEAR WITH THE STORAGE OF THE FIRST 60 OF A TOTAL OF 306 PINPILES.



Photo courtesy of BOW Terminal

the turbines should start at the beginning of 2019, creating space at our terminal for other MHI Vestas projects.”

Complicated structure

Before installation can take place, the tower sections first need to be assembled. “Seen from a distance, a turbine tower looks quite simple, but it is in fact a complicated structure consisting of three pieces with lots of components inside that need to be connected with each other, which requires skilled technicians. The whole operation will also require ample supporting staff, a complete new office will be built for them on our terminal.”

All lights on green

The contract with MHI Vestas means that BOW's Terminal in Vlissingen will be fully occupied for a longer period. “This project is certainly very important to us, but does not mean we will forget about our other customers. We have already discussed matters with some of these clients and are looking for solutions, preferably in Vlissingen. We fortunately still have some aces up our sleeve, so all lights are on green for BOW Terminal to get ready for all our customer requests,” concludes Mr Reijntjes.

WWW.BOWTERMINAL.NL



SERVING THE TRANSFORMER INDUSTRY

EURO-MIT STAAL B.V.

STEEL SERVICE CENTER



EMS is specialized in slitting the higher grades of electrical steel for the transformer industry. Wide coils of thin gauge plate material is slit down to smaller coils, both widthways and lengthways. EMS is also able to cut these coils into so called laminations of customer-specific lengths and shapes, fitting the requirements of the transformer manufacturers.



P.O. Box 535,
4380 AM Vlissingen, The Netherlands
Location Duitslandweg 7,
Haven 1153, Vlissingen-oost
Phone: +31 (0)118 422500
Email: info@euro-mit-staal.com
Website: www.euro-mit-staal.com



ISO 9001 • ISO 14001



EURO-MIT STAAL B.V.



LOCATION OF THE THREE PLANNED WIND TURBINES ON THE STORA ENSO SITE IN GHEENT.

Photo courtesy of Stora Enso

Stora Enso welcomes wind turbines on Ghent paper mill site

North Sea Port recently announced the cutting of the first sod for the construction of three wind turbines on the premises of paper producer Stora Enso in Ghent.

Every year, Stora Enso Langerbrugge, located in the Ghent port area, produces 540,000t of recycled newsprint and magazine paper, fully based on paper waste. The paper mill also operates two high-quality bio-fueled heat and power plants that supply the required amount of process steam, and more than 70% of the company's electricity demand.

From the autumn of 2016 onwards, Stora Enso Langerbrugge uses an underground heat network to send green energy to Volvo Car Gent, where ENGIE also has three wind turbines. The Ghent paper mill equally focusses on additional renewable energy by constructing three wind turbines on its site. The three wind turbines on the Stora Enso site each have a capacity of 3.2MW, and will produce 21GWh of electricity per

year, the equivalent of the average annual power consumption of 6,000 families. As a direct consequence, CO₂ emissions will decrease by 9,600t each year.

All renewable electricity produced by the wind turbines will be used to produce the paper at the Stora Enso mill in Ghent even more sustainably.

Wind4Flanders, a public-private partnership between ENGIE and the finance companies FIGGA, FINILEK, IKA and the Brussels Intermunicipal Electricity company (IBE), will build and finance the three wind turbines. It concerns a local investment of EUR 15 million.

WWW.STORAENSO.COM

The Green Bay

Massive sustainable data centre in Zeeland

The Green Bay has announced its plans for the construction of the largest sustainable data centre in the Netherlands in the Sloe area, municipality of Borsele.

The new centre will be one of the most sustainable in the world. It will cover an area of 30,000m² and has a capacity of 30MW. The building will cover 15,000m², with 4,200 computer racks accommodating 150,000 - 200,000 servers.

The Green Bay's ambition was to construct a large, green data centre. Zeeland was already in the picture as a potential location early on in the process. The high-voltage grid runs from Borsele to Rilland, and via Bergen op Zoom into Noord-Brabant. The entrepreneurs of The Green Bay looked at candidate sites along

this axis. They got in touch with Peter Geertse from Zeeland Seaports, who connected them to Invest in Zeeland. With its broad network, Invest in Zeeland brought together the parties involved.

Reliable power supply

The energy for the data centre will be supplied by Zeeland wind farms and solar parks. Each data centre requires a reliable power supply. Solar and wind energy are however less constant than the energy flows generated from fossil fuels. The imbalance between the energy supply and demand results in fluctuations. A good example was recently in the news. Digital clocks were a few minutes behind, when fluctuations in the energy source over 1,000km away caused the energy flow to digital devices to briefly stall. Most conventional data centres use a diesel generator as back-up energy source. The Green Bay wanted a sustainable alternative, and finally decided on a battery back-up. This back-up will also be used by TenneT, the power switching station operator, to balance the energy network; an innovative collaboration that is a novelty in the Netherlands.



THE GREEN BAY EXECUTIVES, FROM LEFT: CCO GERBEN OUWENS, CEO & CTO, GERRIT GODWALDT, DIRECTOR PROCUREMENT JORRIT WILLEMS, AND EDWIN DE GROOTTE, CFO.

Photo courtesy of The Green Bay

ARTIST IMPRESSION OF THE DATA CENTRE.



Photo courtesy of The Green Bay

Zeeland's strong points

The site near the old coal-fired EPZ power plant offered various facilities that proved decisive for The Green Bay, such as the direct connection to the TenneT power switching station and the seawater cooling system.

Conventional data centres use electricity to cool their computers, which costs an enormous amount of energy. The Green Bay can benefit from a system that is already in place: the cooling system of the old power plant, which has a pipe tapping into the Westerschelde that pumps up seawater. Since the data centre requires pipes and a pump of a smaller scale, The Green Bay will make some adaptations to the system. The sea water will be converted into cold air to cool the computers. The location in Zeeland has fast fibre optic network connections

with the Randstad, making it an attractive alternative to Amsterdam, where most Dutch data centres are located. But the Randstad has several downsides to it, such as industries in the area putting a lot of strain on the energy network, and land is much more expensive.

The Green Bay hopes that its presence in Zeeland will function like a magnet, attracting other innovative, digital companies.

The license application is currently being settled at the Provincial Council. The license is expected to become available in May 2018, after which construction can commence. The Green Bay expects the data centre to become operational in July 2019.

WWW.THEGREENBAY.COM



Photo courtesy of The Green Bay

THE GREEN BAY EXPECTS THE DATA CENTRE TO BECOME OPERATIONAL IN JULY 2019.

KRONOS STARTED WITH A CAPACITY OF 10T PER DAY IN 1957. THE COMPANY HAS MANAGED TO REACH A DAILY VOLUME OF AROUND 300T.



All Photos courtesy of Kronos

Kronos invests in Ghent

Bright future for top class whiteners



After years of prudence caused by the worldwide crisis in, among others, the building industry, international company Kronos looks ahead with investments in most of its branches. With a new five-year investment plan, the annual production of Kronos Europe in the port of Ghent will rise from 85,000t to 120,000t. Apart from this, another EUR 10 million will be invested in the improvement of energy recovery from existing production facilities.

Front row

Being a true business-to-business company, Kronos has to deal with a background role in the awareness of people. But when looking at its market position, Kronos firmly sits on the front row. "Worldwide Kronos has six production facilities. Together they are ranked as the fourth biggest producer of whiteners, worldwide," states Mr Hugo Stas, Manager Energy & Planning at Kronos Europe. "The Ghent location is midsize, but considering the production of titanium dioxide pigments (TiO₂) based on chlorides, we are leading within the group with our high production rate. This is something we are really proud of."

Titanium ores

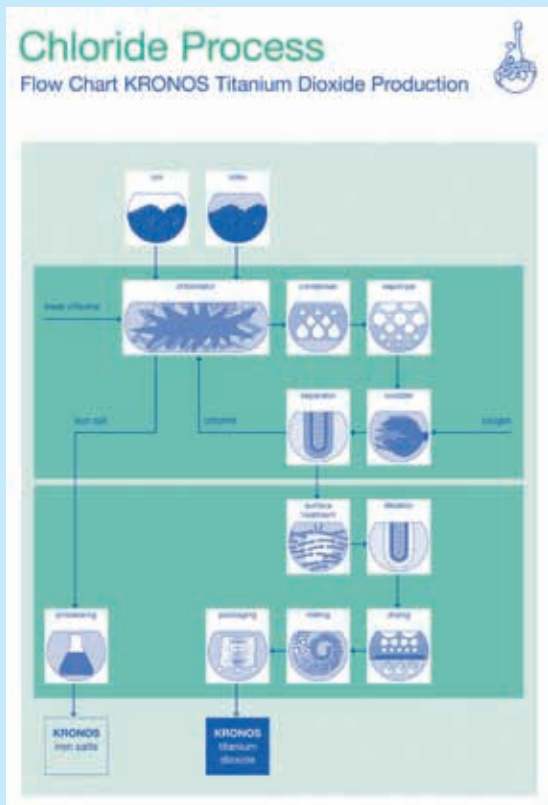
Kronos has been present in Gent since 1957. Back then, TiO₂ was produced by using the sulphate process. This largely changed to the more efficient chloride process in 1989. Mr Stas adds, "Kronos started producing TiO₂ whiteners in Norway more than 100 years ago. The whitener is made out of titanium ores. The company still has a plant and mine in Norway. The ores for our processes however, come from Australia, Canada, and South America, as the Norwegian ores are not suitable for us. We started with a capacity of 10t per day in 1957, and as a

About TiO₂

“Not many people know Kronos, let alone that they know what we are doing,” Mr Stas admits. “But when we tell them about the broad range of products containing our TiO₂, people realise that we are present in almost every household.”

TiO₂ is the whitest material on earth. When grinded into a fine powder, it transforms into a pigment that provides maximum whiteness and opacity. The pigments are used in paints and coatings, plastics, paper, building materials, cosmetics, pharmaceuticals, foods, and in many other commercial products.

All of the production in Ghent is based on the more advanced chloride process, a process that was developed by Kronos in the second half of the 1960s.



MR STAS, MANAGER ENERGY & PLANNING AT KRONOS EUROPE, WE ARE LEADING WITHIN THE GROUP WITH OUR HIGH PRODUCTION RATE. THIS IS SOMETHING WE ARE REALLY PROUD OF.”



ONCE PROCESSED, THE WHITENERS ARE PACKED IN 25KG BAGS AND IN BIG BAGS.

result of constantly improving our production process, we have managed to reach our present volume of around 300t per day.”

Chemical process

Kronos keeps on seeking ways to raise production capacity within the existing facilities. “In fact, most technical and chemical measures to make the production process as efficient as possible have been implemented. We invested in a new installation with a capacity of 40,000t in 1989. Today, this installation can produce 94,000t, thanks to improving our processes. We cannot further increase the capacity without additional installations. Producing TiO₂ is a chemical process, and like most chemical processes, it requires a lot of energy. So now we are also looking for solutions to improve our energy efficiency and reduce CO₂ output.”

Low temperature residual heat

When looking at sustainability, several studies were executed to investigate the possibilities of sharing residual heat and CO₂

with neighbouring companies, but so far this has not resulted in any concrete steps. “Our problem with this is that we have been located in the port area for a relatively long time,” Mr Stas clarifies. “Since we started, many factories and companies settled around us that cannot use our relatively low-temperature residual heat (max 90°C). Greenhouses would be perfect for this temperature, but there is no room for these in our area, and transporting our residual heat over long distances leads to reduced temperatures, and is not economical.”

Energy recovery

In order to operate as efficiently and environmentally-friendly as possible, ample efforts are put into the recovery and reuse of ingredients in the production process. Producing TiO₂ with the chloride process has the advantage that a large part of the chlorine gas can be recycled. A larger pigment separation filter will be constructed with the financial injection. “With this new filter, we can increase our production capacity in the chloride process.” Kronos is also going to improve energy recovery.

“In 2012, we built a co-generation installation. This installation now produces 1MW of power more than we require, and this additional power is added to the national network. In the next three years, we will invest in an off gas burner for our chlorinator exhaust gases. This off gas burner produces heat and with this heat steam will be produced through a heat recovery unit. The steam will be added to the total volume of steam we need in our process. In this way, we need less energy to fulfil our steam requirement.”

Hub for Germany

The choice for the port area as its location is an obvious one. The ores are transported by sea vessels to nearby docks. Sea-Invest takes care of the unloading and storage of the raw material. The same applies to the petroleum cokes. The port of Ghent also acts as a hub for the German plant of Kronos. After arrival from the sea in Ghent, these ores are transported to Germany by barge. Other materials, such as chlorine, come in by rail. Once processed, the whiteners are packed in 25kg bags and in big bags, and shipped all over the world. Mr Stas continues, “Being located in the port of Ghent has more advantages. It has an extensive network of pipelines for all kinds of utilities we need, such as natural gas, oxygen, and nitrogen. As we are connected to the high voltage grid, we can be sure of a reliable power supply.”

Considerable volumes

Kronos has been an important stakeholder in the port for decades. This is underlined by the fact that the current Plant



TiO₂ IS PRESENT IN ALMOST EVERY HOUSEHOLD.

Manager at Kronos, Mr Marnix Mahieu, is a member of the Council of Port Related Industry. Last year the production process resulted in a volume of 165,000 tonnes of bulk material, and 94,000 tonnes of TiO₂. These are considerable volumes, all contributing to the success of North Sea Port. “When looking at employment, we have 300 people working at our plant, but around 150 individuals can be added to this number, as they work for us through our partners,” Mr Stas comments. Kronos is thus an important player. With the new investments that demonstrate the parent company’s faith in its Belgian branch, the future looks bright for Kronos Ghent. Many households will undoubtedly in many ways continue to profit from its top class whiteners.

1. WWW.KRONOSTIO2.COM



WITH A NEW FIVE-YEAR INVESTMENT PLAN, THE ANNUAL PRODUCTION OF KRONOS EUROPE IN THE PORT OF GHENT WILL RISE FROM 85,000T TO 120,000T.



North Sea Port,

the 60 kilometres long cross-border port area stretching from Flushing over Terneuzen in the Netherlands to Ghent in Belgium



1,000 hectares of industrial sites available to investors.

Accessible from the North Sea for deepsea navigation until 32 km inland.

Directly linked with the European network for road transport, inland navigation, rail and pipelines.

Specialist in dry bulk, general cargo, offshore and food.

Europe's number 3 as for added value.

Europe's number 10 concerning seaborne cargo traffic.

northseaport.com





Biobased innovations

Bio Base Europe Pilot Plant

Photo courtesy of Bio Base Europe Pilot Plant



WIM SOETAERT, CEO OF BBEPP

Bio Base Europe Pilot Plant (BBEPP) cannot easily be labeled. It is a pilot plant for biobased processes, meaning the products they develop are based on biomass renewable resources. Their customers are active in arguably every industry imaginable: from food to biofuels, chemicals, pharmaceuticals, construction, and energy. The only industry they are not involved in is aerospace. But in the future, who knows?

The biobased industry is aimed at curbing climate change and mitigating CO₂ emissions. The Bio Base Europe Pilot Plant, located at the very heart of the Ghent Bio-Economy Valley in the Port of Ghent in Belgium, is a well-known facility in the industry. When a company has developed a promising product or process in the laboratory, they can test its feasibility on an industrial scale at the pilot plant. The facilities they provide are state-of-the-art, drawing customers in from every corner of the globe.

Scale-up and downstream processing

CEO of BBEPP Wim Soetaert explains: “One kilogramme is quite a large quantity to produce in a laboratory. If a company develops a promising product in the laboratory, how can they be certain that the product will be profitable on an industrial scale? Ample companies do not have the equipment to produce on an industrial scale, let alone test different process lines and methods to determine which has the best results on a larger scale.” Bio Base Europe Pilot Plant has a wide and flexible spectrum of modular unit operations. Their engineers and process operators assist with the experimental setup, process analysis, and design, as well as with calculating mass and energy balances. When a certain unit in the setup proves inefficient, BBEPP has a range of alternative units that can fit into the process line and perhaps reach the desired results. That way, companies can figure out exactly what is feasible, what needs improvement, and gain a clear overview of what equipment is worth the investment.

Bio Base Europe Pilot Plant performs the entire production chain in one single plant, from biomass feedstock to final refined products. They combine various technologies (biomass pretreatment, biocatalysis, green chemistry, fermentation, biorefining, and downstream purification) for advanced manufacturing of biobased products.

Confidential

Just a few years ago, the biobased industry suffered from a bad image. Many companies did not see commercial potential in biobased products. Environmentally-friendly and profitable seemed like incompatible goals. A lot has happened since then. “Ten years ago, we needed to advertise biobased product

THE FACILITIES OFFERED BY BBEPP ARE STATE-OF-THE-ART, DRAWING CUSTOMERS IN FROM EVERY CORNER OF THE GLOBE.

“ Companies that do not investigate biobased, sustainable alternatives in their line of business are lagging behind. And there will come a point when that backlog is too big to compensate.



Photo courtesy of Bio Base Europe Pilot Plant

THE ENGINEERS AND PROCESS OPERATORS AT BBEPP ASSIST WITH THE EXPERIMENTAL SETUP, PROCESS ANALYSIS, AND DESIGN, AS WELL AS WITH CALCULATING MASS AND ENERGY BALANCES.

processing. Now, companies that do not investigate biobased, sustainable alternatives in their line of business are lagging behind. And there will come a point when that backlog is too big to compensate,” says Mr Soetaert.

Bio Base Europe Pilot Plant rarely discloses any accomplishments in the media. Most companies they work with require strict confidentiality agreements. This makes sense, seeing how the Pilot Plant works exclusively with highly innovative products and processes. No company wants to give competitors any ideas, especially when those ideas are highly innovative, sustainable, and well-researched.

The projects that the organisation does elaborate on are public ones. The company works with over fifty private companies a year and has an approximate 50/50 ratio between public projects and (confidential) company projects.

Project impact

Bio Base Europe Pilot Plant, with its 30% annual growth, is currently fully booked and struggling to keep up with demand. The company has therefore started a project called Impact, which has two main goals. The first objective was the construction of a new processing hall, which was inaugurated on 19 February 2018. The new processing hall enlarges the pilot plant’s downstream processing capacity to high Technology Readiness Level (TRL) level, allowing the pilot facility to use the full potential of its 15m³ fermenters. Downstream processing entails the isolation and purification of a product after a biotechnological or chemical conversion step. The first equipment purchase for the new hall serves debottlenecking purposes: downstream processing equipment that is compatible with the largest fermenter (15m³) at Bio Base Europe, which is just a few years old. That, according to



BIO BASE EUROPE PILOT PLANT PERFORMS THE ENTIRE PRODUCTION CHAIN IN ONE SINGLE PLANT, FROM BIOMASS FEEDSTOCK UP TO FINAL REFINED PRODUCTS.

Photo courtesy of Bio Base Europe Pilot Plant

Mr Soetaert, is the downside of working with innovation: you need to be ahead of the game at all times, which means much of the equipment becomes obsolete and needs to be replaced within ten years.

The second goal of the Impact project is aimed at gas fermentation, for which BBEPP will build a scale-up facility. Gas fermentation uses micro-organisms to convert waste gases, such as CO₂ and syngas, into a wide spectrum of chemicals. Next to the Bio Base Europe Pilot Plant site runs a huge pipeline with blast furnace gas from the ArcelorMittal steel plant. The blast furnace gas is currently burned to generate some energy out of it. With gas fermentation, it could be used as food for micro-organisms. Bacteria can grow on the gas, and these bacteria can convert the waste gas into useful chemicals. The theory sounds fantastic, but it is something no one has achieved yet in industrial practice. Innovation is a long and painful process, warns Mr Soetaert, “Technically speaking, gas fermentation is incredibly complex. The research phase alone could take years.”

But when Bio Base Europe Pilot Plant does manage to achieve gas fermentation, it will certainly be worth it: a single steel factory of ArcelorMittal produces about 10% of Flanders’ total CO₂ emissions.

The difficult thing with climate issues and their prevention is that people want a miracle solution; one big breakthrough that fixes everything and makes all small-scale solutions redundant. According to Mr Soetaert, that is not going to happen. The only way towards a zero emissions future is by doing it all.

I. WWW.BBEU.ORG



INAUGURATION OF THE
NEW PROCESSING HALL
IN FEBRUARY 2018.

Photo courtesy of Filie Roelants



Photo courtesy of Bio Base Europe Pilot Plant

WHEN A COMPANY HAS DEVELOPED A PROMISING PRODUCT IN THE LABORATORY, THEY CAN TEST ITS FEASIBILITY ON AN INDUSTRIAL SCALE AT THE PILOT PLANT.

Project Falcon

Fuel And chemicals from Lignin through enzymatic CONversion

One of the projects BBEPP currently has underway is called Project Falcon.

Falcon is a project funded by the EU directed at turning the lignin-rich industrial waste stream from second generation biofuel plants into higher value products, such as marine fuels, fuel additives, and chemical building blocks.

Falcon aims to convert the lignin waste stream from lignocellulose-based bioethanol plants into a crude oil that can be directly used as a low-sulphur marine fuel (value chain 1) or alternatively, as a renewable feedstock for aromatic fuel additives (value chain 2), and chemical building blocks (value chain 3) such as substituted monomeric phenols. These three new value chains can be readily linked to existing second generation (2G) biofuel plants, and thus contribute to their viability. In addition, the valorisation of the lignin-rich waste stream will support the creation of the 'zero-waste biorefinery' concept.

Lignin bio-oils are already used as fuel additives for heavy-duty engines to reduce soot emissions. The new technology developed in Falcon can thus be directly integrated into this existing value chain. This project's objective is to mature over a period of four years from bench scale (1-10 litres) to pilot scale (tonne scale) the enzymatic low-sulphur heavy fuel oil production from lignin. Preliminary combustion experiments can be conducted at a component level with bench scale volumes, whereas multi-component level tests become possible for pilot scale volumes.

1. WWW.FALCON-BIOREFINERY.EU

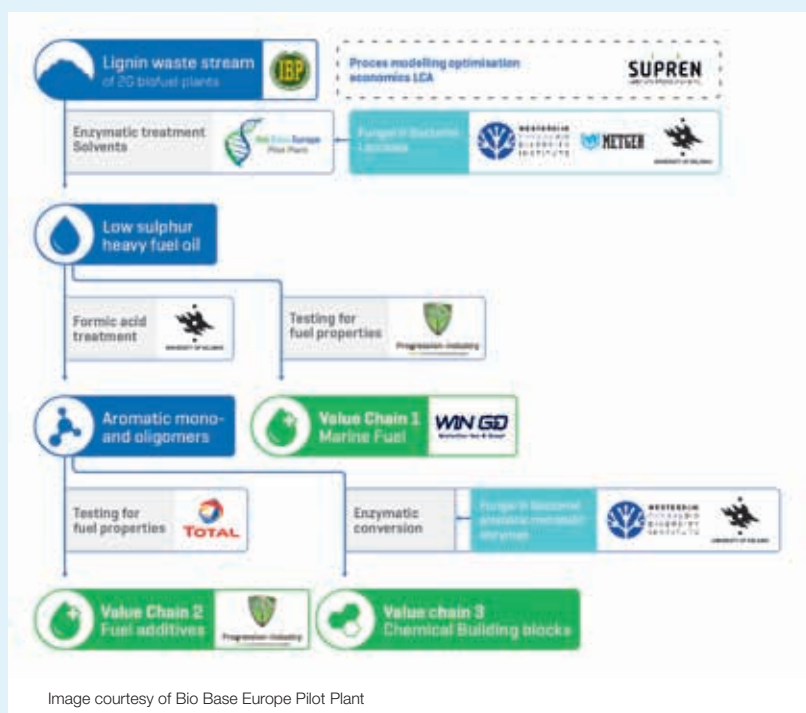


Image courtesy of Bio Base Europe Pilot Plant

First helicopter flights from Airport Midden-Zeeland to offshore windfarm



Photo courtesy of Airport Midden-Zeeland

April will see the first helicopters flying back and forth between Airport Midden-Zeeland and offshore windfarm East Anglia to transfer the personnel of offshore company van Oord. Van Oord is involved in the construction of three windfarms off the English coast. Their employees work a one week on, one week off schedule. Five flights over the course of two days are needed to exchange the full crew, meaning that helicopters will fly over a part of Zeeland ten times a week for six months. Airport Midden-Zeeland will also be the heliport for personnel transfers to windfarm Borssele, which will be constructed 22km off the coast of Walcheren by energy company Ørsted. International logistics service provider Peterson will start a helicopter passenger terminal for this purpose.



Photo courtesy of Airport Midden-Zeeland

Dredging to enhance accessibility in the Wielingen area



In December 2017, North Sea Port started dredging the rises in the Wielingen area of navigation off the Dutch coast. By removing the rises, the access to the port of Vlissingen for vessels with draughts of up to 16.5m will be guaranteed from the end of February onwards. Moreover, sailing possibilities for vessels with a draught of 17m will strongly improve. Deep-lying vessels (capesizers) bound for Vlissingen have for years already frequently had to cope with delays. When the tide is not high enough, there are literally thresholds near Wielingen in front of the coast of Dutch Flanders. The present fairway from and to the Vlissingen port area has a width of 500m. The dredging work consists of creating a 'made-to-measure channel'. Instead of removing the shallows over the entire width of the fairway, it will be tackled 'to size' over a width of 180m. The dredging spoil will be dispersed a few kilometres further in a deeper part. Because of this innovative approach, only 600,000m³ of spoil has to be moved.

North Sea Port wins tank storage prize

On 20 March, North Sea Port won its first-ever award as a cross-border fusion port when its tank storage earned North Sea Port the honourable recognition of 'Best Port'.

Liquid bulk makes up one-third of the cargo volume from sea-going vessels at North Sea Port, making it an important stop for petroleum products, bio-diesel, chemicals, liquid fertilisers, fruit juices, and gases. The current storage capacity of some 3.9m³ million enables the port to retain reserves of liquid bulk for both short and long-term storage. The port expects to further expand this storage capacity to 4.7m³ million in the future.

As a sustainable port, North Sea Port is investing in the production of nearly one million tonnes of bio-fuel (bio-ethanol and bio-diesel) per year.



The Tank Storage Awards reward companies that excel in security, innovation or general storage. North Sea Port was nominated in the 'Best Tank Storage Port' category, along with the ports of Ras Tanura (Saudi Arabia), Antwerp (Belgium) and Amsterdam (Netherlands).

Unifeeder brings more vessels and bananas to North Sea Port



Unifeeder, the largest inter-European container transporter, added North Sea Port to its extensive network by including Vlissingen. Existing Unifeeder services from Rotterdam now also call at Vlissingen. The Danish shipping company is aiming at more shortsea cargo between North Sea Port and Oslo, Helsingborg and Helsinki. The first ship of this new container service (Lindaunis) arrived on 25 January at Kloosterboer in Vlissingen.

Bananas, among other cargo, will be transported twice a week to Scandinavia. Chiquita started its own liner service for the transport of bananas to Northern Europe from Kloosterboer's site in Vlissingen, which has been Chiquita's West European supply port since 2015. This will increase the banana supplies to North Sea Port from 400,000t to 720,000t per year.

The extra liner service brings 150 extra vessels to Vlissingen: 50 for Chiquita and 100 for Unifeeder. The number of jobs at Kloosterboer will rise from 80 to 100. The amount of handled containers will grow from 50,000 to 60,000.

Elia awards offshore construction contract to Heerema

Belgian transmission system operator Elia has awarded Heerema Fabrication Group (HFG) a contract to build an offshore platform for a grid project. The topside will be fabricated in HFG's Zwijndrecht yard, with jacket fabrication taking place in the company's specialised jacket yard in Vlissingen.

The platform will be constructed approximately 40km from the coast of Zeebrugge, in the Belgian part of the North Sea in water depths between 30-35 meters. It will connect four planned offshore windfarms to the Belgian onshore grid connection point in Zeebrugge. Construction started in March 2018. The jacket, weighing around 1,400t, is scheduled for installation in November 2018; the topside, weighing 2,100t, for March 2019.



Photo courtesy of Heerema Fabrication Group

FROM LEFT: JAN LAGASSE, CEO OF NORTH SEA PORT, CARLA SCHÖNKNECHT, DEPUTY OF THE PROVINCIAL COUNCIL OF ZEELAND, AND DAAN SCHALCK, CEO OF NORTH SEA PORT, DURING THE BAPTISING CEREMONY OF HARMONIE.

New sounding boat for North Sea Port

Photo courtesy of Scherp! Fotografie

North Sea Port's new sounding boat was baptised on 19 March. Carla Schönknecht, deputy of the Provincial Council of Zeeland, performed the christening ceremony at the Calamiteitensteiger in the port of Vlissingen, where the boat has her fixed berth.

Harmonie owes her name to the first seagoing vessel that sailed through the newly-constructed Ghent-Terneuzen Canal on 3 December 1827. According to the 'Gazette van Gend' newspaper, this was the Harmonie from Hamburg. The ship was handled in the Ghent port area by the Stukwerkers company, a Ghent stevedore that has already been active since 1338.

Harmonie's main task is sounding the depth of all of North Sea Port's docks and harbours, and the Wielingen fairway off the coast of Zeeuws-Vlaanderen towards Vlissingen. Sounding will take place six times a year in tidal parts of the ports that silt up more rapidly. Other port areas will be sounded twice a year. The vessel will also carry out sounding activities during maintenance dredging and construction works, inspections, and for guiding traffic during big operations. The vessel can furthermore be deployed for commercial tours and calamities.

Harmonie is the first concrete cooperation example of the merged port companies. Thanks to this merger, the investment only had to be made once. Harmonie certainly is a suitable name for the sounding boat, as she is cordially active on both sides of the Dutch-Belgian border.

Harmonie was built by Next Generation Shipyards at Lauwersoog, near Groningen. The vessel is 15.09m long, has a beam of 4.74m, reaches 20 knots, and is outfitted with modern devices. Her cost price stands at to EUR 925,000.

I. WWW.NORTHSEAPORT.COM



Photo courtesy of Scherp! Fotografie

The Zeeland Port Promotion Council is pleased to welcome new participants. Founded in 1993, the Zeeland Port Promotion Council represents the majority of companies located in the ports of Vlissingen and Terneuzen. Together they offer a complete range of the best possible port facilities and all the logistics solutions you need. See pages 57 - 59 for a complete list of participants.

→ DOC-SWAN HUNTER



DOC-Swan Hunter is a JV between DOC BV and Swan Hunter LTD. The DOC-Swan Hunter Cable Storage, Repair and Spool Yard in Vlissingen provides a 24/7 terminal and logistics support services hub for the renewable energy, marine maintenance and construction industries. DOC-Swan Hunter is specialised in the transport and storage of subsea cable and umbilicals on carousels, turntables, and static tanks, for offshore windfarm construction and maintenance companies. A Mob-Demob quay, RoRo quay and 'stern to'

mooring facility provide full services for cable installation vessels.

Storage capacity currently consists of a 7,000t and a 5,500t carousel, and a land-based storage carousel of 6,000t that can be enlarged to 9,000MT. A repair spread of 2x 400t, will be added in May 2018. Construction of another 9,000MT will start in June 2018.

I. WWW.DUTCHOFFSHORECONTRACTORS.COM

→ ELLORO



An enhanced online appearance, commitment, leads, sales growth, business optimisation and automation, online demand or brand experience; every organization is different and has unique (online) goals. Elloro provides effective and custom-made solutions that fits an organisation's needs.

Web development

Your website should contribute to your goals by generating leads, informing your target group, or increasing your turnover. Developing effective websites requires ample knowledge and expertise on the online domain.

Cloud software & web applications

Elloro develops smart cloud software to optimise processes, collect data, save time, increase business, and display complex information.

Online marketing

Generating more relevant visitors, increasing sales and leads, or informing your target audience; depending on your objectives, we will use (a mix of) online marketing methods to achieve these.

I. WWW.ELLORO.NL

→ PRIOR GROUP



The Prior Group has a long-lasting track in the shipbuilding, marine and offshore industry. The group assists customers with project management and engineering queries, and have been involved in the offshore wind industry from the very start. The Prior Group supports vessel owners by supplying personnel for mobilising, demobilising, and repairing activities on their vessels, and is active in the steel fabrication and manufacturing industry for offshore constructions.

Due to an increasing demand of qualified personnel by their customers, The Prior Group decided to initiate a new activity in January 2018, called Prior Marine & Offshore. This is a new division to provide white collar personnel both yard, shore and offshore-based to support organisations in the marine & offshore industry.

I. WWW.PRIORGROUP.NL

➔ **VERSCHELLING ASSURANTIËN**



Verschelling Assurantiën is a niche player in the insurance market, specialising in the insurance of pleasure crafts, commercial inland water vessels, transport insurance, and insurance solutions for shipping agents. Their catch phrase is "If it has to do with water, we can insure it". This market requires constant studying and keeping up with new developments. Verschelling Assurantiën works closely together with several insurance companies, and is able to insure on the

English market as well. They cooperate with Eelsing Surveyors and Klaassen Lawyers for claims and legal issues. The company offers a 24/7 service, and effective and clear insurance propositions. "It is better to take time for a good proposition, than to have a discussion after a claim arises." They offer advice on insurance, as well as on other issues, such as on what incoterm to use when transporting goods abroad.

I. WWW.VERSCHELLING.NL

➔ **ZEELAND CRUISE PORT (ZCP)**



ZCP's core activity is mooring cruise vessels in Zeeland. The port of Zeeland has a lot to offer cruise companies and tourists, including:

- An open sea connection without locks, close to the most important North Sea sailing routes;
- A warm welcome at the quayside;
- Good direct connections with public transport;
- An attractive location with more options for excursions within 30 minutes of the quay;

• Hospitality desk.
Because of its strategic location, Vlissingen is an ideally located harbour in north-western Europe, providing inexpensive, customised day excursions including Roosevelt Oud-Vossemeer Theme Centre, De Gevangentoren, Delta Works, and the Flood Museum. ZCP is in the heart of Zeeland, and makes an unforgettable and exclusive experience.

I. WWW.ZEELANDCRUISEPORT.COM

➔ **ZEELAND MARITIME CLEANING (ZMC)**



ZMC delivers a complete package of services, ranging from maritime and industrial cleaning to waste management. The company employs experienced, certified specialists, is available 24/7, and is fast, flexible and focused on quality.

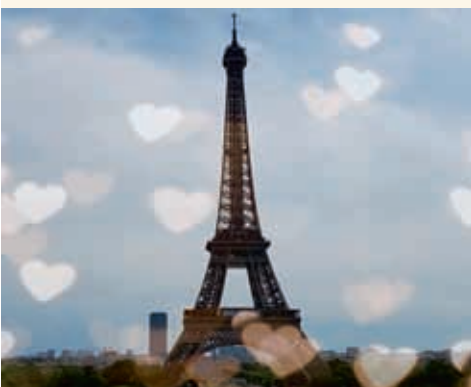
Cleaning services – ZMC ensures extensive inside-and-out cleaning using vacuum trucks and high-pressure units for sea-going vessels and barges. With the wealth of expertise and techniques gained in the maritime field, the

enterprise also provides industrial cleaning services on land for tank storage and for the petrochemical industry.

Waste management – ZMC's skilled and certified staff is fully licensed in national waste collection and cleaning permits. The company collects and transports various ship waste to authorised processing facilities. This waste includes fuel remains, washing or septic waters, chemical waste and other trash.

I. WWW.ZMCCLEANING.NL

➔ **ZÉFRANCO**



Zeeland, France, and communication, three passions united in the name 'Zéfranco'. Zéfranco loves to guide and support French business in the broadest sense of the word. Its services go far beyond translating. A vast network of both private and public organisations allow the company to help fulfil customer needs and ambitions on the French spoken markets, and include setting up a French subsidiary, obtaining permits from French authorities, finding new or more

customers, suppliers or project investors, as well as trouble shooting for urgent matters. Between our region and France, a sea of opportunities is waiting to be developed, in particular for the transport industry. With Zéfranco by their side, businesses do not need to worry about any language barriers, or French bureaucracy.

I. WWW.ZEFRANCO.COM



Participants of Zeeland Port Promotion Council

		INDUSTRY	MARITIME	OFFSHORE	LOGISTICS SERVICES	OTHER SERVICES	EDUCATION AND GOVERNMENT
A	ABN AMRO	www.abnamro.nl				■	
	Access World (Missingen) B.V.	www.accessworld.com			■	■	
	Adriaanse & van der Weel Advocaten	www.avdw.nl				■	
	Aerssens & Partners	www.aenpmakelaars.nl				■	
	Amadore Hotels & Restaurants	www.amadore.nl				■	
B	Aquadrant B.V.	www.aquadrant.com				■	
	Beeldmerk	www.beeldmerk.org				■	
	Boogaard Advocaten	www.boogaardadvocaten.nl				■	
	Bouwgroep Peters B.V.	www.bouwgroep-peters.nl				■	
	BOW Terminal	www.bowterminal.nl			■	■	
C	Bulk Terminal Zeeland Services B.V.	www.btzeeland.nl		■	■		
	C.T.O.B. Transport & Logistics	www.ctob-logistics.com			■		
	CdMR/ Cobelfret B.V.	www.cobelfret.com			■		
	Century Aluminum Vlissingen B.V.	www.centuryvlissingen.nl	■				
	Cordeel Nederland B.V.	www.cordeel.nl	■			■	
D	C-Port B.V.	www.c-port.nl				■	
	Damen Shiprepair Vlissingen	www.damen.com	■	■	■		
	DB Schenker	www.dbschenker.com				■	
	De Pooter Personeelsdiensten	www.depooter.nl				■	
	De Ruyter Training & Consultancy	www.drte.nl					■
E	De Zeeuwse Alliantie Notarissen	www.dezeeuwsealliantie.nl				■	
	Delta Coastal Services B.V.	www.deltacoastalservices.nl		■		■	
	Delta Safe Security Services B.V.	www.delta-safe.nl				■	
	DOC-Swan Hunter B.V.	www.dutchcontractors.com		■	■	■	
	DOW Benelux B.V.	www.dow.com	■				
F	DRV Accountants & Adviseurs	www.driv.nl				■	
	Dutch Marine B.V.	www.dutchmarinebv.com		■		■	
	Elloro	www.elloro.nl				■	
	Embedded Coaching & Consultancy	www.ecc-coach.nl				■	
	Euro-Mit Staal B.V.	www.euro-mit-staal.com	■				
G	Fabricom B.V.	www.fabricom-gdfsuez.nl	■			■	
	Firma Klouwers Terneuzen	www.klouwers.nl			■		
	Feyter Group	www.feyter.com	■			■	
	Flexibility Zeeland	www.flexibility.nl				■	
	Flushing Shipping Agencies	www.fsagencies.com				■	■
H	Golden Tulip L'Escaut	www.hotel-lescaut.nl				■	
	H4A	www.h4a.nl				■	
	Haskoning DHV Nederland B.V.	www.royalhaskoningdhv.com				■	
	Havenwerk B.V.	www.havenwerk.nl				■	
	Henk Kramer Communicatie	www.henkkramer.nl				■	
I	Heros Sluiskil B.V.	www.heros.nl	■				
	HR Expat Services	www.hrxpats.com				■	
	I.B.S. B.V.	www.ibs-hallenbouw.nl	■			■	
	ICL-IP Terneuzen B.V.	www.iclip-terneuzen.nl	■				



Participants of Zeeland Port Promotion Council

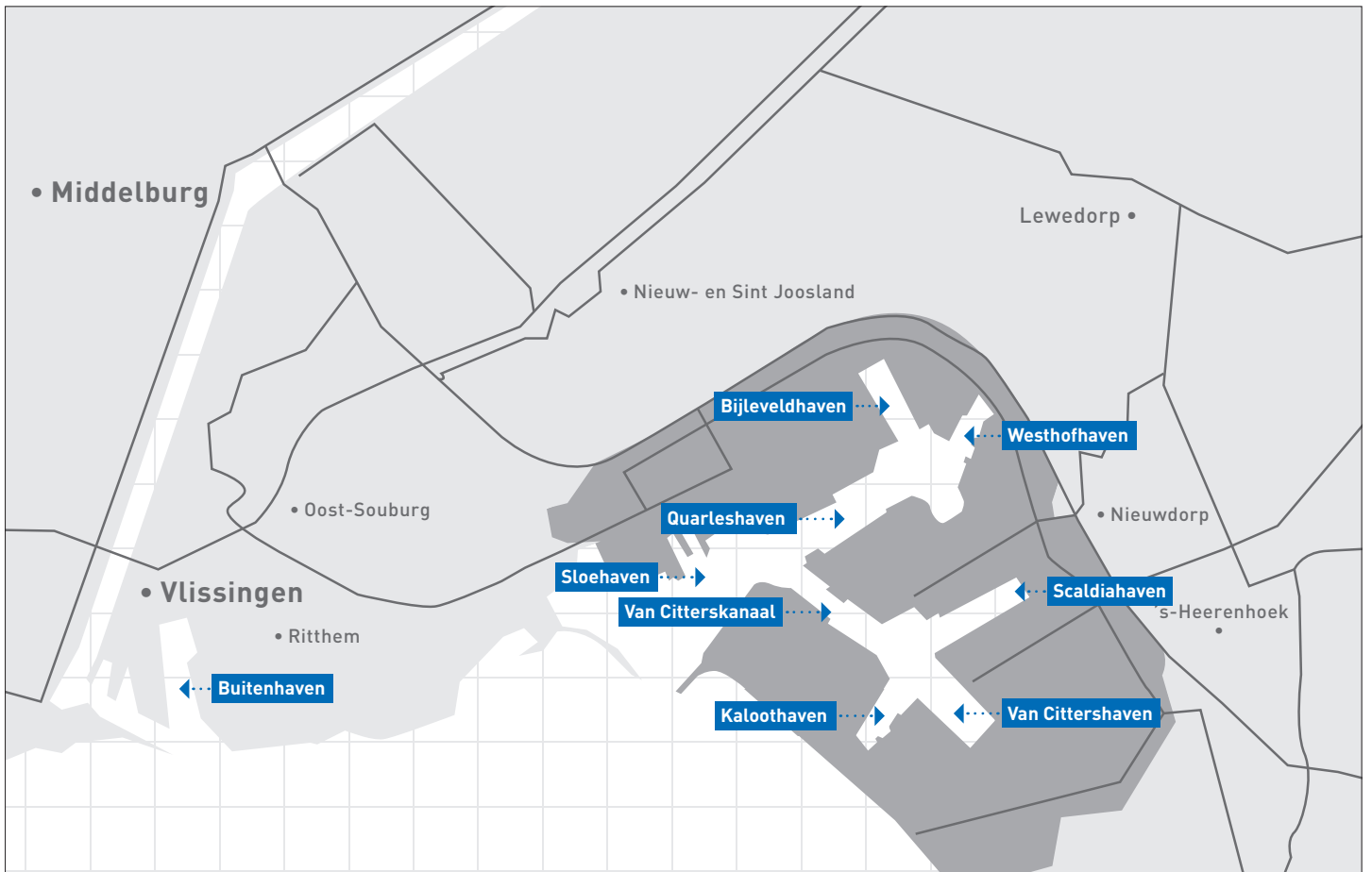
		INDUSTRY	MARITIME	OFFSHORE	LOGISTICS SERVICES	OTHER SERVICES	EDUCATION AND GOVERNMENT
	ING Business Banking					■	
	Interlashing B.V.				■	■	
	Istimewa Elektro	■				■	
J	Justion Advocaten					■	
K	Katoen Natie Westerschelde B.V.				■	■	
	Kloosterboer Vlissingen B.V.				■		
	Koch adviesgroep Ingenieurs & Architecten					■	
	Koolwijk Shipstores B.V.				■	■	
	Kotug Smit Towage		■				
	KVA International	■	■	■			
	KWS Infra/Aquavia					■	
L	Labojuce B.V.	■				■	
	Legrant Freight Management B.V.				■		
	Liftal Hijstechniek					■	
	Loodswezen Regio Scheldemonden		■		■	■	
	Luctor Belting Nederland B.V.	■				■	
M	Mammoet Nederland B.V.	■	■	■	■	■	
	Maritiem & Logistiek College de Ruyter					■	
	Mourik Vlissingen B.V.				■		
	Multraship Towage & Salvage	■	■	■			
	Municipality of Middelburg						■
	Municipality of Terneuzen						■
	Municipality of Vlissingen						■
	Montagebedrijf Terneuzen	■	■				
N	Nelis BV		■		■	■	
	North Sea Port	■	■	■		■	
	Nouvall Engineering Services					■	
	N.V. Economische Impuls Zeeland					■	
	N.V. Westerscheldetunnel				■	■	
O	Oceanwide Personnel Services B.V.					■	
	Oiltanking Terneuzen B.V.	■			■	■	
	Outokumpu Stainless B.V.	■			■		
	Ovet B.V.				■	■	
P	Pfauth Logistics B.V.				■	■	
	Prior Group					■	
	PTC B.A.		■		■		
R	Rabobank Oosterschelde					■	
	Rabobank Walcheren-Noord Beveland					■	
	Rabobank Zeeuws-Vlaanderen					■	
	Redbrook Engineering					■	
S	S5 Agency World			■	■		
	Sagro Aannemingsmij. Zeeland B.V.		■	■	■		
	Saybolt Nederland B.V.				■	■	
	Schipper Groep					■	



Participants of Zeeland Port Promotion Council

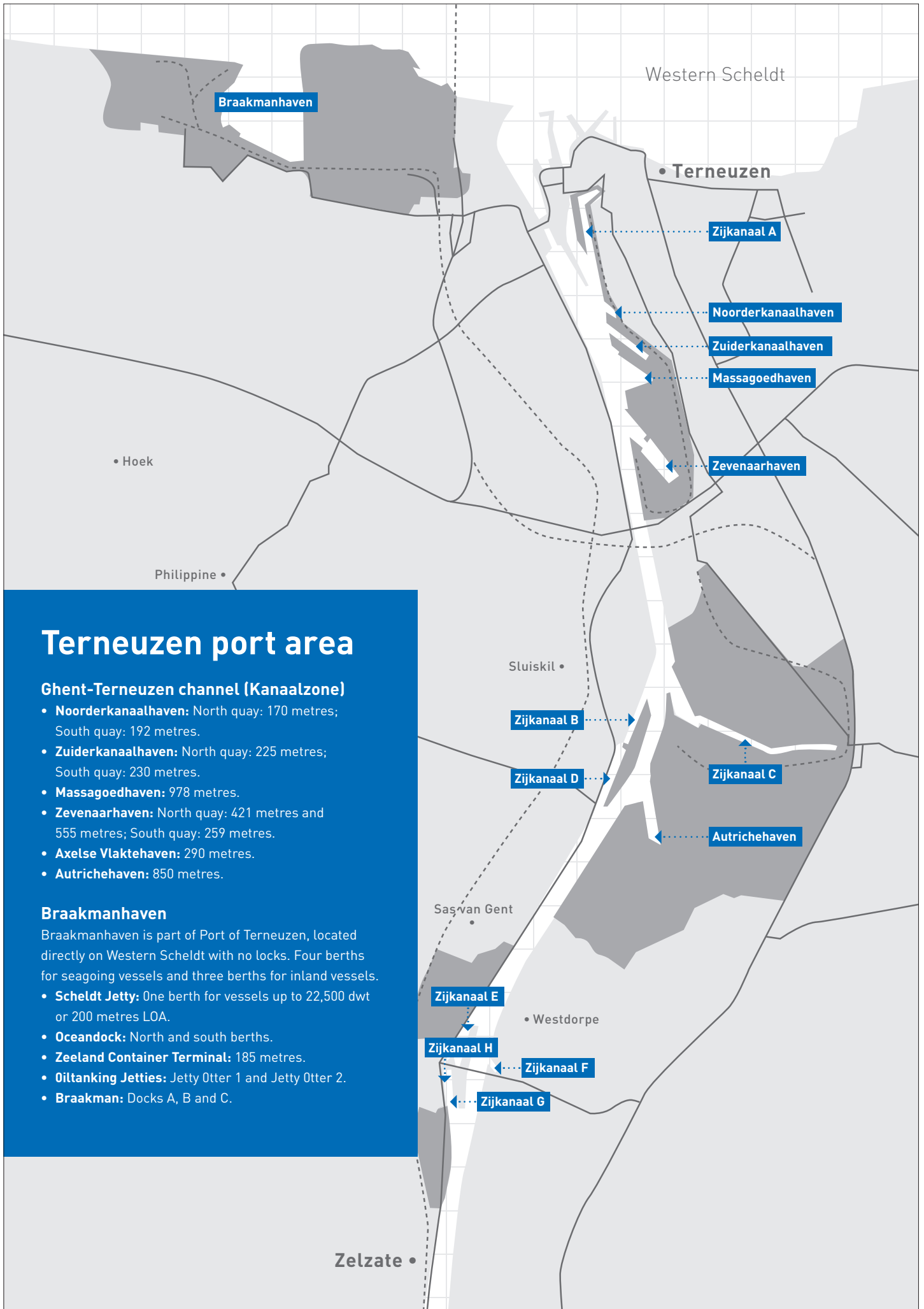
INDUSTRY	MARITIME	OFFSHORE	LOGISTICS SERVICES	OTHER SERVICES	EDUCATION AND GOVERNMENT
----------	----------	----------	--------------------	----------------	--------------------------

	INDUSTRY	MARITIME	OFFSHORE	LOGISTICS SERVICES	OTHER SERVICES	EDUCATION AND GOVERNMENT
SDW Shipping				■		
Seacontractors		■	■	■	■	
Sealake Terminal B.V.		■	■	■	■	
Secil Cement	■			■		
SGS Nederland B.V.				■	■	
Shipyards Reimerswaal		■				
Shutdown Control		■				
Suez Recycling & Recovery Netherlands					■	
Sweco Nederland B.V.					■	
S.T.T. B.V.	■	■	■	■		
Sorteerbedrijf Vlissingen B.V.				■	■	
SPIE Nederland B.V.					■	
Supermaritime Nederland B.V.			■	■	■	
Swagemakers Intermodaal Transport B.V.				■		
Tanido B.V. Sworn Marine Surveyors				■	■	
Tempo-Team Uitzendbureau B.V.					■	
Terneuzen Powder Technologies B.V.	■			■	■	
The Wind Technicians			■		■	
TMS Terneuzen B.V.	■				■	
Try-Act EWIV					■	
Van Ameyde Marine Vlissingen		■		■	■	
Van Keulen Transport B.V.				■		
Verbrugge Internationale Wegtransporten B.V.				■		
Verbrugge Marine B.V.		■		■	■	
Verbrugge Terminals B.V.		■	■	■		
Verenigde Bootlieden B.V.		■		■	■	
Verex Douane Service				■	■	
Verschelling Assurantien					■	
Vesta Terminal Flushing B.V.				■	■	
Vlissingse Bootliedenwacht B.V.		■		■	■	
Vopak Agencies Terneuzen B.V.				■	■	
Wielemaker B.V.				■	■	
Yellow & Finch Publishers					■	
Zeeland Bunkering		■				
Zeeland Cruise Port					■	
Zeeland Maritime Cleaning	■	■	■	■		
Zeeland Refinery	■					
Zéfranco Communicatieservice Frans					■	
Zuidgeest Uitzendbureau					■	



Vlissingen port area

- **Sloehaven:** Suitable for all kinds of transshipment including LPG and chemical bulk 920 metres of quay. Cobelfret RoRo jetties: Four berths.
- **Bijleveldhaven:** 1,980 metres of quay. North bank is 300 metres long.
- **Westhofhaven:** 475 metres of quay. Can accommodate largest reefer vessels. East side jetty for discharging peat and general cargo quay.
- **Kaloothaven:** 1,130 metres of quay. Two jetties on south bank, one for inland barges.
- **Scaldiahaven:** Over 1,700 metres of quay. South side used by Verbrugge for handling and storage of cellulose and metals. Transverse quay is 250 metres long.
- **Van Citterskanaal/haven:** Six jetties for inland vessels and coasters. On south bank, 275 metres. On north bank, 200 metres. Heerema quay: 230 metres and 220 metres.
- **Quarleshaven:** Extension of Sloehaven to NNE, 315 metres of quay. Set of two mooring buoys on east bank with a span of 320 metres. Zalco quay: East bank, length of 150 metres. Vopak Terminal Vlissingen: Four LPG jetties.
- **Zeeland Refinery Pier:** Located on Western Scheldt. Accommodates tankers up to 100,000 dwt with maximum LOA of 280 metres.
- **Buitenhaven:** Located outside lock system with direct access to sea, 300 metres of quay. Northern basin has area for coasters and lighters. Vesta also operates an oil jetty for tankers.



Terneuzen port area

Ghent-Terneuzen channel (Kanaalzone)

- **Noorderkanaalhaven:** North quay: 170 metres; South quay: 192 metres.
- **Zuiderkanaalhaven:** North quay: 225 metres; South quay: 230 metres.
- **Massagoedhaven:** 978 metres.
- **Zevenaarhaven:** North quay: 421 metres and 555 metres; South quay: 259 metres.
- **Axelse Vlaktehaven:** 290 metres.
- **Autrichehaven:** 850 metres.

Braakmanhaven

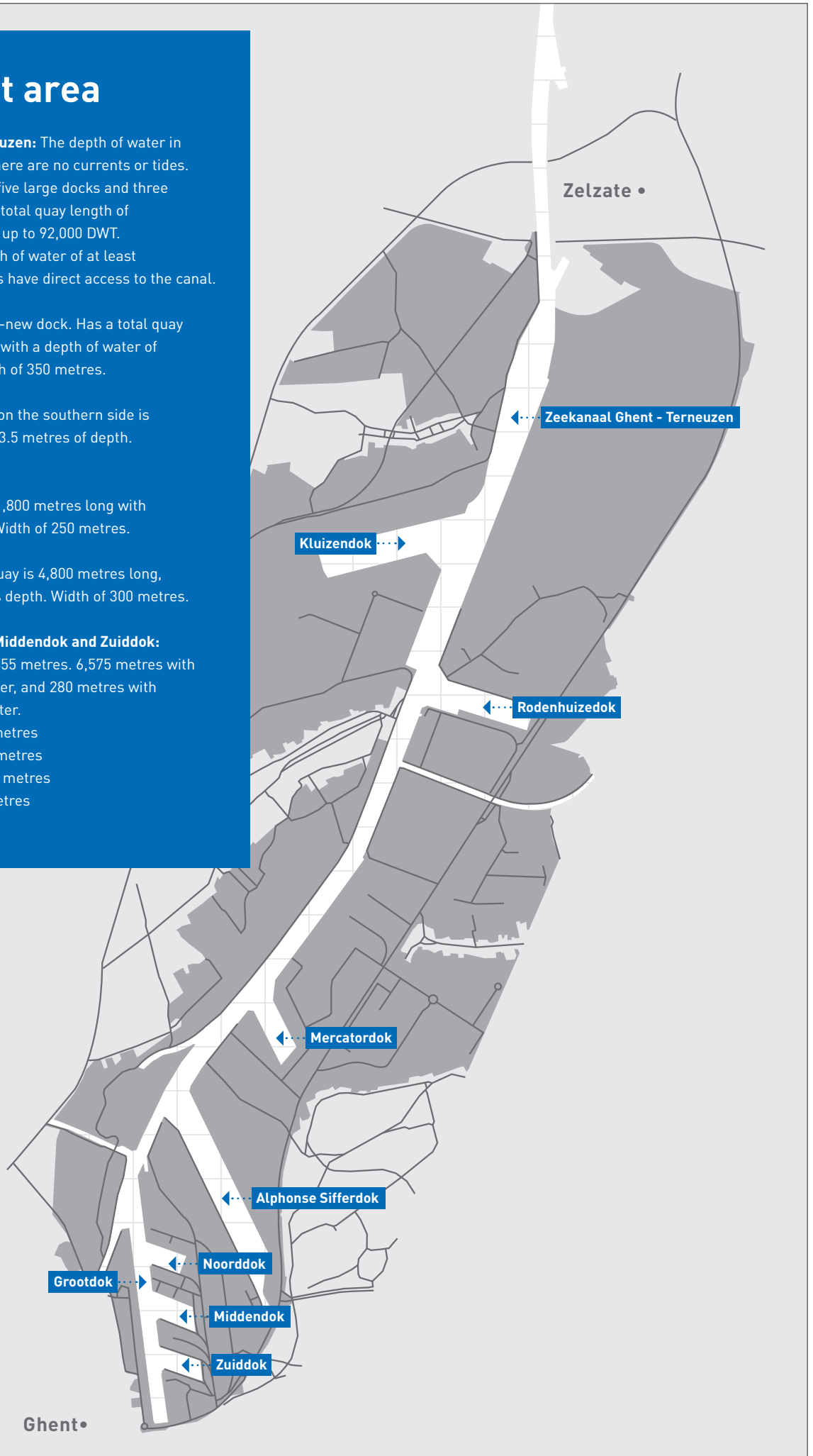
Braakmanhaven is part of Port of Terneuzen, located directly on Western Scheldt with no locks. Four berths for seagoing vessels and three berths for inland vessels.

- **Scheldt Jetty:** One berth for vessels up to 22,500 dwt or 200 metres LOA.
- **Oceandock:** North and south berths.
- **Zeeland Container Terminal:** 185 metres.
- **Oil tanking Jetties:** Jetty Otter 1 and Jetty Otter 2.
- **Braakman:** Docks A, B and C.

Ghent port area

Zeekanaal Ghent - Terneuzen: The depth of water in the canal is 13.5 m and there are no currents or tides. Inside the port there are five large docks and three smaller docks, offering a total quay length of 31 kilometres for vessels up to 92,000 DWT. 22 kilometers with a depth of water of at least 12.5 metres. All the docks have direct access to the canal.

- **Kluisendok:** Is a brand-new dock. Has a total quay length of 4,300 metres with a depth of water of 13.5 metres and a width of 350 metres.
- **Rodenhuisdok:** Quay on the southern side is 790 metres long with 13.5 metres of depth. Width of 270 metres.
- **Mercatordok:** Quay is 1,800 metres long with 13.5 metres of depth. Width of 250 metres.
- **Alphonse Sifferdok:** Quay is 4,800 metres long, with 12.5 – 13.5 metres depth. Width of 300 metres.
- **Grootdok, Noorddok, Middendok and Zuiddok:** Total quay length of 6,855 metres. 6,575 metres with 13 metres depth of water, and 280 metres with 8.5 metres depth of water.
Width: Grootdok: 150 metres
Noorddok: 200 metres
Middendok: 250 metres
Zuiddok: 220 metres



Eastern Scheldt lobster

A true Zeeland treat

Eleven regional restaurants have created their own special lobster menu, making use of this local delicacy accompanied by a wine specially selected to enhance the experience! The season, which started at the end of March, continues until 15 July.

Eastern Scheldt lobster is reputed to be one of the best-tasting lobsters worldwide. Zeeland has since 2000 been promoting this lobster – and the province as a whole – with the support of eleven local restaurateurs. It was an obvious combination, a superior product from local waters prepared by some of the highly skilled chefs our province can call our own.

This year's official opening took place on 29 March. Guest of honour was the Lobster Queen, Marianne Bout, a nineteen year old accountancy student and, as daughter of a fisherman, a great lobster promoter! An armada of ships set sail from Zierikzee to retrieve the first lobster pots from the Eastern Scheldt. The first lobsters caught were subsequently prepared on board by chef Jannis Brevet of Inter Scaldis. On the way back to Zierikzee, the invited guests enjoyed a lobster lunch, washed down by a nice Cave de Pomérois Chardonnay that was chosen as this year's lobster wine. The label for this special edition was designed by nineteen year old media design student Nouria Verhage. The

auction of the first lobster raised a record amount of EUR 22,500, which was donated to War Child.

Eastern Scheldt lobster is said to have a soft, refined flavour. Its origins stem from the nineteenth century, which is when lobster larvae are thought to have entered the Zeeland waters from the North Sea. The lobster's DNA has evolved throughout the years, giving it its unique flavour. Give this seafood to some of the best chefs in the Netherlands and it is no surprise Eastern Scheldt lobster has become a sought-after delicacy at this time of the year. The Eastern Scheldt lobster menu, which costs EUR 64.50, is served by members of the Circle of the Eastern Scheldt Lobster.

WWW.OOSTERSCHELDEKREEFT.NL



A LOT OF ATTENTION FOR THE FIRST 2018 EASTERN SCHELDT LOBSTER.

A NICE CAVE DE POMÉROLS CHARDONNAY WAS CHOSEN AS THIS YEAR'S LOBSTER WINE.



All photos courtesy of Limit Fotografie

FROM LEFT TO RIGHT: LOBSTER QUEEN MARIANNE BOUT, HAN POLMAN (KING'S COMMISSIONER OF ZEELAND), EDWIN VINKE OF RESTAURANT DE KROMME WATERGANG, LUIT EZINGA (CHAIRMAN OF THE EASTERN SCHELDT LOBSTER PROMOTION COUNCIL), AND CLAUDIA AND JANNIS BREVET OF RESTAURANT INTER SCALDIS.



About PortNews

Covering the port area of Vlissingen, Terneuzen and Ghent, PortNews is the official publication of the Zeeland Port Promotion Council (ZPPC) and port company North Sea Port.

Circulation and subscriptions

Distributed to a wide international audience, the high quality quarterly magazine promotes the activities of companies active in the ports to key customers, business partners, stakeholders, as well as at major international trade events. PortNews is available in hard copy as well as a digital version. Each issue has approximately 10,000 readers.

Editorial Committee

The content of PortNews is the responsibility of the Editorial Committee.

Contact:

- Henk de Haas, Chairman ZPPC
- Johan Bresseleers, Communicatiemanager, North Sea Port

Special thanks to everyone who kindly contributed their time and expertise to put together this issue of PortNews.

Find out more about contributing to future issues of PortNews by contacting Charles van den Oosterkamp, charles@ynfpublishers.com, tel. +31 (0)6-10979655.

Free subscription or additional copies?

Would you like a free subscription to PortNews, or would you like to receive additional copies of PortNews free of charge for promoting the port and your organisation to your business relations? Please contact the publisher at info@zppc.nl or contacteer@northseaport.com.



P.O. Box 5130
4380 KC Vlissingen
The Netherlands
T +31 (0)118-491320
E info@zppc.nl, I www.zppc.nl
Follow us on:   



P.O. Box 132
4530 AC Terneuzen
The Netherlands
T +31 (0)115-647400

John Kennedylaan 32,
Harbour 3000A
B-9042 Ghent, Belgium
T +32 (0)9-2510550
E contacteer@northseaport.com

I www.northseaport.com
Follow us on:   

IMPRINT

Copyright 2015.
All rights reserved.

The contents of this magazine may not be reproduced in whole or in part without the express written consent of the publisher(s).

PortNews is a production of maritime publishing & promotion company Yellow & Finch Publishers on behalf of the Zeeland Port Promotion Council and North Sea Port.

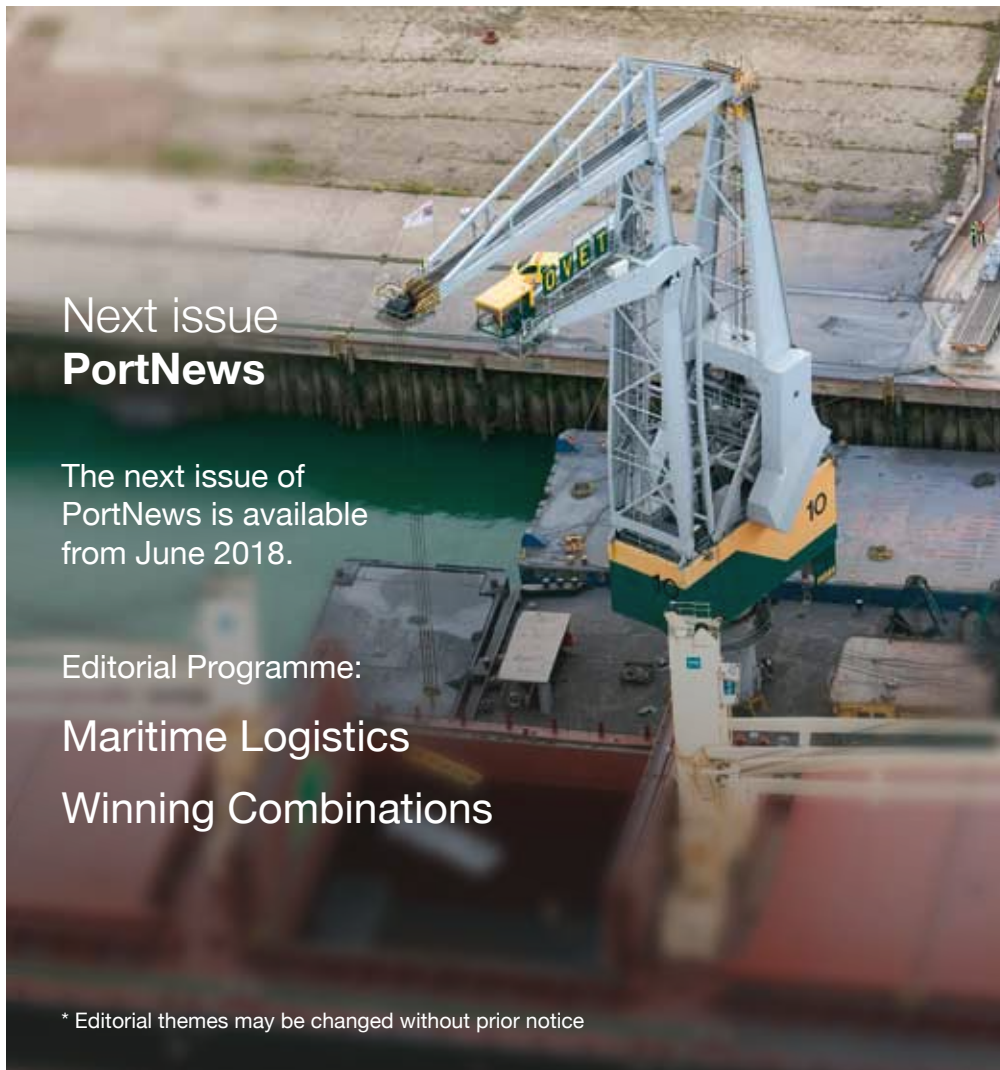
The opinions expressed in PortNews are not necessarily those of the Editorial Committee or the publishers. While every effort has been made to ensure the accuracy of information in PortNews, no liability can be accepted for any errors or omissions.

PRODUCTION & ADVERTISEMENT ACQUISITION



Charles van den Oosterkamp, MD
Yara Rood, Editor
Arno Dirkzwager, Editor
Joanna Hughes, Editor
Nathalie Putman, Art Director

President Rooseveltlaan 739
NL- 4383 NG Vlissingen
The Netherlands
T +31 118 473398
E charles@ynfpublishers.com
I www.ynfpublishers.com



Next issue PortNews

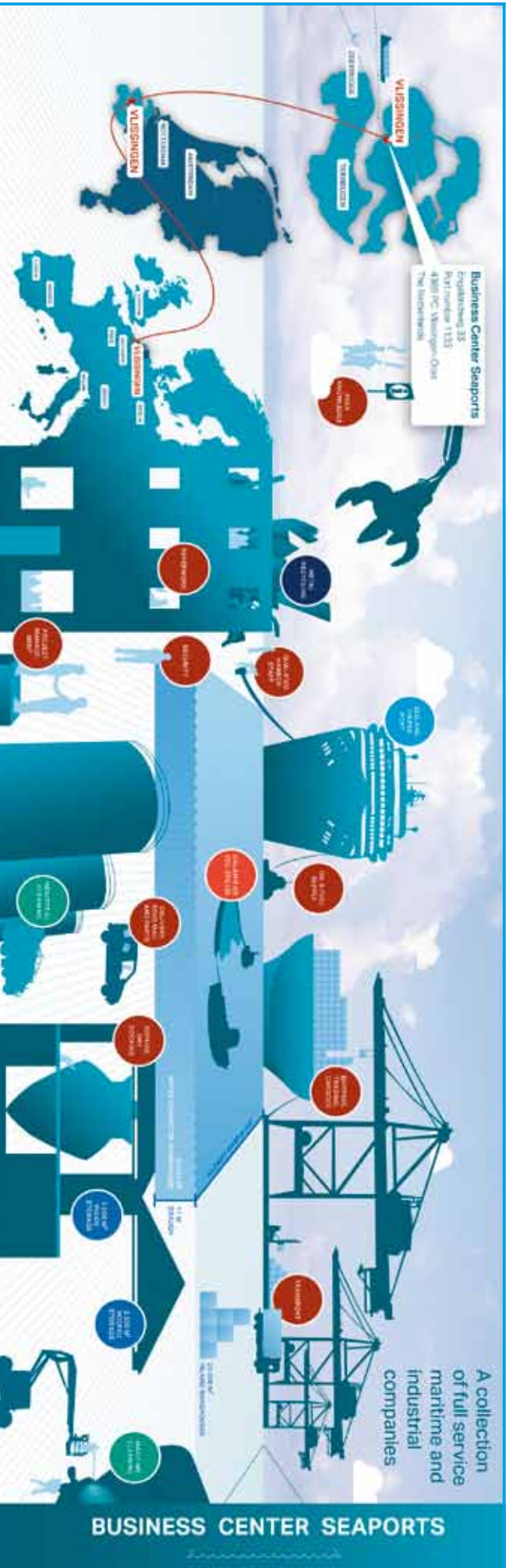
The next issue of
PortNews is available
from June 2018.

Editorial Programme:

Maritime Logistics

Winning Combinations

* Editorial themes may be changed without prior notice



A collection of full service maritime and industrial companies.

BUSINESS CENTER SEAPORTS



Zeeland Maritime Cleaning



We take care of your logistics

Maritime & Industrial cleaning

Worldwide forwarding and transport services

The solution to all your leaks & spills

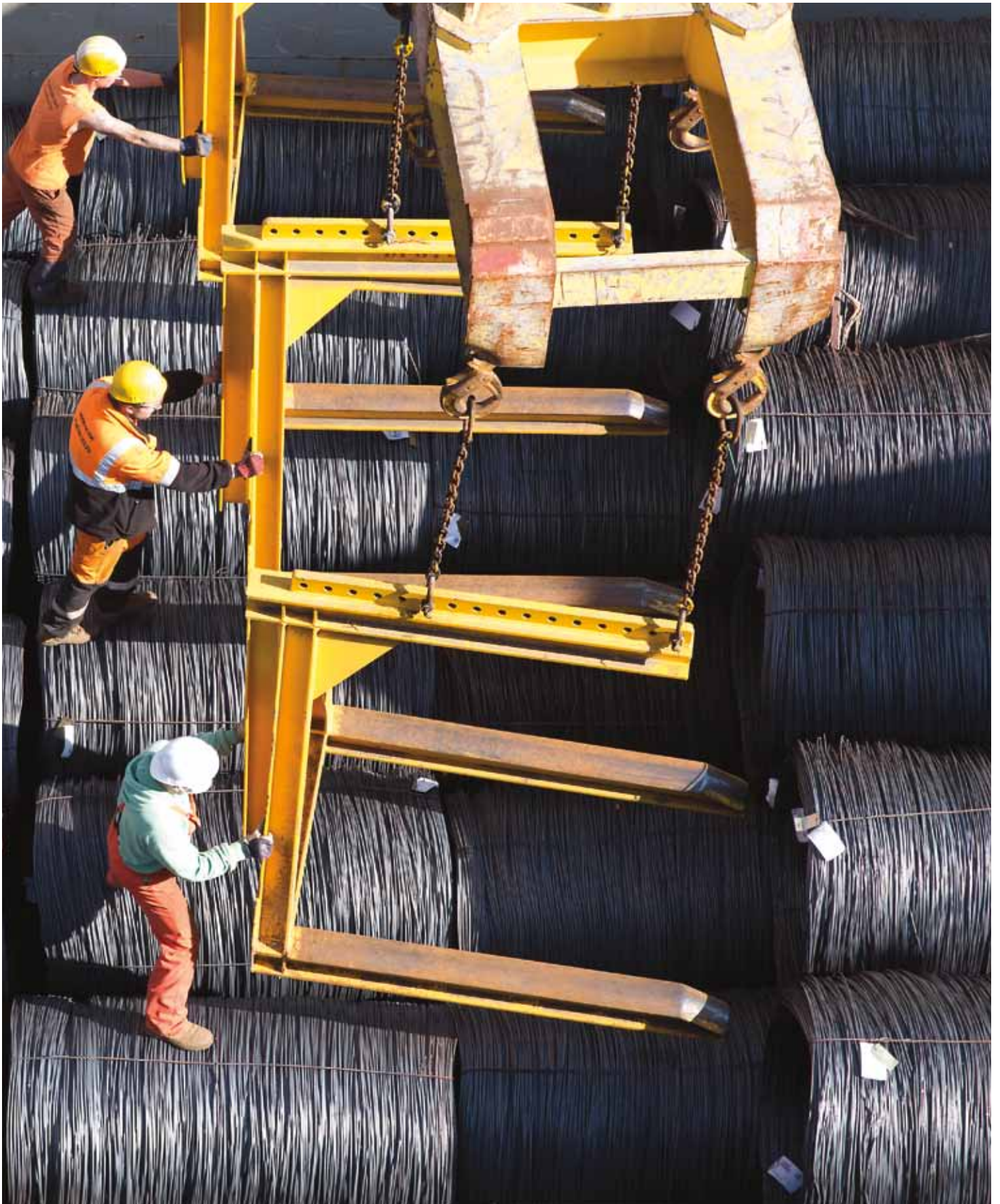
Discover Zeeland, the perfect choice for spectacular cruises

Our team guarantees the most cost-effective and feasible solution for your company



S.T.T. Group of Companies, Engelandweg 33, Harbournumber 1133, NL-4389 PC Vlissingen-Oost

www.bcseaports.com



Europe's number 1 in breakbulk

northseaport.com

