# Tug

## All about Antwerp and more...

YDROTUG

### vol. 6 **nr. 29** March - April 2025

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**51: The Port of Antwerp** A short history

**57: Belgian Towage** Development of Belgian Towage

73: The iron tug "Oskarsborg" Norwegian history needs help

### 77: Preserved ocean tugs meet

79: Marine People BV An umbrella for household names

#### 87: The Marine People fleet Tugs, lifting craft, pollution control

92: The Backpage Photo Heavy lifting en route

#### It's all about Belgium

TugeZine was set up to report on past, present and future tugs and towage. Linked to the TugTechnolgy 2025 event it is only natural that this issue leans towards Antwerp, Belgium, its ports and its towage past and present.

Like everywhere the older companies have been swallowed by the (bigger) boys. Dominant players in Belgium are Boluda and the Multraship / Fairplay combine. Interesting, all three can be regarded as family-run operations.

In The Netherlands three family-run companies have come together under one umbrella – aptly named Marine People. It has become the major player in the Netherlands and probably in Europe with lifting craft – crane barges and sheerlegs. Started by Hebo Maritime and Bonn & Mees they have now acquired Lekstroom Transport and a majority shareholding in VKV.

Furthermore we have a call for help in the preservation of a Norwegian tug that has passed its first century of operations. A worthwhile cause for sure so if you think you can be of help in one way or the other, contact the preservation group.

As this issue is for the greater part dedicated to Belgium we have held over our Tug News for the next issue. We wish all delegates and exhibitors a successful Tug Technology 2025.

#### Job van Eijk (editor)



HYDROTUG is one of several tugs belonging to the Port of Antwerp-Bruges that are driven by an alternative fuel. POA also is 'greening' several of its fleet. It will be interesting to see what will be the driver of the future in the Port of Antwerp. No doubt TugTechnology 2025 will provide some insight in the matter. Photo Ruud Zegwaard

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# The port of Antwerp

A short history of Antwerp and its port, host of the 2025 TugTechnology event.

by TDI Tugboat Publications

The city of Antwerp today is the third largest Belgian city by area. By metropolitan area it has a population of some 1,2 million people, the second largest metropolitan area after Brussels. The river Scheldt connects Antwerp to the North Sea via the Westerscheldt estuary. Antwerp is the second European port after Rotterdam.

The name **Ando Verpia** was found on Roman coins. What is now a big city started out as a small local village under Gallo-Roman rule. In the 4<sup>th</sup> century that the name Antwerp appeared – a name given to the settlement by the Franks. In the next centuries Antwerp remained an insignificant port contrary to Bruges with its thriving trading houses and overseas connections. The position of Bruges came about because of the Zwin river. When that river silted up, trade shifted to Antwerp.

By **1505** the Portuguese had established Antwerp as one of their main shipping bases with spices brought in trading them for textiles and metal. Cloth came in from England, wines from Germany, France and Spain, salt form France and wheat from the Baltic. Banks





Port of Antwerp. The CMB liner LEOPOLDVILLE being handled by the city tug 29 (left) and the Brabo boatmen on oars and with a steam launch photo: coll. Brabo

This 1897 map clearly shows the state of dock development at the end of the 19th century. The docks on the south side of the city (at bottom) were filled in during the 1970s map: From a booklet in the public domain - Bibliographisches Institut, Leipzig - Wikipedia Commons Licence

were financing trade, merchants and manufacturers. In 1531 the Antwerp Commodity Exchange was established which lasted until 1661. This was caused by the siege and fall of Antwerp to Spain. Under the terms agreed all Protestants were given four years to leave the city. This robbed Antwerp of a large percentage of its middle class and mercantile population. Furthermore, the Dutch forts in the area blockaded





The Port of Antwerp as seen from the air in 2016. The Right Bank runs from the middle left side to the bottom right side of the photo. The Scheldt runs below from the middle left side to the middle bottom side. The Deurganck Dock is seen at the bottom left side. Other details include the Kieldrecht Lock connecting the Deurganck Dock to the Left Bank (partially visible at the extreme bottom left side)photo: Tadmouri - Creative Commons Attribution-Share Alike 4.0 International license

the river Scheldt until 1795. In 1872 the Antwerp Stock Exchange was established which in 1997 merged into the Brussels Stock Exchange, currently known as Euronext.

In **1830** Belgium became an independent country and developed into one of the most industrious countries in the world. In 1914 the Germans invaded neutral Belgium. The occupation lasted until the Armistice in November 1918. Having been reconstructed a repeat happened in Maay 1940. Antwerp was liberated in September, 1944, but the Germans continued trying to destroy the port in an attempt to halt the use of the port by the Allied Forces. This failed.

#### Post World War 2

Reconstruction started anew. The docks were repaired so trade could resume. As the river is tidal a system of docks allows for easier loading / unloading. The first dock was ordered by Napolean Bonapart and was constructed in 1811 (Bonaparte Dock). The Willem Dock (named after the Dutch king) followed in 1830. In 1860 the Kattendijk Dock was completed. An important step was taken when in 1863 the Dutch Toll ended. The important Iron Rhine railway to Germany was completed in 1879. By 1908 eight docks were available.

After World War 2 had ended a plan was devised for the extension of the port of Antwerp. This involved extension of the docklands on the **right bank** of the Scheldt up to the Dutch border. The Berendrecht Lock which was completed in 1989 formed the final element of this extension. The locks had a length of 500 m and a width of 68 m. Apart from the docks large container terminals were established on the river banks. The Europe Terminal was completed in 1990 with the North Sea Terminal following in 1997.

The first plans for the **left bank** were prepared in the 1960s. Work on the Kalloo Lock started in 1979. The Waasland Canal, Verrrebroek Dock and Vrasene Dock were started but development of the area was slow. The urgency was only felt by the 1990's. The Vrasene Dock received its first seagoing vessel in 2000. An additional dock – the Deurganck Dock



Antwerp - container handling at the Bevrijdings Dock (Liberation Dock) - the former Delwaide Dock - in 2006 photo: Aminius - Creative Commons BY-SA 3.0 licence





#### Port of Antwerp

was tidal. At the end of the Deurganck
 Dock is the Kieldrecht Lock which opens
 up to the non-tidal docks.

The **port of Antwerp-Bruges** (the merged Antwerp and Zeebrugge ports) in 2024 handled 277,7 million tonnes of goods. Liquid bulk was down by 5,8%

to 83,6 million tonnes while dry bulk was up by 0,4% to 15 million tonnes. In this segment coal was down by 35,4% but this was in part compensated for by fertilizers up 22,9%. Conventional piece goods remained almost the same at 10 million tonnes. Ro/ro traffic was down by 3,4% to 20,3 million tonnes. Container

#### map: Port of Antwerp-Bruges

traffic, however, was up by 8,9% to 148,9 million tonnes with 13,5 million TEU handled. 20.195 seagoing ships were handled amongst which 187 cruise ships with 557.000 passengers.

Towage inside the locks is handled exclusively by the Port of Antwerp tug





Port of Zeebrugge map: Port of Antwerp-Bruges

fleet. Currently it is replacing its tugs with eco-friendly fuelled vessels. The tidal docks and quays are services by Multraship / Fairplay and Boluda. In Zeebrugge Boluda has the towage contract.

The **port of Ghent** in 2024 handled 29 million tonnes which is about equal to 2023. The majority of the cargo was dry bulk (64,1%). Liquid bulk was 15,8 %, ro/ ro 8,4% and conventional piece goods 10,5%.'Towage is handled by Multraship and Boluda.

The **port of Ostend** in 2024 handled 1 million tonnes. The figures for this port are steadily coming down since 2008. This is replaced with ever increasing traffic workboats supporting the construction of wind farms and the servicing of same. Of the cargo handled



Port of Ostend in 2025 - workboats and offshore support ships are major clients of the port photo: Port of Ostend

90% is dry bulk, 1,6% ro/ro, 0,2% containers and 7,6% traditional piecegoods. The port is also known for its handling of project cargo. Ostend is the second fishery port of Belgium.

Sources: Wikipedia, Port of Antwerp publications, Port of Ostend publications, 150 jaar Kanaal Gent-Terneuzen (published 1977), publications of North Sea Ports / Ghent.



Port of Ostend

map: Port of Ostend







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# **Belgian Towage**

Belgium, although a relatively small country, has a long history, houses some of Europe's biggest port areas and is home to a large number of tugs. This article provides an overview of the development of Belgian towage.

The name 'Belgium' comes from 'Gallia Belgica' which was a Roman province in the northern part of Gaul. From the Roman invasion in 100 BC matters evolved slowly. Between the 5<sup>th</sup> and 8<sup>th</sup> century power gradually shifted. The Verdun Treaty of 843 divided the region into a Middle Francia and a Western Francia. Gradually independent fiefdoms within the regions united. Finally, the Eighty Year's War divided the Low Countries into the United Provinces (or Federated Netherlands) in the North and the Southern Netherlands (or Royal Netherlands) in the South. The latter area more or less covers the current state of Belgium.

Ruled by the Spanish and later the Austrian Habsburgs the area was the scene of several power clashes. Following the French Revolutionary Wars the area was annexed by France in 1794. Next the Low Countries were unified as the Kingdom of The Netherlands in 1815.

Then, in 1830, the Belgian Revolution led to an independent Belgium, which from 1831 became a constitutional monarchy. Although initially the official language was French this gradually was diluted and Dutch became the second national language. Rather uniquely the country also divided into a French and Dutch speaking area.

During the First World War Germany occupied Belgium which became

the battle ground of the Western Front, This



AJAX is one of a series of three tugs built by P. Boele, Slikkerveer, The Netherlands, for SARaH. Her sister CASTOR (20,50 m, 200 ihp, built 1914) gained fame when on 7 November 1922 she rescued the remaining crew members of the barque ENCHANTRESS beached in the Braakman. On this particular occasion the tug was piloted by Capt. Goossen under the direction of the locally well-known Capt. Muller, owner of the Terneuzen-based towage company of the same name photo: coll. Job van Eijk (TugDoc)



OCEAN BULL was war-built as EMPIRE JEAN, later renamed EMPIRE MARY upon completion. Managed by Overseas Towwage they later acquired her and put the tug to work as MARINIA. In 1950 she was sold to Union des Remorqueurs de Dakar as W. PONTY. In 1961 she was sold to the Société Belge de Remorquage Océanique. The venture was apparently not succesful and the tug sold again in 1965 to the Italian owner S.A. Italiana Lavori Edili Marittimi as NETTUNO S. She was finally scrapped in 1985. Her steam engine developed 1.275 ihp

War in which Belgium became occupied territory from 1940 to 1944.

Following the War, the Belgian colonies of Belgian Congo and Ruanda-Urundi gained independence in 1960 and 1962 respectively. Belgium joined NATO as a founding member and in 1951 was one of the six founding members of the European Coal and Steel Community, followed in 1957 by the European Atomic Energy Community and the European Economic Community.

#### **Belgian Ports**

Belgium has six sea ports, two of which - Nieuwpoort and Blankenberge - nowadays provide for pleasure craft and the occasional fishing vessel. The other four are Ostend, Zeebrugge, Ghent and Antwerp. While Ostend and Zeebrugge are situated directly on the

photo: E. Dewulf



by Job van Eijk



Leon Letzer, founder of Sleepdienst Letzer

North Sea, Ghent and Antwerp can only be reached via the Wester Scheldt river, which runs for the greater part through The Netherlands. The Wester Scheldt is a treacherous river which meanders through a multitude of sand banks. Almost per definition this results in a high number of groundings, collisions, sinkings etc per year. For that reason there is a large presence of tugs and salvage craft available on the river but most of those are outside the scope of this article. Having said that the subject cannot entirely be avoided since without the river there would not be a Port of Antwerp and a Port of Ghent.

#### The beginning . . .

As per usual towage started in ports. It was Captain Henri Gerling who initiated towage in the Port of Antwerp. In 1866 this deepsea Master settled in Antwerp to start a towage business. Gerling was born in 1825 at Flensburg, at that time belonging to Denmark. By origin, Gerding - which was later altered to Gerling thus was a Dane. Four years later, on 10 December, 1870, he and two merchants with interests in deepsea trading, John Pickard Best and Herman Ludwig, established the Société de Remorquage à Hélice (freely translated as the Screw Propulsion Towage Company). At that time the paddle steamer still dominated so it was wise to thus advertise the novelty. The company took over the assets of Gerling, being six tugs the most powerful of which was 50 ihp.

Gerling was closely followed by **J.B. Maas** which in 1867 established a competing towage service. A third player emerged with the Port of Antwerp. In order to ensure the port had sufficient towage equipment a monopoly was offered to SARaH in 1871. This was refused by SARaH on the grounds that it restricted the company's development. Antwerp then placed the contract with Maas.

Due to the competition SARaH regularly invested in new tonnage and a 110 ihp tug was ordered. Even so the company ran into difficulties and was forced into an operational agreement with two competing firms. An unusual player during this period was the **S.A.** d'Assureurs et d'Armateurs **pour le Remorquage et Le Sauvetage**. Established in 1879 this company was set up by insurers to provide assistance to their clients and thus save on the payouts. It was a short-lived venture as the company liquidated in 1889. No further details were found but it is likely that the company had become superfluous to requirements due to the battle between Maas and SARaH and its operational partners and the succes of the latter which had greatly expanded its fleet.

photo: Jaap Heijliger

The battle ended when, in 1900, SARaH acquired the NV J.B. Maas and in 1901



CAPT. A. LETZER dates from 1917 when the 500 ihp tug was built as HS 28. She measured 28,52 x 6,37 m

CATHERINE LETZER and GENEVIEVE LETZER were part of a series of five built in Bremerhaven for account of Letzer's. The 1.000 hp tugs measured 27,00 x 6,78 m. The photo dates from post-1968 since in that year CATHERINE LETZER was slightly modified photo: coll. Job van Eijk (TugDoc)





DIRECTOR J. LETZER - bought 1923 built 1919 at Great Yarmouth as HS 93, later WESTHILL - 93 grt - 28, 52 x 6, 37 m - 500 ihp - 6 tbp - 1940-1944 escaped to UK and chartered by Ministry of War Transport, managed by Wm Cory, London. 1944 to the Admiralty. 1945 returned to owners



Letzer. Official name suggested as DIRECTOR JACK LETZER. Scrapped 1964. Also in the picture CAPT. A. LETZER - built 1918 as HS 28 for the UK War Office (Inland Water Transport Directorate). 1921-1929 managed by Crichton, Thompson & Co, London. 1929-1930 with Shipowners Towage syndicate, Antwerp, as ALSACE. 1930 transferred to Remoquage Letzer as CAPT. A. LETZER. Escaped to the U.K. during the invasion of Belgium. chartered to UK Navy as FY 1673 SERVITOR, an auxiliary minesweeper. 1944 returned to owners Letzer. 1964 broken up. Dimensions 28,52 x 6,37 m - 500 ihp - 7,5 tbp

postcard: issued by Administration Communale d Anvers - coll. Job van Eijk

DIRECTOR G. GERLING (650 ihp) owned by SARAH, Seen at Antwerp prior 1927 assisting the liner MINNEWASKA. She was a 21.716-ton ocean liner in the service of the Atlantic Transport Line and the Red Star Line from 1923–1933

postcard: issued by Escamator - coll. Job van Eijk



The seagoing tug GOLIATH - 1.200 ihp - was owned by SARAH and used in salvage operations. When the low countriesw were invaded the tug with a number of smaller Belgian tugs in company escaped to France only to flee again several days later. She served as W 121 during the War operating out of England

the **Bädische A.G. für Rheinschiffahrt**. J.B. Maas was paid for by the issue of 952 new shares in exchange for 10 tugs. The Bädische price was 348 new shares plus 126.000 Francs in cash in return for four tugs.

In 1908 SARaH had the 1.085 ihp tug *President de Leeuw* built which at the time was the most powerful tug in the area. The start of World War I saw SARaH with an impressive fleet of 34 vessels the majority of which escaped to England. Four vessels were lost during the war. After the war Mr F. Gerling took up office as Chairman of SARaH.

Another family that was to gain a name in towage was Letzer. Having established the S.A. de Remorqueurs Averso 'Antverpia' they looked to broaden their horizon. At the time the company was led by Mr Adrianus Letzer and his son, Leon Letzer. Leon Letzer - who hailed from the Dutch town of Zierikzee - took the initiative and on 23 November, 1923, the Letzers supported by the Rotterdam-based shipping company Wm. H. Müller, established Sleepdienst Letzer. Contrary to the Gerlings the Letzers already had an established fleet on which to build. In a few years the fleet grew significantly threatening the leading position of SARaH.



The salvage tug SCALDIS was added to the fleet in 1955. The tug was under construction for Bugsier as HERMES when taken over by URS. The 400 grt tug measured 50,50 x 9,16 m. Originally fitted with 2.400 hp Deutz she was later re-engined with 4.000 hp. The tug became a household name in Westerscheldt salvage. The tug experienced various groundings during her career due to the nature of the salvage work in the Westerscheldt area with its speedy currents and shifting sands photo: W. Puijpe



SCHELDE V is one of the six tugs originally ordered by Schelde Sleepvaart at the start-up of the company. Built in 1964 the tug measured 27,67 x 6,86 m. Single screw, Deutz main engine 750 bhp,11 tbp. Around 1972 competition between URS and Schelde Sleepvaart had forced the former in a defensive position. As the Belgian state had invested in both companies the state intervened and forced the companies to co-operate in the Antwerp River Towage Pool. This severely limited Antwerp's ambitions and their expansion outside Belgium. Schelde Sleepvaart's connection with Belgian shiphandling ceased by 2000 when URS took over the remaining shiphandlers. photo: coll. Job van Eijk (TugDoc)

Competition again became a major issue but by 1927 SARaH and Sleepdienst Letzer agreed to co-operation in order to minimise competition in the Scheldt area. The next year they took this a step further by establishing a new joint company: **Union de Remorquage et Sauvetage** (Towage & Salvage Union). The partners, however, also remained operating under their own flag effectively creating three non-competing fleets.

The late 1920's certainly were a time of change for the Belgian towage operators for in the same year URS was established, Letzer and SARaH together with Sleepdienst Antverpia NV and E. Herbosch established the **S.M. Binnenvaart Sleepdienst** (Inland Towage Company) in order to consolidate the barge and lighterage market in the Scheldt area.

In 1929 an unsuccesful attempt was made by a new entrant in the market, **The Shipowners and Towage** 



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NATHALIE LETZER - seen here in the colours of Union Towing & Transport - is another example of Belgian reconstruction. She was built in 1953 as the steam tug HAMTUN for Red Funnel at Southampton. Purchased in 1970 she returned to deepsea offshore work in 1973 under her new name. Now fitted with twin Deutz delivering 3.480 bhp - compared to her former 1.500 ihp - her bollard pull rose to 50 tonnes. By 1986 she was sold out of the fleet to Klyne tugs which used her on distance towing work photo: R. & F. van der Hoek



73 is one of a series of six 1968-built 2.200 hp Voith Tractors

photo: R. & F. van der Hoek

**Syndicate**. By the end of 1930 it was finished and the equipment taken over by Letzer and SARaH.

At the start of World War II SARaH numbered 21 vessels in its fleet. Once again many made the crossing to the UK with several later to be involved in the Dunkirk Evacuation. Five tugs were lost during the war, while SARaH's Managing Director Fred. G. Gerling was killed in 1940. His nephew Michel Gerling was also killed by the enemy in 1944.

#### Post War

A post-war credit-facility set up by the Government allowed Belgian companies to invest and Letzer's did so. First and foremost they took advantage of the many wreck clearing operations in the post war period. With newly acquired salvage gear and vessels URS salvage teams were active not only in Belgium but also in various French ports, the Congo and the Suez Canal. On the tugboat front a drastic renewal program was started wiping out the older steam tugs. No less than 12 shiphandling tugs of some 1.000 hp were built in Germany. Also a deepsea tug, *Scaldis*, was built to a German design. She was mainly active in the Westerscheldt and the North Sea on salvage duty. She lasted until 1983 when she was replaced on the Flushing salvage station by the much more powerful *Fighter*.

Not only did they make a start with renewal of the fleet but they also ventured abroad taking a stake in McAllister Towing, Canada. This unlikely move was made possible through the Belgian mining company Union Minière which had a stake in Sogemines which in turn operated in Canada. Also, the Letzer's appear to have been more adventurous and they invested in deepsea towage and salvage mainly through URS. While the three fleets still operated separately it was now URS that controlled them.

In 1963 Schelde Sleepvaart (Scheldt Towage) was established by Charlie and Ady Letzer competing with URS in the Antwerp region. Although maintaining a percentage of the shiphandling work the company soon branched out abroad. In Spain they operated S.A. de **Remolcadores**, in Egypt **Suez Towage** and Offshore Services (established 1978), Scheldt Gulf Towage and Salvage in the Emirates at Sharjah, Nassau Towing in the Bahamas while they also ventured into Nigeria (1980) and Iran (1978). Furthermore they operated some tug / supply vessels under the OSA banner.



On this postcard stamped 1934 a tug of the Stedelijke Sleepdienst is handling a passenger vessel through the Kruisschans Locks postcard: coll. Job van Eijk (TugDoc)





The U.R.S. tug SEA HORSE and sister SEA LION were built for an intended tug / barge operation. The intention was to carry coal from Poland to Belgium using 13.500 dwt bulk barges propelled by a tug pushing in the notch of the barge but with a towline already attached so in bad weather the tug could leave the notch a start towing in the conventional way. The project was a cooperation of Exmar - a Belgian shipping company and U.R.S. Dimensions of the barges 115,80 x 19,30 m. When sailing the tug would be controlled from a small wheelhouse on the barge. The distance to cover was 620 nm with an estimated push speed of 8 knots. The design of the notch was such that in case more ad the project aimed at chinning 250 000 tons of

powerful tugs were needed the notch could be adapted without consequences for the construction of the barge. In the end the project aimed at shipping 350.000 tons of coal per year - failed as an enterprise. The tugs were put on regular work and the barges used for other projects photo: coll. Job van Eijk





photo: R. & F. van der Hoek



The powerful Scaldis Salvage offshore crane RAMBIZ at work installing a substation in the London Array windfarm. Dimensions 85 x 44 x 5,6 m. Lift capacity 3.300 tonnes. Propulsion 4x Schottel, total 3.000 bhp. RAMBIZ was constructed in 1995 by the Rotterdam Drydock Co (RDM) from two offshore barges, RAM and BIZON, with a third - BUFFEL - on top

connecting the two. RAMBIZ was also instrumental in the wreck clearing operation of the car carrier TRICOLOR together with Smit Salvage's ASIAN HERCULES III. The salvage consortium for the operation consisted of Smit Salvage, Scaldis Salvage, U.R.S. Salvage and Multraship photo: courtesy London Array Ltd.

On 27 June, 1974, the hitherto separate SARaH, Letzer and URS companies merged into **Unie van Redding en Sleepdienst** (Salvage and Towage Union) bringing together a fleet of 49 vessels under a single banner. At that time the company had already diversified to take advantage of the North Sea oil business. For this several large tugs were built. After 1974 more powerful units were added up to 11.000 hp. The company also invested in North Sea cargo barges. **United Towing and Transport** was set up together with Crowley and Seaspan.

In the eighties the oil market collapsed. As a consequence many of the offshorerelated units were sold and attention once again shifted to upgrading the harbour fleet. The ever growing port areas of Antwerp outside the locks required new and more powerful tugs. A large newbuilding program brought twin screw, reverse tractor tugs and combi tugs on the scene. Some powerful tugs were equipped to FiFi-1 standard to be employed in terminal areas. This program was followed from 1995 by another extensive newbuilding program.

The Antwerp-area by that time had drawn the attention of competitors from outside Belgium. Rotterdam-based Kotug researched the possibilities but decided not to enter. The German operator **Bugsier** – which had many years before also operated salvage tugs from Flushing - made a probing gesture by stationing a tug near the Antwerp locks but this was quickly squashed by the city of Antwerp, competing tug operators and the Government. Singapore's PSA had thoughts to enter and in fact already decided on which tugs to send when they withdrew. Antwerp Towage is a joint-venture between Hamburg-based Fairplay Towage and Terneuzen-based Multraship. It operates outside the locks. The initial fleet comprised five tugs but these were augmented by tugs of the home fleets if and when necessary. *Multratug 5* was a 65-tbp time-chartered J.P. Knight tug, Fairplay *XVII* a 50 tbp tug. With the brand-new



The URS tug SCALDIS on her salvage station in the port of Flushing. Tugs occasionally form the subject of picture postcards and this is one depicting the activities in the port of Flushing on the north bank of the Westerscheldt. In the background a tanker is handled by tugs of the SHV while alongside SCALDIS a small Tak-owned salvage vessel is moored postcard: Foto Dert, Vlissingen



OURTHE was delivered by IHC Holland in 1953 to Société Generale de Dragage. The tug measured 28,80 x 7,52 m and was fitted with a 750 hp engine delivering 11 tbp. In 1967 she was purchased by URS and reconstructed photo: IHC Holland

94,7 tbp *Multratug 3* – a Damen ASD 3213 design – the company operated the then most powerful tug in the Antwerp port area. **MedTug** – a subsidiary of Mediterranean Shipping – made a shortlived appearance operating outside the lock serving mainly MSC container ships. Med Tug meanwhile was sold to Grupo Boluda in exchange for a shareholding in Boluda. Boluda now aso operates a number of tugs outside the city locks.

#### Port of Antwerp

Antwerp is the capital of the province of Antwerp in the region of Flanders. It is

media partner of

also one of the biggest European ports. It is also very old, dating from around the 2<sup>nd</sup> century. It was first named as such in the 4<sup>th</sup> century. It was, however, the siltation of the Zwin which effectively killed the city of Bruges as a major trading port. As Antwerp was by now easier to reach the trade transferred. In the 16<sup>th</sup> Century Antwerp became the second-largest city in Europe. Its port handled large numbers of ships. The booming business was based – in different periods – on the pepper market, silver and the textiles industry. In 1648 the **Treaty of Münster** declared



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LOUISE, one of Haeck & Van de Meerssche's 540 hp plow-dredge tugs at Antwerp, 4 August 1974

photo: L.O. Amboldt

the Scheldt to be closed for navigation effectively wiping out Antwerp's trading activities. This was later revoked and Antwerp regained a prominent position.

The city of Antwerp started a towage service in 1875. The '**Stedelijke Sleepdienst**' (City Towage Service) strictly operated within the docks. It gradually took over from the J.B. Maas monopoly. The Stedelijke has always eral other docks followed and by 1908 no less than eight docks were operational.

In order to take ships to their designated moorings within the dock system socalled dock-pilots were available. In general these were local people with intimate knowledge of the docks and in daily life had jobs like shrimp fishing, deck-hands or boatman. The cut-



CONDOR is operated by Verbeke Shipping. She is an example of a modern-day dredge tug

throat competition led to unsavoury practices that had a negative impact on the standing of the port. In 1931 the shipping association, shipping agencies, city council and port-related business syndicates were fed up with this and came together to regulate this business. In future Brabo was to run the harbour / docking pilots and the boatmen.

**The Brabo Group** today consists of three departments: Brabo Pilotage & Mooring, Brabo Academy and Brabo Maritime Services. Annually the number of pilotage services totals some 26.000 while the boatman services total some 36.000 jobs. Total staff of Babo Group is some 300 of which 65 pilots and 194 boatmen.

The Brabo Group is 55% owned by its contractors (i.e. the Antwerp Shipping Federation and the Royal Belgian Shipowners Association) and 45% by its employees. The co-ownership guarantees a maximum of operational knowledge and personal involvement of its employees. Employee share ownership is limited per person and is built up in phases. This avoids distortions in the capital structure and the focus on the long term is conceptually embedded into the corporate structure.

#### The Westerscheldt

The river Scheldt has a length of 384 kilometres. Its source is situated near Gouy in the French department of Aisne. On its travel the waters of the Scheldt run for 107 km through France, 207 km through Belgium and finally 70 km through The Netherlands. The name "Schelde" originates from Roman times when it was known as Scaldis. During the French occupation it became Scauth and later Escaut. Next it became Sceld, Schelde and Schelt.

Harbours can be found on both sides of the river and consequently availability of tugs was a must. The nature of the river caused many accidents and therefore the salvage industry was well developed in the area. Many players were operating there and fierce competition was never far away. Salvage station Flushing was occupied by at least three competitors at a time, moored almost on top of each other. L. Smit & Co. and the Belgians (U.R.S.) had a cooperation agreement and divided the area. Others thought nothing of this and **Bugsier, van den** 



photo: Neptune Marine



A tug launched today will be required to lower emissions year-on-year until it achieves carbon neutrality. In many cases, the technology for zero emissions operations has not yet reached maturity. Even if it had, how to pay today for a solution that will return on investment tomorrow? What fuels will be available? Affordable?

You're looking at the solution. The Damen ASD Tug 2713 Fuel Flexible (FF) is prepared for whatever the future demands. The vessel operates on a variety of dual-fuel arrangements now, and stands ready for rapid, cost-effective conversion once the picture becomes clear. Pictured here: ASD Tug 2713 FF

Navigating to



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Akker, Dijkhuizen, SHV, Polderman, Willem Muller, and Multraship all freely competed. After the initial contract was gained, however, they often worked together. Especially with groundings many tugs were necessary to keep a vessel in position – it was necessary to evenly distribute the forces in order to avoid the casualty shifting to a more dangerous position or to keep it in position to avoid capsizing on the edge of the sand banks.

Gradually however companies disappeared, merged or were purchased by the Smit Group. Nowadays the area is dominated by Multraship. Polderman also is still active with a number of smaller tugs. Bugsier currently owned by the German Fairplay Group which in turn has teamed up with Multraship. Van den Akker, the SHV towage department and U.R.S were all brought under the Smit International umbrella. Smit, however, has been acquired by BosKalis which eventually disposed of the shiphandling services. The north-western European division – by that time a joint-venture



VB JADE operates at Antwerp. Owned by Boluda, she was previously owned by Kotug-Smit, Smit International Harbour, and Union de Remorquage (URS) photo: Reinier van de Wetering

of Smit and Kotug – was disposed of by BosKalis to the Spanish operator Boluda.

The **Port of Ghent** came about when, in 1822, research was done into the

possibilities of an improvement and lengthening of the Sasse Vaart to connect Ghent to the Dutch port of Terneuzen on the Westerscheldt. On 24 January, 1825, digging of the canal



52 was one of a batch of Damen-built tugs delivered to the Port of Antwerp

photo: Hans Hoffmann





UNION FOUR aground in the Westerscheldt. She was one of a series of four powerful offshore tugs built for U.R.S. At the time URS had also teamed up with Canadian Crowley and Seaspan in Union Towing & Transportation for the exploitation of offshore tugs in the North Sea. The location where she ran aground was fairly popular as over the years several tugs and other vessels have been spotted in this location

photo: coll. Job van Eijk

The work / salvage vessel NORMA operated by Scaldis Salvage is the conversion of one of two former block-dumpers used in the construction of the pierheads at Hoek van Holland. The innovative design allowed for the dumping of the 50-tonne concrete blocks with extreme precision. The gantry crane has been removed and a sheerlegs put in place. NORMA actively participated in various salvage operations, amongst which HERALD OF FREE ENTERPRISE the ro/ro ferry that capsized outside Zeebrugge after leaving resulting in great loss of life photo: Job van Eijk





Boluda tugs handling a gas carrier at Zeebrugge

started. Two years later, the first ships entered. Political trouble, however, halted further development until 1841. In 1895 a start was made with a new lock at Terneuzen that would facilitate ships up to 140 m in length. Increased shipping allowed for the development of new port areas along the canal banks. After World War II, however, ships grew bigger almost yearly and the locks could not accommodate this. A sharp drop in shipping necessitated the building of a new sea lock at Terneuzen. With a length of 290 m this could accommodate vessels up to some 70.000 dwt. Also a new lock for inland shipping was built.

The Belgian company of J.B. Maas had been the first to station a tug at Terneuzen. The 50 ihp *Klamper* was looked after by Maas' local agent, Aug. de Meyer Shipping. Another important player at Terneuzen was the Muller company. Competition in the area ended in 1938 when Willem Muller and URS agreed to share the work on the Ghent - Terneuzen Canal including the salvage work on the river. The Muller company lasted until 1984 when sold to Wijsmuller. This situation lasted for a couple of years until the remains were sold to URS, effectively establishing URS Nederland with tugs flying the Dutch flag.

**In 1984**, the Muller family was back on scene with Multraship, competing for work on the Canal and on the river. From modest beginnings Multraship has grown into a significant player in the world of towage and salvage. Multraship and URS tugs jointly operated on the Canal, just like many years before by Willem Muller and URS.

The port operating company of **Brugge** - Maatschappij Brugse Zeevaart **Inrichtingen** – has through the years operated several relatively powerful tugs. The port of Zeebrugge officially opened for business in 1907, but the works started nine years earlier. In 1894 an agreement had been between the City of Brugge, the Belgian State and Messrs L. Coiseau and J. Cousin to build and operate a sea port (now Zeebrugge), an inland port and a channel to connect the ports. The company established by the latter two gentlemen - in 1895 - was named Compagnie des Installations Maritimes de Bruges, which years later was renamed to become the M.B.Z. for short. Over the years M.B.Z. operated a number of tugs but also made use of the major Belgian operators when needed. In 2013 it changed its name to Maatschappij van de Brugse Zeehaven **NV**, the major shareholder of which is the City of Brugge. In 1965 2.280 ships visited the port which handled 2,2 million tonnes of cargo. By 2022 the number of ships had risen to 7.548 with cargo handled increased to 54,9 million tonnes. An all-time high was reached in 1995 with 10.369 ships and handling



VB KIWI - seen here as SL KIWI - is a Rotor Tug operating at Zeebrugge

30,6 million tonnes of cargo. Compared to the 2022 figures the increase in size of today's ships is apparent. The port today handles significant ro/ro traffic and is a major port for liquid bulk, import / export of new cars and LNG. Apart from the sea port is the fishery port and the naval base. **In 2021 the Port of Antwerp and the MBZ merged. The business is continued under the name Port of Antwerp Bruges**. Today, all shiphandling at **Zeebrugge** is carried out by **Boluda**.

The **Belgian Navy** like any other navy employs tugs. The Belgian Navy came into existence in 1831. Operating some derelict warships interest dwindled and by 1862 the Navy was disbanded. The next attempt at naval operations started in early 1914 when some coastal and riverine guard vessels were used by the Government. Then, in 1918, with the addition of some former German naval vessels, the Navy was re-established only to disappear again some two years later. In 1938 a new start was made mainly with Coast Guard duties and mine countermeasures in mind. World War II intervened and it was only in 1949 that the Navy became one of the three divisions of the Ministry of Defence.

The first bigger tug in the Navy was the oceangoing *O-Lt Valcke*, a former Dutch tug built during the War for German account. In the early fifties a number of river / harbour tugs were built for the Navy, which rather unusual at the time used Voith-Schneider propulsion. The fleet was further strengthened by the inclusion of the Belgian State's coastal tug *Zeemeeuw* in 1981. Two former Smit harbour / coastal tugs were enlisted in 1980 as *Valcke* and *Ekster*.

#### **Dredging and spin-offs**

Belgium is home to some of the biggest dredging and hydraulic engineering firms in the world. Dredging has always involved tugs and consequently there have been quite a number of Belgian dredging tugs employed by **Ackermans & Van Haaren** (dating from 1888), **Dredging International** and **Jan de Nul**. All operate large fleet of tugs and multicat type vessels in support of their world-wide operations.

The company of **Haeck and Van de Meerssche** based at Dendermonde



photo: Richard Wisse

### Utility Tug CTV Service - Offshore Supply









#### CTOW BIEKE

even made dredging by tugs its living. They employed a fleet of tugs involved in plow dredging the entrance to the locks. The origins of the company date from shortly after World War II. At the time towing work on the inland waters of Belgium was down. Alfred Haeck, skipper / owner of the tug Helene was contracted by the Union Margariniere at Baasrode to loosen the silt build-up near their quays by sailing back and forth along the quays. The jet stream from the propeller diluted the silt which was then transported with the river current. The operation was quite successful and Haeck set to work to improve on the performance. This resulted in the invention of a dredging plow scraping the bottom being towed by the tug and raised / lowered by a winch. Further successful contracts necessitated more and bigger tugs. The expansion could be realised by teaming up with Caroline van de Meersche, daughter of a shipping agent with an interest in tugs.

With the tugs being less of a hindrance in the busy port areas the

fleet was contracted again and again. By 1959 no less than 9 steam tugs were in the fleet. Modernisation of the fleet led to a 13-strong all-diesel fleet in 1986. The company invested in new techniques with water pressure and air injection systems to improve efficiency of the ploughs. When Alfred Haeck passed away the firm was split into NV. Rupeltransport and NV. Freddy Roels. Both companies somewhat later went out of business and the remaining tugs were sold. The techniques pioneered by Haeck and Van de Meerssche are nowadays common use with dredging companies thus again providing work for a variety of tugs and workboats.

Other companies by origin also came from the hydraulic engineering industry. The **TVB** – Tijdelijke Vereniging van Bergingswerken (Temporary Society for Salvage Work) was set up by a number of dredging companies especially with a view to wreck clearance operations. **Scaldis Salvage** evolved from the TVB as a contractor for heavy lifting and salvage.

photo: Nicolas Arocha

Yet another player is **Herbosch-Kiere** which has over the years been involved in activities ranging from ship scrapping to hydraulic engineering. As such they were involved in marine lifting operations and operated a number of sheerlegs. 2025 is the 50<sup>th</sup> anniversary of the company which is today active in civil and hydraulic engineering, maritime and offshore support, construction foundation techniques and environmental projects aimed at soil remediation.

A recent development is the teaming up of Multraship, Herbosch-Kiere and DEME (through Dredging International and Decloedt Dredging) in **CTOW** - Combined Marine Terminal Operations Worldwide. The goal is to offer world-wide clients wider expertise base. It also offers opportunities for turn-key projects in various segments of the marine industry.

Sources: various company brochures; book 'De Westerschelde bij Storm en Mist' by Cor Heijkoop; book 'Terneuzen Sleepboothaven' by Henk de Winde; various articles on Belgian tugs and towage in Lekko and Lekko International; Port information websites; Internet, Wikipedia, files Job van Eijk, files TugDoc International. Note: this article is based on an article by the same author published in Lekko International in 2011.







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# The iron tug "Oscarsborg"

Dating from 1874 Oscarsborg is a unique memory of the Industrial Revolution and a piece of Norwegian history. It needs help.

#### by Olav Engvig



OSCARSBORG ashore 9 September, 2013

The 150-year-old *Oscarsborg* is the largest and most complete movable object left in Norway from the days of the industrial revolution.

With its original iron hull and regular care and maintenance it can steam for another 100 years. The vessel must be secured for preservation for future generations for research and education as a genuine object our constructed by our ancestors, The original iron hull is intact for close to a 100%.

The tug was built by *Akers Mek. Verksted* in Christiania in 1874 for the Government of Norway. She was used in the operation to fill three of the fairways of the Oslo Fjord west of the fortress Oscarsborg in the Drobak Narrows. The intent of the project was to make the defense of the capital much easier.

The jetty is in fact a long underwater wall stretching from the skerries of Hurum via Smaskjaer to the islet of Sondre Kaholmen. The wall was built as part of Oscarsborg Fortress, and was designed to prevent large vessels from sailing into the sound towards Haoya Island, on the east side of the fortress. Small openings allowing small shallow-draught vessels to pass are found near Hurumlande and south of Sondre Kaholmen. The jetty was built between the years of 1874–79,

photo: coll. Olaf Engvig

and is about 1.500 metres long and 25 metres high in some places. Its upper edge is about 4 metres wide. It consists of about 315.000 m<sup>3</sup> of stone blocks, each weighing up to a tonne, and took four years to construct. The material was freighted in on barges towed from Royken to location by *Oscarsborg*.

Sixty years later it proved its worth when commander colonel Birger Eriksen of the then obsolete fortress at Oscarsborg was able to stop the brand-new German heavy cruiser *Blücher*. By firing one shot each from the two ancient 28-cm Krupp-cannons at close range the heavy cruiser was stopped. The first shot hit the bridge and put the gunnery control out of action. The second one hit the aircraft fuel storage setting the area ablaze. Next she was finished off by two torpedoes fired from a hidden location. The commander of Blücher turned his



TUQ

Zine

Map of the underwater jetty which narrowed the entrance to Oslo to some 500 m

map: coll. Olaf Engvig



The heavy cruiser Blücher that led the attack on Norway and became the victim of the Oscarsborg Fort

photo: Deutsches Marinemuseum

ship towards shallow water but the vessel suddenly rolled over and sank. Nevertheless of the 2.202 people on board the majority managed to swim to the shore. 850, however, were lost.

*Blücher* was a large vessel measuring 206 x 21,3 m with a draught of 7,7 m. During construction her design was adapted so she could carry some 1.000 invasion troops and landing craft. The warship became operational in January 1940. When the attack on Norway began – in April 1940 – the 18.600 tons displacement heavy cruiser *Blücher* and the 11.700 tons displacement armoured pocket battleship Lützow (ex Deutschland) were tasked to attack Oslo carrying 800 and 1.000 marines respectively. These were to occupy the city after the guns of the ships had destroyed a number of land-based targets.

This happened during the early hours of 9 April, 1940, during the German invasion of Norway. The Blücher's main task had been to capture the Norwegian king and make Norway surrender without a fight. As it was, what happened made it possible for King Haakon of Norway and the Government to flee Oslo and continue the uneven challenge of trying to stop the superior German invaders. It was a most uneven battle but even so the fighting in southern Norway lasted for about one month. By then the King and the Government were safe over in England. This inspired President Franklin D Roosevelt to make his famous 'Look to Norway' speech. Oscarsborg thus is connected to this most significant time in the history of (maritime) Norway.

The tugboat had been built with a thicker hull than needed. The Government had asked Det Norske Veritas to specify and oversee the building of the ship. They did, however, used the specifications for a much larger vessel with thicker plating. It was a sturdy vessel that required the shipyard to order new material from the Bloomfield Ironwork in Staffordshire, England. Therefore the Aker Yard was unable to deliver the ship on time.

Arbitration that followed concluded that the Government had received a much stronger ship than asked for. On the other hand, the iron hull of the 22,22 meter hull of the 63 GT large tug is still the same after the vessel having been used for almost 150 years on the coast of Norway!

After working continuously for 128 years she overturned during a regular docking



OSCARSBORG

photo: coll. TugDoc International



OSCARSBORG in 1996 breaking ice

photo: coll. Olaf Engvig



OSCARSBORG operating in rough seas

and was partly filled with seawater. She had to be repaired It had to be repaired and the ship was temporarily secured at Kvithyll in Rissa next to the shipyard. Currently, however, we have been asked to move her due to re-development of the area. Oscarsborg has newly furnished cabins and a new electric system forward paid for by Norwegian public funds and us. It now needs engine room hook-up of the new gear.

#### We are looking for help to finish that.

Please see **www.olafengvig.com** and my book *Slepebaten OSCARSBORG*, Tapir Akademisk Forlag, Trondheim 2008. 264 p, ill, index. We are looking forward to initiating collaboration on a takeover and / or support for final repair of the ship.

#### Notes by editor

Olaf Engvig is a maritime historian, photographer, author of numerous books, and consultant to maritime museums in Norway, Sweden, and other countries. He has been the editor of several magazines in Norway, and a leader and diver in



Oscarsborg ashore in 2024

marine archaeological expeditions and excavations. In addition, he was the founder and CEO of a shipyard specializing in restoration of historic ships, and has been instrumental in restoring many unique old vessels.

One of those vessels is *Hansteen* – built by Nyland in Christiania (now Oslo) of iron in 1866 for account of the Government of Norway as a survey vessel for The Geographical Survey of Norway (Norges Geografiske

photo: Olaf Engvig

Oppmaling). In 1898 the Government sold the ship to Inherred Forenede Damskibsselskaber which converted it into a cargo, mail and passenger vessel. Shortly after it was sold again, this time to Sandnessjoen for service as a local passenger ferry renamed *Haarek*. In 1916 it was remodeled and this time a new weather deck was added. It made the ship better suited for passengers, serving both the fjords and the islands





OSCARSBORG in the colours of BOA Kompaniet

75

**Tug** Zine

off the coast of Norland, including the remote island of Traena for more than a generation. The vessel later served as an accommodation vessel and later as a hostel for the homeless. In 1978 the ship was scheduled for scrap.

Olaf Engvig, however, had contacted various maritime organisations but noone was interested in preservation of the historic vessel. He then took over the ship himself and with the help of volunteers worked for 15 year to restore the vessel. The volunteers and Engvig started Veteranskipsreparasjoner A/S, a shipyard specializing in restoration of old ships at the site of the closeddown Nylands Verksted in Oslo. They re-introduced riveting in Norway as a restoration technique for historic ships. In 1993 restoration was completed. Hansteen restored to her original form as a survey vessel was steamed to Trondheim where it came in the care of a non-profit organisation. In 2015, operational responsibility for the vessel was transferred to the Museums of Southern Trondelag (MiST), represented by the Trondheim Maritime Museum.



OSCARSBORG in Fosen drydock

photo: Olaf Engvig



HANSTEEN - the historic Norwegian survey vessel built during the change-over period from sail to steam. Preserved through the action of Olaf Engvig and now a working exhibit photo: Pieter Inpijn



**Tug** Zine



The two Dutch preserved ocean tugs HOLLAND (above) meets ELBE at sea off Scheveningen, as seen from ELBE (below) photos: Reinier van de Wetering



ELBE – photo Hans Hoffmann. HOLLAND was built in 1951 for account of Doeksen. She was based at the island Terschelling for salvage operations although she made a few ocean crossings as well. She was designed for the working area with a relatively shallow draught and high speed while in summertime she had to double as passenger ferry

> ferries to and from Terschelling. The high speed was required to fend off competing salvage tugs form the north (Bugsier) to the south (Wijsmuller, Smit). The route from Terschelling to the North Sea required precise navigation negotiating the shallows to deep

water in bad weather. During her operational life as a salvage tug she performed some 200 jobs. From 1976 to 1998 she was chartered to Rijkswaterstaat for survey work in the North Sea. In 1998 she was saved from the scrapyard to be preserved and and reconstructed to her original state ELBE was built in 1959 for account of L. Smit & Co. International Towing Co. The tug was employed in deepsea distance towing and salvage towing. In 1976 she was sold to the U.S. and reconstructed for use as a pilot boat named MARYLAND. In 1985 she went to Greenpeace. Renamed GONDWANA and later GREENPEACE she visited the North as well as the South Pole and everything in between. In 2002 she was handed to the Maritime Rijnmond Foundation and renamed ELBE. Over a period of years she was been restored to her original state, albeit without towing winch and with some modifications required by law.



JAN LEENHEER

photo: Ruud Zegwaard



# **Marine People BV**

Marine People BV is the name of a new and fast growing Rotterdam-based maritime service provider specialised in heavy-lifting, construction and decommissioning, emergency assistance, salvage and transport.

#### by Jasiu van Haarlem



Bonn & Mees tug DAVID (ex OONDERNEMING III) alongside the sheerlegs GOLIATH (built 1962 - 100 tonnes lift total main blocks to 50 m height - 28,05 x 13,8 m) photo: Toon van Bussel

It was on 14 July, 2023, that two renowned Dutch maritime operators - **Hebo Maritime Service** and **Bonn** & Mees Floating Sheerlegs announced they had merged to form Marine People B.V. Hebo and Bonn & Mees are both family businesses with a rich history. With a large and diverse fleet of vessels, Hebo is involved in projects in the field of integrated infrastructure, emergency assistance, salvage operations, transport, wind energy and dismantling in various markets. With more than 135 years of experience, Bonn & Mees operates floating sheerlegs from Rotterdam to meet lifting challenges in the field of offshore installation and dismantling, heavy lifting and civil construction. Already during the merger announcement future take-overs were not excluded. Since May, 2024, Marine People is 100% owned by Hebo and Bonn & Mees.

On 30 September, 2024, Marine People announced that it had taken over the 126-year-old Lekkerkerk based **Lekstroom Transport**. With this takeover, two tugboats, one work vessel and a large number of pontoons were added to the fleet. The name Lekstroom Transport, however, will remain. The same goes for Bonn & Mees and Hebo. The Lekstroom fleet was moved from Lekkerkerk to Rotterdam.

A second acquisition followed a few months later. On 23 December, 2024, Marine People announced that it had acquired a majority interest in



Bonn & Mees MATADOR 3 installing substations in the London Array windfarm on 16 May, 2011

photo: courtesy London Array Ltd



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the Rotterdam towing and pushing company **VKV Service**. With a fleet of ten tugboats and one transhipment vessel, VKV Service will be operating as an independent company under the flag of Marine People.

The oldest of the companies under the Marine People banner is

#### Bonn & Mees

The history of Bonn & Mees Drijvende Bokken B.V. goes back a long time. It was 1888 when the company started as a spin-off from the shipyard that had been established in 1869 by the shipbuilder J. Smit Czn. at Katendrecht (near Rotterdam) in 1869. This was a subsidiary of his shipyard in Alblasserdam. The Katendrecht works were managed by mr Hillrich Jann Bonn - Jan Smit's brother-in-law. Although it was the time when ship construction changed over form wood to iron the first ship built at the yard was the - wooden barque Groen van Prinsterer. It took from 1874 to 1876 to complete the vessel. The vard, however, had not been without work as much ship-repair work had been carried out, not in the least because the yard since its beginning had use of a drydock, the first in the Rotterdam area.

Hilrich Jann Bonn soon mingled with the influential Rotterdam shipping elite where, amongst others, he came in contact with mr Marten Mees. In the



Hebo's AVONTUUR 2 was built in 1978 as the patrol / inspection vessel HORN for account of the Ministry of Transport & Waterways, Directorate Limburg, by shipyard K. Damen.10,90 x 3,69 m. Main engine 345 bhp installed 1991 photo: TugDoc / Job van Eijk

early 1880s the increasing number of ships entering the port of Rotterdam also increased the risk of a serious collision with the probability a ship would sink in the fairway blocking the entrance to the port. The presence of adequate help in the form of a salvage company was required and an initiative of Rotterdam shipping people, amongst which Marten Mees, led to the formation in 1887 of the **Bergings Maatschappij** (Salvage Company). Director of the company was mr G. Dirkzwager while Hilrich Jann Bonn was nominated as one of the commissioners. The company survived as the Nieuwe Bergings Maatschappij (New Salvage Company) until 1925 when the company was transferred to Van den Tak Salvage. The salvage vessel *Stier* (yard nr 38) and a lighter with lifting capability – *Bok 1* – (yard nr 40) were ordered from Jan Smit. *Stier* was constructed at the Katendrecht yard as was the sheerlegs although the latter was completed under different ownership.



Hebo's push / tug CATHARINA 5 was built in 1989 by Damen shipyards for account of the Graan elevator Maatschappij as ELLY. Acquired by Hebo in 2011. 17,00 x 6,54 m. 2x Caterpillar total output 1.080 bhp. 15 tbp photo: TugDoc / Job van Eijk

In 1888 Jan Smit had sold the Katendrecht yard to concentrate on his Alblasserdam yard. The yard was purchased by Hilrich Bonn and Joan (Job) Mees, son of the banker Marten Mees. Henceforth it was known as **Bonn & Mees**. Mr. Joan. Mees Mzn. was a banker by trade. He thus provided sufficient financial support to work with Mr H.J. Bonn to take over the shipyard. The first product under new ownership was the sheerlegs *Bok 1*.

Although modest in capacity, a respectable number of seagoing vessels were built. Important shipping companies like Koninklijke Rotterdamsche Lloyd (Royal Rotterdam Lloyd) and the Holland-Amerika Lijn (NASM) were among the clients. Many repairs were also carried out on all kinds of ships. The yard also had an excellent reputation for building fishing vessels. Hilrich Bonn passed away in 1902, just two years into retirement.



In 1869 mr Jan Leenheer had entered he shipbuilding trade as an assistant in the store rooms of the Jan smit yard. Later as an apprentice carpenter he schooled in finances to become a bookkeeper next to the Director, Job Mees. In 1905 he was offered a (minority) shareholding in the associated NV Maatschappij Drijvende Bokken (Company Floating Sheerlegs) managed Bonn & Mees. The fleet at the start consisted of two lifting craft – the sheerlegs *Bok 1* and *Bok 2* – which had been purchased from the Nieuwe Bergings Maatschappij. Somewhat later the sheerlegs were sold to single-ship-companies in which both Bonn & Mees and Jan Leenheer had shares.

When the slump in the thirties hit the yard - by the time one of the 31 shipyards, 113 slipways and 15 floating dry docks in the Rotterdam region found it difficult to cope. The plans for the construction of the Maas tunnel – the construction of which was ultimately started in 1937 – meant the shipyard had to moved. It was therefore decided to close down the yard.in 1931.

N.V. Drijvende Bokken v/h. Bonn & Mees founded on16 October, 1916, was, however, spun off and continued by mr. Pieter Leenheer, who is associated with naval architecture at the Bonn & Mees shipyard. He acquired the floating sheerlegs *Bok 1* from the Nieuwe Bergingsmaatschappij in Maassluis. The floating sheerlegs *Bok 2* and *Bok 3* followed sometime later.

The older floating sheerlegs *Bok 1, 2* and 3 were equipped with hand winches and operated by at least six people that had to be provided by the client! They served the company well but post-war were replaced by the floating sheerlegs *Pionier* (in 1958) and *Goliath* (in 1962).

These sheerlegs were fitted with an auxiliary engine for the hoist winches. The arrival of the well-known seagoing sheerlegs Matador (1968) and Matador 2 (1975) modernised the fleet and greatly increased the available lifting capacity. To be able to tow these modern and heavier sheerlegs, the motor tug Ita of 1924 - second of that name - was joined from 1964 by the newbuild tug Pieter. Incidentally, the first Ita had jointly been owned by Bonn & Mees and Jan Leenheer. Ita (2) survived in the fleet until 1979. In 1973 the tug Onderneming III (built 1943) was acquired and renamed David. She busied herself mainly with the sheerlegs Goliath. When required extra tug capacity was chartered from other Rotterdam-based tug operators.

In 1997 the management - Jan Leenheer and his son Pieter Leenheer - set up Deltalift B.V. in a partnership with Smit-



HEBO-LIFT 9 seen here 7 January, 2022, off Puttershoek was acquired from Dansk Bjergning og Bogsering in 2017. Built 1998 at Busan. 66,98 x 27,03 m. Lifting capacity main blocks 800 tonnes to a height of 59 m photo: Nico Giltay



Tak. The latter put their sheerlegs Taklift 1 in this pool. It was a short-lived venture and by the end of 2000 it came to an end. But Bonn & Mees still needed a more powerful seagoing sheerlegs. For this they contracted Vuyk Engineering to develop and construct a 1.400-tonne sheerlegs. The fleet addition entered service in 2002 as *Matador 3*. This lifting craft was put to work all over Europe being one of the most powerful available in those years. In 2010 the company acquired the seagoing tug Eerland 26 actually the first-ever Schottel tractor tug ever built - from the Smit Group. This was a useful addition as the tug had been modernised and upgraded only a few years earlier which had included the installation of new main engines. The tug entered service as Jan Leenheer. In 2017 Bonn & Mees negotiated with the Smit

Group for the purchase of their *Taklift* 7 but this did not materialise.

#### Hebo Maritime Service

was founded in Zwartsluis in 1989 by Henk Bonsink. Henk since his school days had been working for Rijkswaterstaat, the Dutch Government body responsible for main water infrastructure of the country and for the protection of the country against the same waters. In addition to this job he also did many welding jobs and regularly transported yachts from all over Friesland to Zwartsluis. To this end he used his mother's motor yacht - not an ideal vessel for use as a tug. It suited Henk and he decided to become an independent operator. On 24 May, 1989, he purchased his first tug which was renamed Catharina.



LEKSTROOM VII is an example of Eerland ingenuity. The vessel was constructed by Eerland ashore at their base in Lekkerkerk.in 1960. The 17,00 x 4,70 m push boat was a novelty in those years. She was fitted with 2x 116 hp K.H. Deutz. Unclear when she left the Eerland fleet photo: A.T. Nobel

Henk managed to have a full order book during the start-up - not only for straight towing jobs but also pump work and some environmental control work which later was to become one of the Hebo specialties. His working area soon spread to the entire Dutch inland water system. A year into his new life the 120 hp tug proved to be too small so a second *Catharina* was acquired, this time with a 430 hp main engine. At the request of the authorities a floating crane was added to the fleet. A tract of land was acquired at Zwartsluis that became the home-base of Hebo. In 1997 the 410 hp Catharina 3 was purchased. Several local shipyards were serviced by the acquisition of transport pontoons suitable for the transport of ship's hulls. Henk's children – daughter Janneke and sons Wiebbe and Gerrit also joined the company. In 2000 the business portfolio was extended when Hebo started the building of polyester 'sloops' for recreational purposes – a growing market in those years.

During this period pollution prevention and -control became an important item for government bodies. Through Henk's contacts with local authorities in 2002 Hebo started a partnership with AVR Roteb – the Rotterdam City waste transport and disposal company – and several bilge reception and disposal companies in Calamiteiten Service Nederland. This group of companies was available for battling and prevention of major disasters.



LEKSTROOM 5 acting as stern tug with a transport of tanks. This tug was built in 1957 by Van Bennekum, Sliedrecht, as IKA GOEDKOOP for towage at Amsterdam. Over the years she was passed down the line within the Goedkoop group. In 1975 to L. Leeuwis, Rotterdam, as SOPHIA JACOBA II. 1984 acquired by Lekstroom Transport. 19,60 x 5,41 m. Original fitted with a 300 bhp Bolnes which was exchanged for a Caterpillar 609 bhp in 2009. Seen here 13 April, 2022, in the Oude Maas photo: Nico Giltay

83

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Hebo itself received a major standby contract from Rijkswaterstaat for the delivery of pollution prevention, control and clearance services. To this end the Hebo fleet was expanded with a number of dedicated vessels which were strategically located on the various water systems in the Netherlands. Seven years later – in 2009 - Hebo received an exclusive contract from the Port of Rotterdam Authority to supply equipment in the event of oil pollution. For this purpose, the PRA oil spill response vessels were taken over.

In 2014 Hebo purchased the over the inland waterway transport activities of Schiedam-based Mammoet Maritime, including the German office in Duisburg. This significantly expanded the fleet with a large number of tugs, push boats, pontoons, floating cranes / sheerlegs and specialized vessels. This acquisition made Hebo a major player in maritime services and specialized in both vertical and horizontal transport over water, ship salvage and combating environmental incidents on the water. The head office was moved from Zwartsluis to Rotterdam.

In the meantime, Henk's sons had taken over the management of the company. The fleet expanded steadily. A considerable number of seagoing pontoons were acquired from Boskalis. The fleet was also reinforced with a few specialized seagoing vessels, tugboats and floating sheerlegs. This allowed Hebo to make inroads in the offshore wind industry. Several units in the fleet are capable of world-wide operations. Hebo has developed into a major inlandwaters salvor as well.

#### Lekstroom Transport

In 1898, **Willem Daniel Eerland Sr.** founded the company. His son Jan succeeded him and grandson Pieter and his wife Netty led the company for more than 40 years.

While Willem Daniel was mainly involved towage his son Jan opted to expand the fleet with pontoons. This transformed the company form a towage to a transport company. Pieter and Netty further developed this concept and the company became a household name in inland shipping for the execution of complex transports on European inland waterways. Major infrastructure works



 The pushboat STERN was built in 2006 by Tinnemans, Maasbracht, as LIANCO. In 2013 the boat was shipped to

 Montevideo as BELLA UNION 1 to return in 2018 when purchased by Adelaar Duwvaart BV, Rotterdam as STERN.

 The 1.906 bhp 19,00 x 10,00 m vessel is managed by VKV Service. Seen here as stern boat for HEBO-SUB 1 on 10

 February, 2020, off Puttershoek
 photo: Nico Giltay



Hebo's CATHARINA 7 seen off Puttershoek on 10 February, 2025. She was built in 1958 by Weerter Scheepsbouw Maatschappij (hull) and v/h H.H. Bodewes, Millingen, to the order of the NV Nederlandsche Stoomsleepdienst v/h Piet Smit Jr NV. 22,94 x 5,70 m. Original engine Stork-Ricardo 376 bhp. 1996 re-engined with Mitsubishi 720 bhp. 10 tbp. Ordered as ZWEDEN, delivered as SPITSBERGEN. 1971 to Smit-Spido, 1973 Vigilanter Holding, 1973 Piet Smit Sleepdienst, 1975 Smit-VOS, 1977 Smit-VOS-Zwaak Rivier- en Duwvaart BV, 1984 Smit Internationale Havensleepdiensten, 1987 to BTS Berging- en Transportbedrijf Scheffer BV, 2002 to Wagenborg , 2004 to BTS BV, Schiedam, 2009 Mammoet Salvage, Schiedam, 2014 sold to Hebo as SPITSBERGEN and renamed CATHARINA 7 photo: Nico Giltay

have been carried out in the Netherlands, Germany, Austria and Switzerland. The pontoons are also suitable for project cargo, such as offshore constructions, harbour cranes, tanks, ship sections, etc.

W.D. Eerland & Zn – from 1975 onward Lekstroom Transport BV, also known as Eerland Lekkerkerk – was a typical familyowned and operated business with many family members from both sides involved. The culture of the company also kept employees on board for very long times, including several fathers and sons. Hallmark of the company was the talent for improvisation which solved many problems. Post World War 2 there was much work rebuilding The Netherlands. Lekstroom Transport had its fair share of the work. It was Jan Eerland who got involved in road transport, acquiring a second-hand ex-Army truck which he refitted as a crane truck. Another diversion was into the oil trade. That started in the 1940s and ran on until the 1960s.





Bonn & Mees sheerlegs MATADOR 3 seen here passing the Kiel Canal en-route to a new job

In the 1980s the work changed. Many shipyards disappeared so Eerland has to search for new markets. A specialism becomes bridge construction. Elements of a bridge are transported by water and on location the elements are put into place using the capacities of the barges. An out-of-the-box solution for a tank transport where the tank cannot be carried upright – the bridges are too low - and cannot be lowered onto a barge in a horizontal position – the tank construction is not strong enough - was thought of by Jan and his son Pieter Eerland. The solution: lift the transport barge in a vertical position and put it on the bottom. Next lift the tank in its upright position and lower it onto the horizontal section of the barge that now serves as the load deck. Fasten the tank and next transfer the barge from vertical to a horizontal position ready for the tow.

As far as naming of the vessels is concerned, the name *Lekstroom* followed by a number was reserved for the tugs. The names of family members were often used for the pontoons. Socially, the family and their fleet cooperated with activities for the Lekkerkerk community. Each December 'Sinterklaas' was brought ashore every year by a Lekstroom tug, renamed *Spanje* for the occasion. For fireworks displays on the water, the company provided tugs and pontoons.

When owners Pieter and Netty Eerland reached retirement age there was no follow-up in the family so they decided to sell the 125 year old company. Hebo was well-known to them what resulted in a sale. Under the banner of Marine People the continuity of the service is guaranteed and the name Lekstroom Transport will live on. It is the policy of Marine People that the strong brands with good reputation and extensive networks will operate as before doing what they do best.

#### **VKV Service**

was founded in 1999 by Bert Vos and a partner. The company originated from the towing service of the stevedore company European Bulk Service B.V. - EBS, subsidiary of HES management - which ceased its towing activities. The fleet consisting of the

photo: J.W.F. Smallegange

tugs *Albatros* (1) and *Anna Marie* as well as staff were taken over. With a work guarantee from EBS the company started providing towing and pushing activities in and around (mainly) the port of Rotterdam towing floating cranes, weighing towers, elevators, push barges and other equipment. In addition to these activities they also carry out pontoon transports.

The fleet was expanded shortly after its foundation. In 2000 the tugboat *Hercules* was purchased and in 2002 the pushboat Albatros (2) replaced Albatros (1). Over the years, pushboats were added to the fleet and the area of operation expanded beyond the port of Rotterdam to the European inland waterways. In 2013, the first new construction ordered by the company entered service. *Walvis* has an engine output of 2.600 hp. The push / tug is also suitable for assistance to seagoing vessels. In 2024 Marine People acquired a majority interest in 25-year old VKV Service. The fleet consists of 10 tugs and pushboats, two workboats and a number of push barges and pontoons.



# **Fleetlist Marine People**

Note: the fleetlist shows the situation of the fleet under the Marine People umbrella. All vessels listed entered under their initial owner in 2024. Following the company policy they remain listed with their owners. The year they were purchased thus is the year of entrance into their own fleets. Vessels are grouped more or less according to their purpose. The information was gleaned from a variety of sources Note that details may vary since the information was gathered, a fact not unknown to workboats.

#### **Explanation of table**

Bought: the year the vessel entered the fleet of Hebo, Bonn & Mees, Lekstroom or VKV. Tonnage (d = displacement is only used with inland waters vessels), (w= weight of vessel in tonnes), (g = gross tonnage ). Gross tonnage also indicates a seagoing vessel. Dimensions in metres (o = overall, m= moulded). Further details are listed in the second line of text with each vessel. The former names of the vessel are listed (where applicable). Note that when a vessel has held the same name with different owners, the only name change listed is the last one prior to the next name change.

	name	built	bought	tonnage	length	beam	depth	draught	bhp	owner
assist boat	Avontuur 2	1978	1999	2,85 d	10,90 (o)	3,69 (0)	1,20	1,10	340	Hebo Maritime
Built by K. Dame	en – Hardinxveld-Gie	essendar	n. Ex <i>Horn</i> ,	Roermond-9	)1, <i>Horn-</i> 90. S	Single screv	v. Fitted w	ith push b	ow and 2	x coupling winche
assist boat	Avontuur 3	????	????	5,0 d	7,00 (o)	2,38 (o)	-	0,70	75	Hebo Maritime
single screw. M	aritime									
assist boat	Avontuur 4	????	????	3,0 d-	6,70 (o)	2,20 (o)	-	0,40	20	Hebo Maritime
Single screw										
aunch	Avontuur 7	2018	2018	11,7 d	11,20 (o)	3,74 (o)	-	1,10	280	Hebo Maritime
Built by Botenb	ouw Tukker, Gorinc	hem (hu	ll) and Heb	oo Equipme	ent, Zwartslu	is. Single H	HP rudde	r-propeller	•	
oush / tug	Catharina 4	1954	2004	35,4 d	23,40(o)	5,68	-	1,50	1.230	Hebo Maritime
Built by Schifsw	verft Oberwinter, Re	emagen.	. Ex Mercu	rius, Zwabo	-00, Veka 10	4-1997, Clii	nont-96, e	ex A-797 Cl	imont-66.	Twin screw.
bush / tug	Catharina 5	1989	2011	29,2	17,00 (o)	6,54	3,00	2,50	1.080	Hebo Maritime
Built by Damen	Shipyards, Gorinch	em. Ex D	iablo, Hena	lrik 6-08, Bri	itt-06, Betsie	G-04, Ilha	do Corisco	-98, Elly-95	. Twin sci	rew nozzle. 15 tbp
ug	Catharina 7	1958			22,94 (o)					Hebo Maritime
0	er Scheepsbouw (hu								ne). Single	e screw. 10 tbp.
bush boat	Catharina 10	1962	2014	143,4 d	15,23 (o)	9,61 (0)	-	1,90	1.240	Hebo Maritime
Built by De Bies	sbosch, Dordrecht.	Ex Büffel	, Bruche-00	), Seille-79. I	Adjustable v	vheelhous	e. Twin So	hottel Ruc	Iderprop	ellers. 15 tbp.
ug	Catharina 11	1992			19,50 (0)					Hebo Maritime
Built by Den Br	eejen, Hardinxveld.	Ex IJssel	s <i>troom</i> . Tw	in screw. 15	5,5 tbp.					
ender	Hebo Tender	-	-	-	-	-	-	-	-	Hebo Maritme
No further deta	ails.									
oush / tug		1967	2010	138 g	24,28 (0)	8,50 (m)	1 20	3,00 (m)	Q11	Denne & Massa
Jushi / tug	Jan Leenheer	1 1 2 0 7	2010	1 100 8	27,20(0)	1 8,50 (m)	4,30	1,00 (11)		Bonn & Mees
0	owaldtswerk (hull se									
Built by Kieler H		ections) a	nd Ulrich F	Harms & Co,						
Built by Kieler H	owaldtswerk (hull se	ections) a 1964	nd Ulrich F 1964	Harms & Co, 20,8 d	Tellerort. Ex	Eerland 26		. First-ever	Schottel t	ractor tug. 17,0 tb
Built by Kieler H ug Built by Zorg &	owaldtswerk (hull se Pieter L	ections) a 1964	nd Ulrich F 1964 uis. Single	Harms & Co, 20,8 d screw.	Tellerort. Ex	Eerland 26		. First-ever	Schottel t -675	ractor tug. 17,0 tb
Built by Kieler H tug Built by Zorg & tug	owaldtswerk (hull se <i>Pieter L</i> Vlijt (v/h H. de Haas	ections) a   1964 s), Maash   1956	ind Ulrich H 1964 uis. Single 2007	Harms & Co, 20,8 d screw. 18,2 d	Tellerort. Ex 21,43 (o) 21,32 (o)	<i>Eerland 26</i> 5,75	, Janus-77 -	. First-ever 2,73	Schottel t -675	ractor tug. 17,0 tb Bonn & Mees
Built by Kieler H Tug Built by Zorg & Tug Built by v/h Boc	owaldtswerk (hull se Pieter L Vlijt (v/h H. de Haas Lekstroom I	ections) a   1964 s), Maash   1956	nd Ulrich F 1964 uis. Single 2007 20, Polaris	Harms & Co, 20,8 d screw. 18,2 d -74. Single s	Tellerort. Ex 21,43 (o) 21,32 (o)	<i>Eerland 26</i> 5,75	, Janus-77 -	. First-ever 2,73	Schottel t -675	ractor tug. 17,0 tb Bonn & Mees
Built by Kieler H Tug Built by Zorg & Tug Built by v/h Boc Tug	owaldtswerk (hull se Pieter L Vlijt (v/h H. de Haas <i>Lekstroom I</i> dewes, Millingen. Ex	ections) a 1964 (), Maash 1956 ( <i>Eerland</i> 1957	and Ulrich F 1964 uis. Single : 2007 <i>20, Polaris</i> 1984	Harms & Co, 20,8 d screw. 18,2 d -74. Single s 26,2 d	Tellerort. Ex 21,43 (o) 21,32 (o) screw. 19,60 (o)	Eerland 26	, <i>Janus-</i> 77 - 2,80 2,50	. First-ever 2,73 2,15	Schottel t -675 480	ractor tug. 17,0 tb Bonn & Mees Lekstroom
Built by Kieler H sug Built by Zorg & sug Built by v/h Boc sug Built by Van Ber	lowaldtswerk (hull se Pieter L Vlijt (v/h H. de Haas Lekstroom I dewes, Millingen. Ex Lekstroom V	ections) a 1964 (), Maash 1956 ( <i>Eerland</i> 1957	nd Ulrich F 1964 uis. Single 2007 20, Polaris 1984 nia Jacoba I	Harms & Co, 20,8 d screw. 18,2 d -74. Single s 26,2 d <i>I, Ika Goedk</i>	Tellerort. Ex 21,43 (o) 21,32 (o) screw. 19,60 (o)	Eerland 26	, <i>Janus-</i> 77 - 2,80 2,50	First-ever 2,73 2,15 2,10	Schottel t -675 480 609	ractor tug. 17,0 tb Bonn & Mees Lekstroom
Built by Kieler H tug Built by Zorg & tug Built by v/h Boo tug Built by Van Ber Jaunch	lowaldtswerk (hull se Pieter L Vlijt (v/h H. de Haas Lekstroom I dewes, Millingen. Ex Lekstroom V nnekum, Sliedrecht	ections) a 1964 3), Maaslu 1956 4 <i>Eerland</i> 1957 . Ex Sopł	nd Ulrich F 1964 uis. Single 2007 20, Polaris 1984 nia Jacoba I	Harms & Co, 20,8 d screw. 18,2 d -74. Single s 26,2 d <i>I, Ika Goedk</i>	Tellerort. Ex 21,43 (o) 21,32 (o) screw. 19,60 (o) oop-1975. Si	Eerland 26	, Janus-77 - 2,80 2,50 7.	First-ever 2,73 2,15 2,10	Schottel t -675 480 609	ractor tug. 17,0 tb Bonn & Mees Lekstroom Lekstroom
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Built by Kieler H tug Built by Zorg & tug Built by v/h Boo tug Built by Van Ber aunch Single screw. Dush boat Built at Gdynia Dush boat	lowaldtswerk (hull se Pieter L Vlijt (v/h H. de Haas Lekstroom I dewes, Millingen. Ex Lekstroom V nnekum, Sliedrecht Neeltje Adelaar (hull) and Socarena	ections) a 1964 (), Maash 1956 ( <i>Eerland</i> 1957 . Ex <i>Soph</i> 2006 (m, Bould 1982	nd Ulrich F 1964 uis. Single : 2007 20, Polaris 1984 nia Jacoba I 2006 2024 ogne-sur-M 2007	Harms & Co, 20,8 d screw. 18,2 d -74. Single s 26,2 d 1, <i>Ika Goedk</i> 3,5 d 164,0 d Aer. Ex <i>Resis</i> 227,0 d	Tellerort. Ex 21,43 (o) 21,32 (o) screw. 19,60 (o) oop-1975. Si 6,70 (o) 22,42 (o) stant. Owner 19,30 (o)	Eerland 26 5,75 6,02 5,41 ngle screw 2,10 9,50 Hebo Equ 8,30	i, Janus-77 - 2,80 2,50 ,. 1,05 - iipment, 2 2,75	. First-ever 2,73 2,15 2,10 0,60 2,80 Zwartsluis. 2,16	Schottel t -675 480 609 74 2.396 Twin scru 1.730	Lekstroom Lekstroom Lekstroom Lekstroom VKV (op) ew.
Built by Kieler H tug Built by Zorg & tug Built by v/h Boo tug Built by Van Ber Jaunch Single screw. push boat Built at Gdynia push boat Built by De Bies	owaldtswerk (hull se Pieter L Vlijt (v/h H. de Haas Lekstroom I dewes, Millingen. Ex Lekstroom V nnekum, Sliedrecht Neeltje Adelaar (hull) and Socarena Albatros	ections) a 1964 (), Maash 1956 ( <i>Eerland</i> 1957 ( <i>Ex Soph</i> 2006 (1982 (1982) ( <i>Souther Southers</i> )	nd Ulrich F 1964 uis. Single 2007 20, Polaris 1984 nia Jacoba I 2006 2024 ogne-sur-N 2007 ca I, Nedlloy	Harms & Co, 20,8 d screw. 18,2 d -74. Single s 26,2 d 1, <i>Ika Goedk</i> 3,5 d 164,0 d Aer. Ex <i>Resis</i> 227,0 d yd 1-99. Ow	Tellerort. Ex 21,43 (o) 21,32 (o) screw. 19,60 (o) oop-1975. Si 6,70 (o) 22,42 (o) stant. Owner 19,30 (o) mer Albatro	Eerland 26 5,75 6,02 5,41 ngle screw 2,10 9,50 Hebo Equ 8,30 s Duwvaar	, <i>Janus-77</i> 2,80 2,50 , 1,05 - ipment, 2 2,75 t, Zwijndi	. First-ever 2,73 2,15 2,10 0,60 2,80 Zwartsluis. 2,16 recht. Twin	Schottel t -675 480 609 74 2.396 Twin scr 1.730 screw.	ractor tug. 17,0 tb Bonn & Mees Lekstroom Lekstroom Lekstroom VKV (op) ew.
Built by Kieler H tug Built by Zorg & tug Built by v/h Boc tug Built by Van Ber launch Single screw. push boat Built at Gdynia push boat Built by De Bies push boat	owaldtswerk (hull se Pieter L Vlijt (v/h H. de Haas Lekstroom I dewes, Millingen. Ex Lekstroom V nnekum, Sliedrecht Neeltje Adelaar (hull) and Socarena Albatros sbosch, Dordrecht.	ections) a 1964 (), Maash 1956 ( <i>Eerland</i> ) 1957 (Ex <i>Soph</i> ) 2006 (m, Bould 1982 (Ex <i>Nautio</i> ) 1968	Ind Ulrich F 1964 2007 20, Polaris 1984 1984 2006 2024 2006 2024 2007 2007 <i>ca I, Nedllo</i> 2013	Harms & Co, 20,8 d screw. 18,2 d -74. Single s 26,2 d 1, <i>Ika Goedk</i> 3,5 d 164,0 d Aer. Ex <i>Resis</i> 227,0 d yd 1-99. Ow 49,0 d	Tellerort. Ex 21,43 (o) 21,32 (o) screw. 19,60 (o) <i>oop-</i> 1975. Si 6,70 (o) 22,42 (o) <i>stant</i> . Owner 19,30 (o) ner Albatro 19,78 (o)	Eerland 26 5,75 6,02 5,41 ngle screw 2,10 9,50 Hebo Equ 8,30 s Duwvaar 10,27	, <i>Janus-77</i> 2,80 2,50 , 1,05 - iipment, 2 2,75 t, Zwijndi 2,67	. First-ever 2,73 2,15 2,10 0,60 2,80 Zwartsluis. 2,16 recht. Twin 2,17	Schottel t -675 480 609 74 2.396 Twin scr 1.730 screw. 1.200	ractor tug. 17,0 tb Bonn & Mees Lekstroom Lekstroom Lekstroom VKV (op) ew. VKV (op)
Built by Kieler H tug Built by Zorg & tug Built by v/h Boc tug Built by Van Ber launch Single screw. push boat Built at Gdynia push boat Built by De Bies push boat	lowaldtswerk (hull se Pieter L Vlijt (v/h H. de Haas Lekstroom I dewes, Millingen. Ex Lekstroom V nnekum, Sliedrecht Neeltje Adelaar (hull) and Socarena Albatros sbosch, Dordrecht.	ections) a 1964 (), Maash 1956 (), Maash 1957 (), Ex Soph 2006 (), 2006 (),	and Ulrich F 1964 Jis. Single : 2007 20, Polaris 1984 Jacoba I 2006 2024 2007 2007 ca I, Nedllog 2013 reka, Uria-	Harms & Co, 20,8 d screw. 18,2 d -74. Single s 26,2 d 1, Ika Goedk 3,5 d 164,0 d Aer. Ex Resis 227,0 d yd 1-99. Ow 49,0 d 84. Owner J	Tellerort. Ex 21,43 (o) 21,32 (o) screw. 19,60 (o) <i>oop-</i> 1975. Si 6,70 (o) 22,42 (o) <i>stant</i> . Owner 19,30 (o) ner Albatro 19,78 (o)	Eerland 26 5,75 6,02 5,41 ngle screw 2,10 9,50 Hebo Equ 8,30 s Duwvaar 10,27	, <i>Janus-77</i> 2,80 2,50 , 1,05 - iipment, 2 2,75 t, Zwijndi 2,67	. First-ever 2,73 2,15 2,10 0,60 2,80 Zwartsluis. 2,16 recht. Twin 2,17	Schottel t -675 480 609 74 2.396 Twin scr 1.730 screw. 1.200 crew.	ractor tug. 17,0 tb Bonn & Mees Lekstroom Lekstroom Lekstroom VKV (op) ew. VKV (op)



type	name	built	bought	tonnage	length	beam	depth	draught	bhp	owner
push / tug	Arend	1981	2011	15,2 d	16,86 (o)	6,13	2,40	1,84	1.000	VKV (op)
Built by H.A. van Gelder, Gorinchem. Ex Alany, Salvé-08, Elmar-1998, Pantha Rei-87. Owner Adelaar duwvaart, Zwijndrecht. Twin screw.										
push / tug	Patrijs	2016	2016	-	26,45 (o)	11,20	-	1,80	3.100	VKV
Built by Trico, R	otterdam. Owner Pa	atrijs Du	wvaart, Ro	otterdam. T	win screw. 4	1 tbp.				
push boat	Stern	2006	2018	91,5 d	19,00 (o)	10,00	-	2,52	1.906	VKV
Built by Tinnem	ans, Maasbracht. Ex	x Bella U	nion 1, Liai	<i>1co-</i> 13. Owr	ner Adelaar [	Duwvaart,	Rotterda	m. Twin sc	rew.	
patrol	Tille	1971	2010	-	14,23 (0)	4,26	-	1,30	168	VKV
Built by Damen	Shipyard (M. Dame	n & K. D	amen Mzn	), Hardinxv	eld. Ex name	<i>Tille</i> . Sing	le screw.			
push / tug	Utopia	1948	2019	120,0 d	22,20 (o)	5,06	-	2,17	960	VKV (op)
Built by Weserw	erft, Minden. Ex <i>Utoj</i>	oia, Sylvia	a-11, Johnny	/ 0-90, Hille	chien-89, <i>Mo</i>	nopol ??.Ov	vner Adel	aar Duwva	art, Zwijn	drecht. Twin screw.
push / tug	Walvis	2013	2013	-	19,98 (0)	9.65	-	2,20	2.600	VKV
Built by Shipyar	d Kladovo Rhine-Da	nube, Kl	adovo (hu	ll) and Trico	, Rotterdam	. Owner W	alvis Duw	vaart, Rot	terdam. T	win screw. 30 tbp.
Spill response	Hebo-Cat 5	2006	2009	56,0 d	28,55 (0)	13,32 (0)	-	2,02	1.216	Hebo Maritime
Built by Shipyar	d Grave, Grave. Ex (	<i>ЭSR-31</i> . Т	win screw	. Equipped	with sweep	arms, skim	nmer, oil s	screens, et	с.	
spill response	Hebo-Cat 6	2010	2010	-	9,20 (o)	2,50 (oa)	1,50	0,75	75	Hebo Maritime
Truckable vesse	l. Single screw. Equ	ipped w	ith sweepi	ng arms, sk	immer.					
spillresp/salvage	e Hebo-Cat 7	2012	2012	450 g	51,32 (0)	11.80 (o)	3,00	2,50	1.276	Hebo Maritime
Built by Malbo S	δp Zoo, Wrioclaw (hι	ull) and S	Shiprepair	M. Drent, Z	wartsluis. T	win screw.	Equipped	d with swe	eping arn	ns, skimmer,
salvage pumps.										
spill response	Hebo-Cat 8	2010	2010	-	9,20 (o)	2,50 (o)	1,50	0,75	75	Hebo Maritime
Truckable vesse	l. Single screw. Equ	ipped w	ith sweepi	ng arms, sk	immer.					
spillresp/salvage	Hebo-Cat 9	2011	2011	-	40,00 (o)	9,00	2,00	1,85	660	Hebo Maritime
Built by De Groo	ot, Moerdijk. Twin so	crew + b	owthruste	r. Equipped	d with sweep	ing arms,	skimmer,	oil screen	s, salvage	e pumps.
transport	Hebo-Cat 10	1984	2911	-	13,40 (o)	4,00 (o)	-	1,37	132	Hebo Maritime
Built by Shipyar	d Grave, Grave. Ex <i>l</i>	Batenbur	<i>g</i> . Single s	crew. Equip	ped with oil	screens.				
multi spillresp	Hebo-Cat 12	2000	2013	44,1 d	17,05 (o)	5,10 (o)	2,00	1,35	220	Hebo Maritime
Built by Damen	Shipyards, Hardinx	veld. Ex	Ecoduck. S	ingle screw	. Equipped v	vith skimm	ner, oil scr	reens, etc.		
	Hebo-Cat 13	1965	2020	133,0 d	15,70 (o)	4,30	-	0,80	900-	Hebo Maritime
spill response										
	, Schiedam. Ex OSR-	35, Roteb	5. Single s	crew. Equip	ped with skir	nmer, oil se	creens, sa	lvage pum	ps etc. Hi	gh speed 35 km/hr.
Built by De Hoop	, Schiedam. Ex OSR-	35, Roteb <1953				nmer, oil so 9,50 (o)				gh speed 35 km/hr. Hebo Maritime
Built by De Hoop multi / salvage	, Schiedam. Ex OSR-	<1953	2014	232 g	31,80 (o)	9,50 (o)		1,60	750	Hebo Maritime
Built by De Hoop multi / salvage Built at Hambur	, Schiedam. Ex OSR- Hebo-Cat 15	<1953 reconst	2014 ructed int	232 g o 125 tonne	31,80 (o) es floating sh	9,50 (o) neerlegs by	/ Kraaijev	1,60 eld, Sliedro	750 echt. Ex <i>J</i>	Hebo Maritime umbo. 1990
Built by De Hoop multi / salvage Built at Hambur reconstructed n	o, Schiedam. Ex <i>OSR</i> - <i>Hebo-Cat 15</i> g as pontoon. 1953	<1953 reconst boat. Be	2014 ructed inte am can be	232 g o 125 tonne increased	31,80 (o) es floating sh to 14,50 m (d	9,50 (o) neerlegs by pa) with sid	/ Kraaijev de pontoc	1,60 eld, Sliedro ons attach	750 echt. Ex <i>Ju</i> ed. Vesse	Hebo Maritime umbo. 1990
Built by De Hoop multi / salvage Built at Hambur reconstructed n	o, Schiedam. Ex <i>OSR-</i> <i>Hebo-Cat 15</i> rg as pontoon. 1953 nulti-purpose work ifi pump, water / fo	<1953 reconst boat. Be	2014 ructed inte am can be itors. Seag	232 g o 125 tonne increased going. Singl	31,80 (o) es floating sh to 14,50 m (o e Schottel Ru	9,50 (o) neerlegs by pa) with sid	/ Kraaijev de pontoc	1,60 eld, Sliedro ons attach	750 echt. Ex <i>Ju</i> ed. Vesse	Hebo Maritime umbo. 1990



SALUTÉ towing HEBO-LIFT 7

photo: Nico Giltay





#### HEBO-LIFT 10 (ex TAKLIFT 4)

photo: Ruud Zegwaard

Lift capacity (tonnes) is for maximum lift.

type	name	built	bought	tonnage	length	beam	depth	draught	bhp	lift	owner
sheerlegs	Hebo-Lift 1	1964	19??	-	15,30 (o)	9,20	1,50		np	50	Hebo Maritime
crane barge	Hebo-Lift 2	2016	2917`	1.729 g	55,43 (o)	23,80	4,00	2,60	1.400	600	Hebo Maritim
Built 2016 in China.	Ex Yizheng Xiny	ang XY	<i>CB2015-</i> 2	0 (launch r	name). Prop	ulsion thu	sters fo	rward and	l aft.		
crane barge	Hebo-Lift 4	1963	2014	615 d	36,50 (o)	17,90 (o)	3,25	1,70	np	198	Hebo Maritim
Built by Van der Gie	ssen-de Noord	d, Krim	oen a/d IJ	ssel. Ex flo	ating sheer	legs <i>Ajax</i> ,	GPS Ajax	к-2011, <i>Аја</i>	x-2005. 201	5 strip	oed / rebuilt as
crane vessel.											
sheerlegs	Hebo-Lift 5	1972	2014	1.016 g	32,60 (o)	15,71	3,10	2,80	275	160	Hebo Maritim
Built by Shipyard T.	Bodewes, Frar	neker. E	x Phoenix	k, Ome Loek	ks-97, Saturr	nus-92, Hal	klift I-19	88, TBF On	ne Loeks-198	30. Sing	le Schottel
Rudderpropeller. Be	am listed is w	ith side	pontoor	ns attached	d. Sailing be	am is 9,70	m.				
sheerlegs	Hebo-Lift 6	1972	2016	745 g	41,54 (o)	10,68	-	1,30	np	200	Hebo Maritim
Built by Schlömer, O	ldersum. Ex G	rizzly, F	liev Op III	-prior 1997	7. Working b	eam with	side po	ntoons is 2	20,00 m (oa	). Twin	Schottel Rudde
Propeller.											
sheerlegs	Hebo-Lift 7	1969	2014	854 g	41,54 (o)	17,85 (0)	3,50	1,17	550	300	Hebo Maritim
Bult by Arnhemsche	Stoomsleeph	elling, /	Arnhem.	Ex Amstera	<i>lam</i> . Beam l	isted is wi	th side <sub>l</sub>	pontoons.	Sailing bea	m 11,5	0 m (oa).
crane barge	Hebo-Lift 8	19??	2016	870 g	42,00 (o)	11,40 (o)	-	1,60	np	300	Hebo Maritim
Ex <i>Atlas</i> . Beam with	side pontoons	attach	ed is 22,	80 m (oa). l	Draught list	ed is sailir	ng draug	ght withou	t side pont	oons.	
sheerlegs	Hebo-Lift 9	1998	2017	2.531 g	66,98 (o)	27,03	5,00	4,00	2.000 kW	800	Hebo
Built by Hyup Sung S	Shipbuilding, E	Busan.	Ex Samso	<i>n</i> . Draught	listed is mi	nimum wi	th bowt	hruster. W	/ithout bow	<i>i</i> thrust	er 1,60 m
minimum. Twin Sch	ottel Rudderpi	ropelle	r + Schoti	tel bowthr	uster.						
sheerlegs	Hebo-Lift 10	1981	2022	5.695 g	83,29 (o)	36,90	6,79	3,00	2.000 kW	-2.200	Hebo
Built by Verolme Shi	pyard, Heusde	en. Ex 7	aklift 4. N	/laximum d	lraught is 6,	,00 m. Twi	n screw	+ 2x bowt	hruster.		
sheerlegs	Matador	1968	1968	896 g	45,08 (o)	20,10	3,65	1,60	420	400	Bonn & Mees
Built by Rotterdams	che Droogdok	, Rotte	rdam. Tw	in Schotte	l Rudderpro	pellers.					
sheerlegs	Matador 2	1975	1975	896 g	43,14 (o)	19,96	3,58	1,60	420	400	Bonn & Mees
Built by Rotterdams	che Droogdok	, Rotte	rdam. Tw	in Schotte	l Rudderpro	pellers.					
sheerlegs	Matador 3	2002	2002	3.898 g	70,00 (o)	32,00	6,00	3,00	2.400	1.800	Bonn & Mees
Built by Daewoo Ma	0 1	2	0	0			zimuth	ing propel	lers.		
construction barge	Hebo-CB 1	1975	2025	17.235 g	111,44 (0)	1 27,43	6,10	2,00	5.100-	300	Hebo Maritim



#### Pontoons – Barges

Note: load capacity listed is for inland waters. Seagoing units marked by \* Draught is empty / full load

name	load cap.	0	beam	depth	draught	owner
Hebo-P1	88	26,93 (o)-	5,40 (o)	1,60	0,30 / 1,15	Hebo Maritime
Hebo-P2	88	26,54 (o)	5,44 (o)	1,60	0,36-/ 1,07	Hebo Maritime
Hebo-P6*	1.439	63,50 (o)	10,33 (o)	3,00	0,61 / 2,88	Hebo Maritime
Hebo-P7*	966	43,50 (o)	10,33 (o)	3,00	0,61 / 2,88	Hebo Maritime
Hebo-P9	157	29,55 (0)	6,54 (0)	1,97	0,35 / 1,32	Hebo Maritime
Hebo-P10	155	32,00	6,33	1,97	-	Hebo Maritime
Hebo-P13	63	19,50	4,70	2,40	-	Hebo Maritime
Hebo-P20	164	30,24 (o)	6,42 (0)	1,97	0,31 / 1,33	Hebo Maritime
Hebo-P23	958	54,04	11,04	3,12	-	Hebo Maritime
Hebo-P26		34,61	6,91	-	-	Hebo Maritime
Hebo-P27	473	47,70	8,10	1,82	-	Hebo Maritime
Hebo-P28	35	16,23	4,17	1,08	-	Hebo Maritime
Hebo-P32	1.782	76,43 (o)	11,40 (o)	4,00	1,33 / 3,12	Hebo Maritime
Hebo-P33	764	50,00 (o)	11,65 (o)	2,00	0,30 / 1,67	Hebo Maritime
Hebo-P34*		45,00	9,50	2,50	0,40 /	Hebo Maritime
Hebo-P36*	1.067	66,00 (o)	11,48 (o)	3,30	0,50 / -	Hebo Maritime
Hebo-P37*	630	42,00 (o)	7,42 (o)	2,98	0,58 /	Hebo Maritime
Hebo-P38*	597	42,00 (o)	7,40 (o)	2,98	0,55 /	Hebo Maritime
Hebo-P39*	2.194	65,00	15,00	3,30	0,72 /	Hebo Maritime
Hebo-P40	950	42,00	11,40	2,50	-	Hebo Maritime
Hebo-P41*	4.100	75,00 (o)	17,50 (o)	4,00	0,50 /	Hebo Maritime
Hebo-P42-1		29,30	3,50	3,00	-	Hebo Maritime
Hebo-P42-2		29,30	3,50	3,00	-	Hebo Maritime
Hebo-P43-1		29,30	3,50	3,00	-	Hebo Maritime
Hebo-P43-2		29,30	3,50	3,00	-	Hebo Maritime
Hebo-P44		35,00	7,98	2,00	-	Hebo Maritime
Hebo-P53	1.996	65,00	16,04	3,38	-	Hebo Maritime
Hebo-P54	3.606	66,00 (o)	23,00 (o)	4,00	0,75 / 3,21	Hebo Maritime
Hebo-P55*	1.900	65,00 (o)	11,36 (0)	3,50	0,40 /	Hebo Maritime
Hebo-P56	1.900	65,00 (o)	11,36 (o)	3,50	0,40 /	Hebo Maritime
Hebo-P60*	2.100	60,00 (o)	16,50 (o)	3,50	0,54 / 2,71	Hebo Maritime
Hebo-P62*	5.000	60,00 (o)	40,00 (o)	6,00	-	Hebo Maritime
Hebo-P63*	4.200	67,00	18,00		-	Hebo Maritime
Hebo-P71*	4.800*	75,00	23,50	4,50	0,73 /	Hebo Maritime
Hebo-P73*	4.800*	75,00	23,50		0,73 /	Hebo Maritime
Hebo-P80*		80,00	22,00		0,59 /	Hebo Maritime
		84,00	23,50		0,90 /	Hebo Maritime
Hebo-P82*	6.500*	84,00			0,90 / 4,67*	Hebo Maritime
Hebo-P83*	6.500*	84,00	23,50	5,50	0,90 / 4,67*	Hebo Maritime
Hebo-P84*	6.500*	84,00	23,50	5,50	0,90 / 4,67*	Hebo Maritime
Hebo-P100*	11.000*					Hebo Maritime
Hebo-P105	16.500.	105,00 (o)	40,00 (m)	6,00	-	Hebo Maritime
Hebo-Sub 1*		91,44	27,43	6,08	-	Hebo Maritime
Christina	471	45,00	9,50		-	Lekstroom
Franka					-	Lekstroom
Joost	415	45,00			-	Lekstroom
Liesbeth	415				-	Lekstroom
Noor	10				-	Lekstroom
	10				-	Lekstroom
					-	Lekstroom
					-	Lekstroom
					-	Lekstroom
W.D. Sr. 14	259	40,00	8,17	1,53	-	Lekstroom
	2.913	76,50	11,40	4,05	-	Lekstroom
	2.713	,0,50	11,40	7,05		LERSHOUTT
Dolfijn Orka		76 50	11/0	1.05	_	Lekstroom
Orka Rog	2.908 2.938	76,50 76,57	11,40 11,40	4,05 4,28	-	Lekstroom Lekstroom
	Hebo-P1Hebo-P2Hebo-P6*Hebo-P7*Hebo-P10Hebo-P10Hebo-P10Hebo-P21Hebo-P23Hebo-P26Hebo-P27Hebo-P37*Hebo-P36*Hebo-P36*Hebo-P40Hebo-P37*Hebo-P41*Hebo-P41*Hebo-P42-2Hebo-P44-1Hebo-P45*Hebo-P53Hebo-P54Hebo-P60*	Hebo-P1         88           Hebo-P2         88           Hebo-P6*         1.439           Hebo-P7*         966           Hebo-P7*         966           Hebo-P10         155           Hebo-P10         155           Hebo-P20         164           Hebo-P23         958           Hebo-P26         1           Hebo-P27         473           Hebo-P28         35           Hebo-P34*         1.067           Hebo-P36*         1.067           Hebo-P36*         597           Hebo-P36*         597           Hebo-P37*         630           Hebo-P36*         1.067           Hebo-P36*         1.067           Hebo-P36*         1.067           Hebo-P36*         1.067           Hebo-P40         950           Hebo-P41*         4.100           Hebo-P42-1         4.100           Hebo-P43-2         1.900           Hebo-P54         3.606           Hebo-P55         1.900           Hebo-P56         1.900           Hebo-P60*         2.100           Hebo-P61*         4.800*           Heb	Hebo-P1         88         26,93 (o)-           Hebo-P2         88         26,54 (o)           Hebo-P6*         1.439         63,50 (o)           Hebo-P7*         966         43,50 (o)           Hebo-P7         955 (o)         1           Hebo-P1         155         32,00           Hebo-P1         155         32,00           Hebo-P1         63         19,50           Hebo-P2         164         30,24 (o)           Hebo-P2         164         30,24 (o)           Hebo-P2         473         47,70           Hebo-P2         1,782         76,43 (o)           Hebo-P33         764         50,00 (o)           Hebo-P34*         42,00 (o)         1           Hebo-P35*         1,067         66,00 (o)           Hebo-P34*         42,00 (o)         1           Hebo-P35*         1,900         55,00 (o)           Hebo-P40         950         42,00 (o)           Hebo-P41*         4,100         75,00 (o)           Hebo-P42-1         29,30         1           Hebo-P43-1         29,30         1           Hebo-P53         1.906         65,00 (o)           Hebo	Hebo-P1         88         26,93 (o)-         5,40 (o)           Hebo-P2         88         26,54 (o)         5,44 (o)           Hebo-P6*         1.439         63,50 (o)         10,33 (o)           Hebo-P7*         966         43,50 (o)         10,33 (o)           Hebo-P10         155         32,00         6,33           Hebo-P10         155         32,00         6,42 (o)           Hebo-P20         164         30,24 (o)         6,42 (o)           Hebo-P20         164         30,24 (o)         6,42 (o)           Hebo-P20         473         47,70         8,10           Hebo-P27         473         47,70         8,10           Hebo-P28         35         16,23         4,17           Hebo-P34         1.067         66,00 (o)         11,40 (o)           Hebo-P34*         1.067         66,00 (o)         14,80 (o)           Hebo-P36*         1.067         65,00         15,00           Hebo-P36*         2.194         65,00         15,00           Hebo-P40         950         42,00 (o)         7,92 (o)           Hebo-P41*         4.100         75,00 (o)         17,50 (o)           Hebo-P42-1         29,30	Hebo-P1         88         26,93 (o)-         5,40 (o)         1,60           Hebo-P2         88         26,54 (o)         5,44 (o)         1,60           Hebo-P6*         1,439         63,50 (o)         10,33 (o)         3,00           Hebo-P7*         966         43,50 (o)         10,33 (o)         3,00           Hebo-P10         155         2,000         6,33         1,97           Hebo-P13         63         19,50         4,70         2,40           Hebo-P23         958         54,04         11,04         31,21           Hebo-P26         34,61         6,91         -         -           Hebo-P27         473         47,70         8,10         1,82           Hebo-P28         35         16,23         4,17         1,08           Hebo-P33         764         50,00 (o)         11,40 (o)         4,00           Hebo-P34*         45,00         9,50         2,50           Hebo-P37*         630         42,00 (o)         7,40 (o)         2,98           Hebo-P38*         597         42,00 (o)         1,40         2,50           Hebo-P37*         630         42,00         1,40         2,50	Hebo-P1         88         26,93 (o)-         5,40 (o)         1,60         0,30 /1,15           Hebo-P2         88         26,54 (o)         5,44 (o)         1,60         0,36 /1,07           Hebo-P7*         966         43,50 (o)         10,33 (o)         3,00         0,61 / 2,88           Hebo-P7*         966         43,50 (o)         10,33 (o)         3,00         0,61 / 2,88           Hebo-P7         63         19,50         4,70         2,40         -           Hebo-P20         164         30,24 (o)         6,42 (o)         1,97         0,31 / 1,33           Hebo-P20         164         30,24 (o)         6,42 (o)         1,97         0,31 / 1,33           Hebo-P20         155         34,61         6,91         -         -           Hebo-P21         473         47,70         8,10         1,82         -           Hebo-P23         1782         76,43 (o)         11,40 (d)         3,00         0,30 / 1,67           Hebo-P34         45,00         9,50         2,50         0,40 /           Hebo-P37*         630         42,00 (o)         7,41 (o)         2,98         0,55 /           Hebo-P37*         630         42,00 (o)         7,40 (



type	name	load cap.	length	beam	depth	draught	owner
pontoon	Vosje		20,00	9,50	0,40	-	Lekstroom
pontoon	Walrus	3.141	85,50	12,10	4,08	-	Lekstroom
pontoon	lJsbeer	3.501	89,70	11,40	4,27	-	Lekstroom

Note

Hebo-P32 = ex Europa I, Hebo-P60\* = ex Bokabarge 77, Hebo-P73\* = ex Smit Barge 14, Hebo-P81\* = ex Bokabarge 6, Hebo-P83\* = ex Bokabarge 8, Hebo-P63\* = ex E 3004, Hebo-P71\* = ex Smit Barge 11, Hebo-P80\* = ex Bokabarge 91 Hebo-P82\* = ex Bokabarge 7, Hebo-P84\* = ex Bokabarge 9



HEBO-CAT 7

photo: Kees Torn



The seagoing flattop pontoon HEBO-P7 with a load capacity of 966 tonnes at the Hebo base in Zwartsluis photo: Job van Eijk



PIETER L in front of the Bonn & Mees office photo: Ruud Zegwaard



The seagoing sheerlegs MATADOR 2 was built in 1976 for account of Bonn & Mees. Dimensions are 45,08 (oa)  $\times$  20,10  $\times$  3,60 m. Draught 1,60 m. Tonnage: 896 GT, 268 NT. The vessel is equipped with three anchor winches and six mooring winches. Except for the forward anchor winch all winches are fitted with 275 m of wire. The forward anchor winch, however, is fitted with 150m chain. Lifting capacity is 2 $\times$  200 tonnes in the main hooks at a reach of 6,00 – 10,00 m. Hoist height 30,00 / 28 m respectively. The fly jib's hooks lift 2 $\times$  125 tonnes at a reach of 12 m with a hoist height of 49,00 m (jib at zero inclination). With the jib at 30 degrees inclination maximum hoist is 210 tonnes at a hoist height of 44,00 m at a reach slightly over 20,00 m. Maximum reach with the jib at 30 degrees lifting 55 tonnes with a hoist height of 25 m

THE WAY