DAMEN DREDGING JOURNAL

Products, markets and developments from our business partners’ perspective.

TSHD SAMUEL DE CHAMPLAIN
The first dredger in Europe to undergo a conversion to dual fuel, LNG and MGO, engines.

MURJAN AL SHARQ MARINE CONTRACTING
Multiple vessels working together.

FIRST DAMEN MAD FOR CEMEX
Damen lays the keel of CEMEX’s Marine Aggregate Dredger (MAD).

UHL SHIPS TWO DAMEN CSDS 500 TO BANGLADESH

THREE CSDs 500 BRING FLOOD PREVENTION TO AZERBAIJAN

DREDDING AFRICA
FIRST DAMEN CSD IN SOUTH AFRICA
The story began when vessel owner, GIE Dragages Ports, decided it was time to equip the dredger with new engines. GIE Dragages Ports is an economic interest group created in 1979 to optimize the cost of dredging in six key ports serving the French Atlantic Coast, plus Marseille on the Mediterranean. The organisation is 98% state owned, with the remaining 2% split between the seven Grand Ports Maritimes – Dunkerque, Le Havre, Rouen, Nantes-Saint Nazaire, La Rochelle, Bordeaux and Marseille. Headquartered in Rouen, GIE Dragages Ports owns and manages a fleet of seven dredgers, ranging from the 52-metre La Maqueline to the 117-metre Samuel de Champlain.

An eye on sustainability

With an eye on increasing the sustainability of their operations, GIE Dragages Ports considered LNG propulsion. During the analysis they discovered that such a project might be eligible for European Union funding under the Motorways of the Sea programme.

Eligibility for such funding is based on membership of a relevant, cross-EU state consortium. This was no problem for GIE Dragages Ports, which already had close links with a number of interested parties – such as the ports of Nantes-Saint Nazaire, Le Havre and Rouen in France, and Vigo and Gijon in Spain. Both the Spanish ports had already made good headway into preparing for the introduction of LNG – Vigo with the design of a floating bunkering system and Gijon with a design for a terrestrial bunkering device.

The work has not been without its challenges. “As we considered the engines we wanted to use, we decided to go with MAN 6L35/44DF. These were brand new – almost prototypes you might say, but they seemed to be the most promising and offered the required capabilities. They were, however, considerably larger – and heavier – than those they would replace.”

This required nothing less than rebuilding an entire section of the ship. Damen started this in April 2018 with the prefabrication of the double walled engine room section in its Dunkerque workshop. With the engines installed on the section, the complete module was ready for exchange with the ‘old engine room’ after arrival of the Samuel de Champlain in early October. This sounds like a simple process, however it was a large job requiring significant cabling and piping work and the installation of auxiliary equipment, all within a tight timeframe.

A further challenge was the necessary installation of the two LNG storage tanks on the vessel’s main deck. “Each of the tanks weighs 110 tonnes when empty. They each have a capacity of 153 m³. Installation required considerable modification of the hopper deck and two internal structures of 20 tonnes each in order for it to support the weight.”

A large scale project then, to say the least, but one that will, in time, prove beneficial for both the operators and the environment.

Clean & cost-efficient

As this is the first time this has been done on a dredger, we will need to wait until she is operational again to accurately measure the fuel savings, but we have a targeted reduction in fuel cost of 20%. LNG engines require significantly less maintenance, so we will save money and increase uptime there, too.”

Though the Samuel de Champlain retains her ability to sail on MGO fuel, Jean-Pierre explains that this is largely for purposes of redundancy. “We expect that the dredger will operate on LNG possibly all of the time. The principle benefit of this is a significant reduction in emissions.”

Even before work on the Samuel de Champlain commenced, GIE Dragages Ports ordered a specialised consulting company to measure emissions parameters on the exhaust pipes of the ship. These measurements, compared to new ones after conversion, will help to assess the environmental benefit of the conversion, in association with the relevant authorities – those who will be responsible for monitoring the emissions output in the Loire and Seine regions where the dredger operates.

“We anticipate the conversion will result in 99% particulate, 100% SOX, 80% NOX and 20% CO2 reductions, comfortably enough to offset the increase in methane that goes with LNG propulsion.”

Quiet & comfortable

The environmental benefits of LNG conversion don’t end with emissions, however; underwater noise is also expected to be lowered.

“On the test bed the engines are practically silent,” states Jean-Pierre. “And vibration is significantly less too. The benefits of this are widespread. It will provide a more pleasant working environment for the crew, equating less fatigue, it will mean operations are less detrimental to marine life and it will make life more pleasant for our neighbours.”

“TSHD Samuel de Champlain – named for the French explorer and so-called Father of New France – is the first dredger in Europe, perhaps the world, to undergo a conversion to dual fuel, LNG and MGO, engines. And Damen Shipyards Dunkerque has been honoured to deliver it.”
The company operates in five high-end markets – advanced armour, geosynthetics, & leisure. TenCate, like Damen, is a company rooted in a rich, Dutch heritage. Its history reached back to the end of the 17th century, when the TenCate family are first recorded as being involved in the textile industry in the Twente region of the Netherlands’ province of Overijssel.

The company operates in five high-end markets – advanced armour, geosynthetics, synthetic grass, protective fabrics and outdoor fabrics – offering products for personal protection, defence, infrastructure & water management and sport & leisure.

Emerging from the flood

The North Sea flood of 1953 launched TenCate’s geosynthetics arm on a quest for innovative product development for a new generation of dike building. One of the solutions that TenCate developed at this time is one which brings the company into shorelines, rebuilt beaches and reclaimed land from the sea throughout the world in synthetic grass, protective fabrics and outdoor fabrics – offering products for the applications of the TenCate Geotube® systems are many and varied. Edwin Zengerink, Technical Manager Water & Environment at TenCate explains, “TenCate supplies the TenCate Geotube® containers in a range of shapes and sizes depending on the application – they can be tubular, bag, mattress, or more general container-shaped. The technology can be applied to hydraulic engineering projects – where the systems are used to contain sandfill in order to provide erosion-resist structural units – and environmental dredging. Here, the systems are used to contain and dewater slurty wastes. “In environmental applications, TenCate Geotube® technology may be used to contain contaminated sediments for safe offshore disposal when onshore disposal is not possible,” explains Market Manager Gerben van den Berg.

Pump partnership

For both engineering and environmental projects, TenCate Geotube® technology can be applied to a project along with a Damen DOP pump.

“If a project involves pumping sand and slurries, there’s one pump that is always front of mind that I advise contractors to use – the Damen DOP,” says Edwin.

Sustainable solution

Examples of TenCate Geotube® projects drawing on Damen DOP pumps are many and include jobs all over the world. One example is the installation of a submerged breakwater at Azzefoun on the Mediterranean coast in Algeria. When the beach began to erode, local company Laboratoire d’Etude Maritime collected data on the waves and came up with a solution to reduce wave heights. It involved three breakwaters – two of 120 metres and one of 110 metres, serving to protect an area of beach 500 metres in length. Around 1500 linear of systems were successfully filled with Damen DOP pumps.

“There’s another recent example – a project in Israel. Here, the Damen pump increased the speed of the filling process. Instead of taking between 8 and 12 hours to fill a system, with the DOP it took just 4 to 5 hours. The client was very happy.”

PROTECTION TECHNOLOGY

TENCATE GEOTUBE® TECHNOLOGY GOES HAND IN HAND WITH DAMEN DOP PUMPS FOR THE PROTECTION OF PEOPLE AND THEIR ENVIRONMENTS

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By appointment to the King

At the end of the eighteenth century, between Marken Noestieke and Heelandoorn in the same eastern area of the Netherlands, English machine trader Thomas Aneworth built a model weaving mill and warehouses for the Dutch Trading Co. This passed, in 1851, into the ownership of Godfried and Hein Salomonson. The Salomonsons turned it into the first mechanically driven cotton mill in the Netherlands, an entrepreneurial feat that prompted King Willem II of the Netherlands to award it the right to bear the Royal Coat of Arms and to use the name Royal Weaving Mills (KSW). In the following century, KSW and TenCate came together in the in the first merger following the Second World War in the Netherlands.

As the textile industry underwent transformation in the 1960s and 1970s, the company made a timely switch to new technologies, materials and applications. Thus, able to enter new markets, TenCate became an international, industrial company in technical textiles. Today, TenCate is a multinational company, combining textile and chemical technologies for the development of functional materials, modules and systems for the protection of people and their living and working environments.
THREE CSDs 500 BRING FLOOD PREVENTION TO AZERBAIJAN

In May 2010, the southern and central regions of Azerbaijan were hit by the worst floods in more than 50 years following a period of unusually heavy rainfall. Worst affected was the area around the capital, Baku, where the rivers Kura and Araz meet. Houses were flooded and destroyed, and lives were lost. The impact of the runoff from the heavy rain was made worse by the fact that, when the reservoirs in the regions reached full capacity, they also had to start discharging into the rivers. Banks burst, dams overflowed and the surrounding lands were overwhelmed.

"In the subsequent investigations it was determined by the Azerbaijani Ministry of Emergency Situations (MES) that measures had to be taken to ensure that the rivers could more efficiently handle the runoff and move it into the Caspian Sea as quickly as possible," commented Akram Gahramanov, head of the Caspian Basin Accident Rescue Service international relations, marketing and procurement department. "No-one knows how to manage flooding and river works better than the Dutch, and we chose Damen based on its quality, experience and comprehensive product range."

Six months from contract to delivery
Just twenty months later, on 24 January 2012, Damen Shipyards delivered three Cutter Suction Dredgers (CSD) 500 to the MES in Azerbaijan. In fact, the three dredgers were built, outfitted, delivered and commissioned within six months of the contract taking effect, due to Damen’s philosophy of series production and building for stock. On arrival they were inspected by President Ilham Aliyev and he was briefed by Damen representatives on their features and capabilities. Their purpose – to deepen and maintain the channels of the Kura River water system and other strategic waterways.

"With no previous experience of dredging in the country, our staff needed training in how to operate and maintain the vessels," continued Akram Gahramanov. "Damen provided a full support package that included two permanent Damen specialists; one an expert in dredging project management, the other in technical assistance. They transferred their knowledge to our personnel through training and on-the-job experience."

Damen’s CSD 500 is a popular model with over 60 to be found operating all over the world. They are equally at home undertaking maintenance and capital dredging in fresh and salt water environments. One of the largest models in Damen’s CSD range, the CSD 500 is 38.5 metres in length, can work at depths from 2.5 metres up to 14 metres, has a maximum swing with of just under 40 metres, and is able to pump 4,000 m³ of water/soil mixture per hour.

The ‘500’ notation refers to the 500mm discharge pipe, which is fed by 180 kW of cutter power. This allows the point of direct discharge to be up to 1,500 metres from the vessel, but with the addition of booster stations this can be extended to 5,000 metres. The total installed power on board is 1,293 kW. The three for the MES were outfitted with a large number of options to maximise safety and dredging efficiency, and to ensure comfortable working conditions for the vessels’ crews. These included anchor booms, spud carriage pontoons and accommodation. Full communications packages, dredge pump performance monitoring instrumentation and position visualisation Navguard systems were also installed in the operating cabins.

"Over the past six years the area of operations for the CSDs 500 has expanded to cover the delta and the Salyan and Nefchala districts as well as the Kura river," says Fuad Baghirov director of the Caspian Basin Accident Rescue Service, the division of MES responsible for dredging. "By working in more of the waterways around the capital we are able to further increase the ability of the river network to manage exceptionally high levels of water flow in the event of unusually heavy rainfall. Having completed an initial dredging programme to bring the waterways up to the required standard, the dredgers are now mostly occupied with maintenance dredging, although we are also using them on our new Port Ahal area."

Despite the busy workload of the dredgers when, at the end of 2018, Damen technicians visited Azerbaijan to inspect them, they found them to be in excellent working order. The professionalism of the crews and local maintenance teams applying the training provided by Damen over the first two years had ensured that they had all the necessary skills to operate and take care of their vessels.

"The design and quality of the CSDs 500 is really good, and they are easy to operate and highly productive," concludes Fuad Baghirov. "MES is now the only state organisation in Azerbaijan that is experienced in dredging operations of this type. We plan to move on to harbour dredging in the Caspian Sea itself, and also to make our capabilities available to commercial organisations and other state bodies."

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Walter Herchenhorn is Damen’s dredging agent in Brazil as well as a distributor of Damen DOP pumps in the country. Besides this, he also works with Damen colleagues delivering seminars, presentations and project evaluations to the dredging industry across Latin America.

Rooted in dredging
Walter’s association with the sector is deep-rooted. “My father worked in dredging for many years. When I was young I used to take me along to projects, where I would sit and fish while he worked.”

Walter’s father worked for the Companhia Brasileira de Dragagem, fulfilling a number of positions in the course of his career, including Project Manager and General Manager. The company, part private and part public sector, operated four hopper dredgers and numerous cutter suction dredgers. It carried out dredging work on ports and inland waterways, not only in Brazil.

Iconic projects
“Walter Herchenhorn
Director
Entrepeneur e Equipamentos de Dragagem Ltda.,
Dredging Agent of Damen in Brazil

It was logical that Walter would follow in his father’s footsteps and become involved in the dredging industry. Not only had he gained an affinity with dredging through a lifetime of exposure to it, his education also prepared him for a role in the sector.

Walter graduated from the Catholic University of Rio de Janeiro as a mechanical engineer, before gaining an MBA in finance from the same institution. His education, he says, positions him well for work in the dredging world.

“Because of my education I am able to discuss projects in detail with clients in addition to understanding the financial side. My studies represent an alignment between the technical and commercial.”

Transcending international boundaries
Before taking responsibility for sales in the country, Walter first moved to the Netherlands to develop his dredging product knowledge. His career in dredging sales saw him first working for eighteen years for IHC before becoming an agent focused on maritime and civil construction projects. In 2017 he met Damen Sales Manager Rutger Dolk and his relationship with Damen began.

“Already knew of Damen...it’s good to know your competition,” he says, smiling. “As I got to know the culture, I found a vibrant company, keen to develop the market, ambitious in its sales and focused on the quality of its products.”

DAMEN’S MAN IN BRAZIL
WALTER HERCHENHORN TALKS ABOUT A LIFE IN DREDGING,
MARKET POTENTIAL AND WHAT SETS DAMEN APART IN BRAZIL

Walter Herchenhorn
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Damen’s culture, Walter states, is an important factor in its ability to go global.

“It’s not easy to transport quality, reliability and, perhaps most of all, your ability to build relationships around the world; there are so many different cultural factors to take into account. But Damen has the flexibility and they’ve managed it.”

Damen has a long history of standardisation, and this helps, he states.

“Standardisation is good for crossing borders. And, especially when there’s a will to be versatile, standardisation can be easily adapted to suit all needs. Particularly when it draws upon reputable suppliers with a steady supply of replacement parts.”

Quality shipbuilding – quality dredging
Naturally, culture only gets you so far; international awareness and client focus might open doors, but, at the end of the day, it’s all for nothing if the product is not good. Here too, according to Walter, Damen succeeds.

“In Damen dredgers you see the quality of the group’s shipbuilding heritage. The same quality you find in Damen tugs, workboats, ferries and offshore vessels amongst others. Damen dredgers are robust. A lot of attention is paid to the main features; there’s a powerful cutting system with strong winches, heavy anchors and a large width of cutting. All of which, he explains, adds up to greater operational efficiency when compared to similar machines.

“These features combine to offer better use of time. And, with Damen’s philosophy of building for stock we are able to mobilise very quickly, too.

“Furthermore, we have much better tooling to build outside Holland than anyone else. Damen’s track record with the Damen Technical Cooperation programme of building on location at non-Damen yards around the world is unrivalled – including numerous successful examples in Brazil. The market appreciates our product, the quality and efficiency. Then there’s price, that’s also important. Damen’s offering combines competitive CAPEX and low OPEX.”

This is a common theme to be found running throughout the Damen portfolio, fulfilling the company’s goal of offering its clients low total cost of ownership throughout the lifetime of its products.

Spacious comfort & Dutch expertise
“Damen dredgers are also a very operator-friendly place in which to work. They are spacious and comfortable and are very desirable for operators.

“Plus, Damen has the knowledge about the dredging industry to assist its clients with training and project evaluation. This is something that Dutch companies really can make a difference with in other countries; the Netherlands’ experience with land reclamation over the years adds considerable value to the sale of a dredger or dredging equipment.”

Brazil can fly
But what of the market for Damen’s dredgers in Brazil? Walter is also positive in this regard.

“At the moment, Brazil is in a very special place with regards to dredging. The country used to have a large fleet, but many of the old dredgers are no longer in action. The remaining fleet is insufficient in size to deal with the demands of a growing country. I have great expectations for the market.”

He’s expecting the country’s abundance of resources to give impetus to the industry.

“For example, we are a large exporter of grain, and a lot of the transportation of grain needs to take place on the waterways. For this to succeed the rivers and the ports need to be maintained. And if we are to have a keener focus on private enterprises, there will need to be more civil construction projects. It’s a big market for cutter suction dredgers with opportunity for small hopper too.

“The potential for growth is huge. Brazil can fly.”
TRANSPORTING VALUABLE CARGO

UHL DELIVERS TWO CSDs 500 TO BANGLADESH

Many Damen built vessels make the journey from the yard to their new owners on their own keel. Sometimes this can involve small vessels making some epic voyages. At the end of 2017, a 28-metre ASD Tug 2810 sailed the 6,635nm from Damen Song Cam Shipyard in Vietnam to Tahiti in the middle of the Pacific Ocean without incident.

Dredgers, however, are not generally designed for trans-oceanic voyages or the heavy seas that can accompany them, so when Damen had completed the build for two standardised CSDs 500 in the Netherlands for clients in Bangladesh, the 8,000 nm voyage on their own hulls was never an option. Instead Damen turned to the heavy lift market.

No job too big

Heavy lift vessels combine powerful cranes, open decks and capacious holds to move the largest loads both short and long distances and it is a competitive market with a number of operators vying for business. Damen has extensive experience of the sector, and for this project selected United Heavy Lift (UHL) based on its availability and keen pricing.

“An associated company United Engineering Solutions (UES) gives us an unrivalled in-house engineering capability. Our dedicated specialists ensure that each cargo is lifted and stored on board to the highest standards. They study the cargo specifications, perform the rigging calculations and determine the lifting arrangements. This includes undertaking the securing calculations and designing the lashing systems and sea fastening solutions. UES will also arrange a port captain who will be at the port of loading and the port of discharge, making sure that everything proceeds according to the lifting plan. It all means that we can guarantee a seamless operation and minimise the risks of any damage.”

Record breaking

Prior to the shipment of the two dredgers, UHL had taken its expertise to new heights with the shipment of 24 tugs, launches and a Multi Cat built at Damen’s yards in Changde and Yichang, China, to Rotterdam on board the MV Tasmanic Winter. This was the largest ever such shipment for Damen and UHL, and required detailed evaluation followed by intense planning by UES. However, by combining what was originally envisaged as two shipments into one, the costs were reduced without any loss of safety or overall quality.

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“The two CSDs 500 are now at work in Bangladesh on maintenance works for the country’s more than 8,000 km of inland waterways, which represent a vital transport network for its economy. A leader in the international dredging market, Damen has been active in Bangladesh for over 40 years with the CSD 500 a particularly popular and proven model, known for its high production and lowest cost per cubic metre of dredged material.

A local Damen Service Hub provides training as well as servicing and local spare parts. With luck, more Damen dredgers will be making their way there in the future, quite possibly under the watchful eye of UHL.

“Just a few days later, the MV Tasmanic Winter was loading up again in Rotterdam for a return trip to Asia, this time with a mixed cargo from a number of different clients. One of these was again Damen, and this time the cargo was the two CSDs 500, newly built at Damen Dredging Equipment at Nijkerk in the Netherlands, bound for Mongla, Bangladesh.”

“While there were much fewer vessels involved, this project brought its own challenges,” continues Andreas Flensborg. “This was not your average lift. The innovative Damen dredgers had to be treated as delicate cargo. With the dredging equipment extending beyond the bow special arrangements had to be made to ensure that no damage was caused during the on and offloading process and that everything was secure for the passage. UES’s expert engineering played a vital role in this.”

Good teamwork

Since UHL was established in 2015, it and Damen have developed a close relationship, with a number of large shipments taking place in the last two years. “Shipments involving more than a few commercial vessels are not that common and a shipment like the recent one with 24 tugs is incredibly rare,” says Andreas Flensborg. “And very few yards if any do it on the scale and frequency that Damen does. Damen is now one of our biggest clients.”

“As a top client we aim to keep in close touch with Damen, and together we have executed some exceptional projects, with Tasmanic Winter’s Arctic passage at the top of the list. We are one of the only heavy lift operators with ice-class vessels and this was an excellent demonstration of our capabilities.”
Based in Saudi Arabia, Murjan Al Sharq Marine Contracting (MSMC) is a marine service company specialising in construction and maintenance, dredging, diving and subsea services. Considering that all but one of the MSMC fleet is a Damen vessel, it can be said that the relationship between the two companies over recent years has been a productive one.

MSMC Managing Director Abdullah Natheer points to the support that the company receives from Damen as a significant reason for this strong working bond: “They give us access to their engineering and technical team – people who really know what they’re talking about when it comes to designing vessels for actual projects, this results in smooth execution of the work for our clients.” One of MSMC’s recent contracts – and a trio of Damen vessels purchased to complete it – illustrates this collaboration.

Three vessels, one pipeline
The contract in question is an oil pipeline trenching and installation project. “We are dredging a 5 kilometre trench and installing a new trunk line to tie in wells that have been recently upgraded. After that we have a pipe pull, followed by backfill operations,” explains MSMC Business Development Director Chris Clark. “The overall aim of the project is to improve the efficiency of old wells.”

In Q4 2018 MSMC took delivery of three Damen vessels to complete the contract: a Stan Tug 1606, a Shoalbuster 2509, and a Stan Pontoon 4512 equipped with a Damen DOP Pump. For the first kilometre of the trench, MSMC will mobilise a Multi Cat 1908 and DOP 250 purchased from Damen in 2017. The remaining 4 kilometres of trench will be dredged by the new Stan Pontoon, supported by the new Stan Tug and the new Shoalbuster.

Engineering support
The project is complex in numerous ways. First of all, operational water depth ranges from 0 metres at the shore to only 7 metres at the deepest point. Furthermore, geotechnical conditions are variable.

This diversity in project conditions – and consequent vessel requirements – called for some precise cooperation. “We worked closely with Damen’s engineers in the Netherlands and at Albwardy Damen (the construction shipyard) to customise the Pontoon specifically for this job,” says Mr Clark, confirming Mr Natheer’s comments regarding Damen’s engineering support.

The solution to tackle the diverse working conditions was to equip the Stan Pontoon 4512 to be as versatile as possible. First to catch the eye are the 170-tonne Heila and the 100-tonne Liebherr cranes. “For trenching, we can work as a backhoe dredger, or use the DOP in various configurations. And then for backfilling operations we have a mass flow excavator,” continues Mr Clark.

Maximising uptime
Depending on the conditions and client requirements, MSMC can use a four-point mooring system in addition to its three hydraulically-driven 18-metre long spud poles for mooring. This is as well as the sizeable deck space offered by the 45-metre long, 12-metre wide vessel. This provides a hefty 515m² space for day and night accommodation, workshop and control room facilities.

While it could be said that MSMC’s new Stan Pontoon is set to play the starring role in the company’s latest contract, it must also be noted that it will be backed up by two vessels that are more than capable of putting in a solid supporting role. With its 2.21 metre draught, the Stan Tug 1606 will provide support in the shallowest waters. The Shoalbuster 2509 will be deployed for tasks further from the coast; for which its 30-tonne bollard pull will be invaluable during pipe pulling operations.

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ON THE PHOTO BELOW FROM LEFT TO RIGHT: MR ABDULLAH NATHEER (MANAGING DIRECTOR, MURJAN AL SHARQ MARINE CONTRACTING), MR CHRIS CLARK (BUSINESS DEVELOPMENT DIRECTOR, MURJAN AL SHARQ MARINE CONTRACTING)
“Important may be an understatement – dredging is vital for the existence of this country,” Arend van de Wetering replies when asked about the role of the dredging industry in South Africa. This is by no means an empty statement; especially when looking back at the severe drought that affected the country in 2018, which resulted in the South African Government declaring a national state of disaster. “We experienced severe water scarcity last year, not only in Cape Town, but all over.”

Dam maintenance
Mr. Van de Wetering is Director of Dredging Africa, a company founded in 2015 to provide inland dredging services for dam maintenance, environmental clean-up and mining projects in Southern Africa. In its short history, Dredging Africa has built up a sizeable list of completed projects. These have primarily involved dam maintenance contracts – sludge and vegetation removal – for water users’ associations, mining and oil & gas companies.

Naturally, the company’s equipment portfolio matches its contract requirements, including four horizontal auger cutter dredgers, numerous long reach excavators and various auxiliary equipment such as floating pipelines and booster pumps.

A first for South Africa
In summer 2018 a new vessel – a Damen Cutter Suction Dredger 250 – was added to the company’s fleet list. Talking about the purchase of what is actually the first Damen-CSD to operate in South Africa, Mr. Van de Wetering says: “We firmly believe in the quality of Damen products and chose the CSD 250 to enter the cutter suction market in South Africa and in neighbouring countries in Southern Africa.”

The new vessel, named Indlovu (Zulu for elephant), has had a busy work schedule since delivery. Its first contract was to dredge fluvial sand for the construction industry. After that, it was deployed on a canal dredging project.

“The vessel has excellent productivity for its size, with the pump being able to handle up to 1,000 m³ of mixture per hour.”

On to the next job
The fact that the Damen-CSD 250 is easily disassembled and reassembled means that transporting the Indlovu to the next job site is a straightforward affair. “For short distances we disassemble into dredger, ladder, wheelhouse and spud poles,” he explains. “The dredger – meaning the main pontoon with side pontoons attached – and wheelhouse are loaded onto one lowbed truck. We use a second lowbed truck for the ladder, spud poles, pipes and floats. It is simple, fast and efficient. A complete move, including disassembly and offloading at the new site, is done in one day. For longer journeys into neighbouring countries we will use three containers.”

Damen provided initial vessel (dis)assembly training: “The dredge was assembled by Wilco van de Pol from Damen Shipyards Cape Town. He did an excellent job and we were very satisfied with his knowledge.”

Water security
For Dredging Africa, the expansion of its fleet with a Damen-CSD 250 not only reflects the company’s ambitions for the future, but also its role in national water management. “We see a huge responsibility to actively be involved in, and lead the way towards, water security and the preservation of our environment.

“Important for the present as well as the future is good teamwork,” he adds. “With the best equipment available for the job, with good teams of personnel and sound civil engineering knowledge, we are on the path to becoming the number one dredging company in South Africa.”
INTRODUCING 
THE DAMEN DOP SHOP

Damen has launched the DOP Shop – an online purchasing platform that is dedicated to the sales of dredge pumps and associated spare parts.

“The aim of the DOP shop is to make the whole process of ordering products and parts – from A to Z – a lot smoother and quicker,” begins Michel Bruijers van Nidek, Damen Product Manager E-Commerce. “With only a few clicks customers can view the product range, fill their shopping carts and order their products online.”

In addition to the full selection of DOP pumps (with capacities ranging from 600 m³/h up to 4,000 m³/h), the webshop also offers auxiliary systems such as hydraulic power packs and jet water sets, as well as accessories and spare parts. This includes documentation sets, hydraulic motors, bearing housings, suction heads, gear oil and impellers.

The DOP Shop is Damen’s first web-based sales platform. Michel goes on to say that the idea of the webshop is closely aligned to the importance of productivity in the dredging sector. “Efficiency is the key – and the DOP shop will go towards enabling a more efficient supply chain. One that maximises production and uptime in our clients’ projects.”

Clients visiting the DOP shop for the first time will immediately notice a very logical and straightforward layout. When designing the website, Damen concentrated on creating a transparent and open structure in relation to pricing and delivery times. “All this information is very clearly presented; a fact that will be as important to potential clients as it is to existing clients.”

Damen Product Director Dredging Olivier Marcus: “There are so many variables in dredging, it can be difficult to select the right product. Our ultimate aim is to help customers with our knowledge and products in the most efficient way to make them more successful. The DOP Shop is about connecting clients with the right tool.”

FIRST DAMEN MAD FOR CEMEX

Damen has laid the keel of the Marine Aggregate Dredger (MAD) that it is building for CEMEX. The vessel – being built at Damen Shipyards Mangalia in Romania – represents a new standard in marine aggregate dredging. The vessel will be called CEMEX Go Innovation.

The construction of the new vessel will draw upon collaboration with multiple companies within the Damen Group, as well as with external partners. Damen has designed the future-proof vessel for long-lasting durability for operations in North Sea conditions over the coming decades. Particular attention has been paid to sustainability, safety and performance. The MAD will extract sand and gravel from the seabed at up to -55 metres.

CEMEX Marine Fleet Engineering Manager Mark Williams undertook the traditional role of welding the coins during the keel-laying ceremony. Three coins were used: a British Pound, a Dutch Guilder and a Romanian Leu. This respectively commemorates the regional base of the client, the home country of the shipbuilder and the location of the shipyard.

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Damen Area Director Frank de Lange added, “We are very much looking forward to the coming construction and to delivering the vessel to CEMEX next year – and also to seeing CEMEX Go Innovation in action, demonstrating her strong credentials.”

The keel-laying of the CEMEX Go Innovation marks the first such event since Damen took on the operational management of Damen Shipyards Mangalia in July 2018. Located on the Black Sea coast, the yard has three drydocks with a total length of 982 metres and 1.6 kilometres of berthing space. The 48 and 60 metre wide docks will allow Damen to cater for larger maritime vessels and structures.