DAMEN OFFSHORE FOCUS

SURVEY & EXPLORATION → INSTALLATION → PRODUCTION SUPPORT → FACILITY UPGRADE

SHIPREPAIR & CONVERSION
Resources located offshore can be challenging to recover. Increasingly remote production sites in deeper waters and harsher environments demand safe, cost efficient and environmentally responsible recovery solutions.

Damen Shipyards Group strives to design and build vessels with optimal performance to meet the specific needs in the offshore oil and gas industry, delivering from yards in Europe, the Middle East and Asia but also the Americas. Specialist vessels that demand market insight as well as design and construction excellence.

In offshore as elsewhere, the Damen brand has been built on dedication to fulfilling our clients’ needs without compromising safety, quality and reliability. In all of this, we adhere to our E3 principles: Environmentally friendly, Efficient in operation and Economically viable. Serving the needs of people, planet and the growth of our company.

Damen continuously invests in R&D, but also pursues a vigorous policy of standardisation in proven technology and optimised logistical processes worldwide to meet cost and delivery challenges. We do all of this because we know that we can and will only succeed if we partner and listen to our customers. Together, we can make the difference.

The global energy outlook for the coming decades is as challenging as it is promising. The world’s population is expected to increase to 9 billion by 2040, with consequent economic growth expected to drive demand for energy up by 35% in the next 30 years. In line with these developments oil will remain the number one global fuel meeting that energy need, while gas is expected to overtake coal to become number two. In the constant search for new reserves, offshore oil & gas production already accounts for one-third of the total oil & gas stream and represents 20% of global energy production.
Damen recognises the offshore market as a growth market with a requirement for innovative, high performance vessels for site-specific or other special duties. However, cost and delivery times are seen as the main drivers.

Central to Damen’s offshore portfolio is its modular approach to design and construction, which forms the basis to deliver high quality vessels. To reach this high level of quality Damen focuses very much on standardisation of vessels, standardisation of yard processes and standardised parts. This concept has been pivotal in the Damen success story since its adoption in 1969. Standardisation, modular construction and keeping vessels in stock leads to short delivery times, low ‘total cost of ownership’, high resale value and reliable performance.

Every project within Damen is treated with this philosophy, where from the operations point of view aspects like, project management, planning and cost control are highly valued and necessary for the successful finalization of our projects.

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**DAMEN’S STANDARD APPROACH**
- Reliability, proven and tested technology
- Continuous product development
- Interchangeability of ships, crew and spares
- Fast response to customer requests
- Competitive pricing
- Benchmark for the industry
- Co-maker relationship

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**STANDARDISATION KEY TO SUCCESS**

Damen has developed a full range incorporating a high level of standardization yet meeting customer requirements.

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<th>Platform Supply Vessels</th>
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<td><strong>PSV 6000</strong></td>
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<td><strong>PSV 5000</strong></td>
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For a number of Offshore vessels Damen has developed a full range incorporating a high level of standardization yet meeting customer requirements.

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**STANDARD OR CUSTOM BUILD...**

Even complex vessels with a high level of functionality are no exception for Damen. This contributes to our level of knowledge.
The Damen standard bridge offers all the functionality and high quality finish as you would expect from us.

To support the offshore industry, we offer a range of standard platforms that are inclusive enough to meet specifications set by the most challenging of customers, and yet flexible enough to take advantage of proven technology, lean building methods and timely delivery.

For example, our new multi-purpose Damen Offshore Carrier (DOC), Anchor Handler, Platform Supply Vessel and Fast Crew Supply designs are available in a variety of sizes with equipment arrangements suiting specific operational requirements. We are always ready to start from scratch, but we believe Damen designs stand comparison to any custom-built ship.
As offshore developments become more remote, support vessels spend longer at sea. Increasingly, a more comfortable working environment is required for extended stays at sea raising the luxury and amenity level for the crew. From first design principles to outfitting the vessel, Damen prioritises safety and comfort. Our new Sea-Axe design for example significantly reduces the vertical accelerations. Our ability to ensure increased comfort levels is based on the knowledge and experience of our yacht specialist Amels.

SEAKEEPING

We design and engineer our vessels in full 3D, allowing Damen to efficiently plan and execute ship construction. This process facilitates fine tuning to ensure each vessel is virtually fitted out, so the performance can be assessed, weight savings can be identified and layouts optimised. We can draw on our Research & Development departments, TU Delft, MARIN and TNO, providing our clients with well designed, thoroughly tested vessels which offer highly rated technology.

NOISE AND COMFORT

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Dutch Maritime Knowledge

Damen designers have a vast amount of know-how and experience in developing the hull, bow and stern shapes as well as the thruster arrangements that still break new ground in seakeeping performance. Our new and updated designs are subject to continuous performance assessments and evaluation to corroborate our original thinking. This is all applied to achieve optimal vessel performance.
Damen's innovations are based on close consultation with customers in the specialised markets we serve. We are proactive in our approach, identifying market trends as they emerge to ‘fit for purpose concepts’ as the need arises.

Damen also undertakes research that benefits all of our designs. New developments in the market are closely monitored in terms of new ideas from operators, new techniques or products by our suppliers but also other closely relating markets which we can learn from. Furthermore our broad experience, having built a large portfolio of vessels provides the necessary know-how which we can rely on. It also gives us a broader perspective where out-of-the-box solutions, or cross-over designs can be beneficial to our customer.

Damen also carries out research into manufacturing matters, further developing and optimising our building processes looking for improvements and reducing cost. This has a close relation with our aim to perform production friendly engineering.
We design build and test ships and provide operational training for these ships. We use A-class components, use proven designs and have a clear focus on reducing down time. This perspective involves fitting separate ship systems, having a close eye on interface large systems such as thrusters, power systems and mission equipment but also on smart, interchangeable spares. To succeed in these matters we have a lot of contact with our co-makers, helping us to realise these goals.

We also learn from our ship repair & conversion yards, which provides us with useful information and insight from ship owners on practicalities involved. This feedback improves our designs and gives us a better understanding about what the customer requires.

We provide maintenance, spare parts and repair for the complete lifecycle of the newly delivered vessel including our DAMOS software system, which helps you plan and execute your maintenance programmes in every detail.

Reliability in the way we handle our components, manage our supply chain, execute our yard processes and take care of our customer relations is what Damen stands for.
HSEQ is absorbed in the way we design and build our vessels and is practise in all our operations and business processes. The Damen offshore portfolio is underpinned by its group-wide Total Quality Management Program (TQM), which covers every facet of Damen Shipyards operations.

The quality of Damen Shipyards organisation and products is continuously maintained and upgraded. Damen Shipyards Gorinchem has been approved by Lloyd’s Register Quality Assurance Limited to the ISO 9001: 2008 standards, covering design, construction and delivery of ships, after-sales services and the delivery of prefabricated shipbuilding packages.

Damen Shipyards Gorinchem has also been approved by Lloyd’s Register Quality Assurance to the ISO 14001: 2004 standards. Using our Supplier Code of Conduct, we advocate best practices in all of our building locations. In addition, we provide training on how to use Damen vessels safely and efficiently.
FOCUSBING ON DEDICATED SUBSEA SERVICES

Damen already delivered a number of survey vessels for both commercial and coast guard related applications. In this known segment Damen can offer customised functionality to support the inspection, construction and installation of infrastructures.
For locating oil & gas fields our offshore portfolio supports survey and exploration activities with a wide range of vessels including Utility Vessels, Survey Vessels, Fast Crew Suppliers and ROV Support Vessels.

Witnessing the requirements for survey and exploration vessels operating in remote locations and increasing water depth we recognise the challenges. Damen is already very active in this sector and has delivered a number of different vessels and we continuously strive to improve our designs, particular from an operational perspective.

Breaking the mould is Damen’s business, which is why we also focus on vessel designs which can be utilised in environmentally sensitive areas including new frontiers like the Arctic. To safeguard these sensitive areas, as well as the personnel working there, we have to ensure we are at the forefront of the very latest developments in vessel and equipment design.
SURVEY & EXPLORATION - Vessels such as our Exploring new oil & gas fields at more remote locations demands cost efficient and reliable vessels such as our Survey vessels, ROV support vessels, Utility vessels but also our new line of PSV and AHTSs vessels.
The ROV support vessel shown on the left is constructed at the Wilson Sons yard in Brazil. Built for the local market and according Petrobras specifications this vessel is high spec and will be delivered via Damen Technical Cooperation which enables our customers to build Damen vessels locally. Prior to the construction phase, packaging, logistical activities and detailed engineering for this design was thoroughly tank tested at MARIN, where transit and stability tests were performed together with operational testing using DP.

With the Wilson, Sons experience we can look back on a fruitful cooperation having built over 16 PSV’s. Additionally we have one PSV 5000, one ROV Support Vessel and four Oil Spill Recovery Vessels under construction which also will be delivered via DTC. Alongside the engineering package, material package there will be some technical assistance during commissioning or certain phases of the building process. These activities show our international network & track record and gives a proper basis for further development in the Brazilian market.

The Utility vessel 5514 concept has been designed for several offshore operations. This vessel can be fitted with a DP2 propulsion system, offshore crane, A-frame and winch package to support e.g. survey activities. Despite the shallow draft of 4.3m the vessel has a dead weight of 850 tons, allowing it to stay at sea for extended periods of time. The accommodation houses stores and/or workshops, a meeting room, offices, a large mess and day room, the galley and accompanying stores.

**Utility Vessel 5514**

- Optimized deck lay out & work flow, throughout vessel
- Full functionality including crane, deep water winches and A-frame
- Designed to minimise noise & vibrations
- Slender hull design for high transit speed
- Excellent station keeping capabilities
Jumbo Offshore successfully performed a number of installation projects. Of this versatile DP vessels Damen has built four and this proves that we can deliver and support this offshore range.
Damen offers a broad range of construction vessel options to meet even the most challenging duties. Transport barge construction goes back to 1979. Our Stan Pontoons and sea going tugs can be combined to transport pipes, risers, modules, and we also have many years’ experience when it comes to submersible pontoons, pipe-laying barges and accommodation barges. Furthermore the range of DP Heavy lift vessels delivered to Jumbo are a good example of the extent of our experience in this challenging field.

***INSTALLATION***

In a continuous drive to develop better products for increasing offshore challenges Damen generated a new platform being the Damen Offshore Carrier. This is the answer to having a standard platform ready which can be utilized for several operations having a strong focus on installation and transport activities. This versatile vessel has been setup from a standard perspective having a distinctive look, sleek bow and slender hull which enables the vessel to sustain its speed and course in head seas.

Furthermore, the DOC reduces fuel consumption, vertical accelerations and slamming, the latter improving comfort and safety. The first customers for the Damen Offshore Carrier include Van Oord and Maersk Supply Service. This new vessel highlights Damen’s effort to develop its portfolio to support the installation.
DAMEN OFFSHORE CARRIER 8500

INSTALLATION - For the offshore installation sector Damen's experience can be seen in Damen Offshore Carrier Platform, Construction support vessels, PSV's, AHTS's or infield cable layers, each covering their specific work scope during Subsea, Umbilicals Risers & Flowlines- installation activities.
The distinctive design has been developed to cater for a high level of functionality and provides high operability in harsh environments. This focuses on an optimised tank arrangement, offshore AHC crane, ROV spread, deep water winch spread and helicopter facilities. It also has an advanced level of comfort in the accommodation and a reduction in vertical accelerations during transit or at the location, which is beneficial for the crew. This vessel sets a new standard.

Having a standard platform in mind, while at the same time meeting purpose-specific demands suiting specific operations was the idea behind establishing this new concept. This challenge was taken up and due to continuous R&D efforts, aiming for flexibility in our design, the Damen Offshore Carrier was born. The DOC offers a flexible approach for both transport and offshore installation work. The capabilities are very much in line with the current market requirements in terms of regulations, sea keeping, transit conditions and personnel comfort.

The Fast Crew Supply Vessels can be utilized for several sectors within the offshore. Among its main function to safely transfer personnel to- and from offshore facilities it can further be used for transporting small items, even standard sized containers. With FiFi and rescue means on board it is fit for purpose for conducting safety standby activities.
This Oil Recovery Vessel is a dedicated design according to specific customer requirements. Providing inflatable containment booms and an accompanying skimmer system, the vessel also incorporates all the required clean-up and detection services as well as A-frame, several cranes and rescue facilities.

The range of Fast Crew Support Vessels is based on our successful Sea-Axe design which has proven itself and is well-known for its seakeeping characteristics at high speed. The particular hull shape results in fewer vertical accelerations and hull slamming, making it much more comfortable for the passengers and crew.

For each type of vessel Damen has developed a full standard range to meet customer requirements.
In order to give immediate response in case of an oil spill or potential leakage the OSRV is fully equipped to provide support minimizing the environmental impact. The vessel has a dedicated design where by means of a detection system, dispersant system, skimmer system and inflatable booms a swift cleaning operation can be performed.

The accommodation support vessel is designed for a total of 52 persons all with private cabins and own private sanitary facilities. It furthermore has recreations rooms, mess rooms, offices, gymnasium, conference room, library, treatment room, stores and workspaces. It can optionally be provided with an offshore crane and access system for offshore support activities.

OIL SPILL RECOVERY VESSEL 1050

ACCOMMODATION SUPPORT VESSEL 8316

PRODUCTION SUPPORT

Damen-built vessels play a central role in offshore production at locations around the world. Our PSVs, Safety Standby Vessels, Fast Crew Suppliers, Oil Spill Recovery Vessels, barge range and the new Walk2Walk vessel are designed for a high level of operations, where day rates bring efficiency and reliability into sharp focus.

Whatever the specific requirement, Damen has tailor-made vessels suitable for the transfer of personnel transport of equipment, risers and drill pipes but also for subsea work using ROVs, offshore cranes, A-frames or deep water winches. Our vessels provide a well-balanced dynamic positioning system and enhanced station keeping. These features combined with optimised manoeuvrability offer a stable platform even when vessels are in harsh environments.

This can be underpinned by our high-speed craft which provide a high level of comfort for people on board during transport to the production facilities. Due to the Sea-axe design the vessel characteristics are improved significantly which ensures that the personnel are safe, and ready and fit for work. Crew comfort, smart logistics on board and optimised vessel utilisation are all key factors. We learn from our customers as well from our repair & conversion yards and taking this into account we can offer a top quality as well as reliable vessels for this segment.
PRODUCTION SUPPORT - Damen’s extensive range of vessels used during production support includes Fast Crew Suppliers, Oil Spill Recovery vessels, PSVs, Standby Vessels and Walk2Work vessels.
DEEP WATER WINCH PACKAGE
- AH/towing drums: 2 x 400 ton at 10 m/min pull, 450 ton brake - 2 x 3000 m 87 mm wire
- Special handling drum: 1 x 400 ton at 10 m/min pull, 450 ton brake - 1 x 7000 m 87 mm wire
- Secondary winches: 2 x 140 ton at 10 m/min pull, 140 ton brake - 2 x 1600 m 208 mm rope
- Storage winch: 1 x 20 ton pull, 23 ton brake - 2 x 2300 m 208 mm rope
New finds in deeper waters and more remote locations lead the current offshore vessel market, but the fact is that mature offshore fields also offer life of-field extension potential, whether through expansion, upgrades or the emergence of new independent producers. Even maintaining production at existing levels can require substantial refurbishment and upgrade work or can it lead to tie-in work.

Wherever LOF extension opportunities and challenges exist, Damen can offer its PSVs, AHTS vessels, Heavy Lift, Construction or Multi-Purpose Pessels to match the customer’s needs. Deep water developments may also require ROV support where the subsea infrastructure is too deep to deploy divers.

As well as this the Damen well stimulation concept has created from integrating Damen’s approach incorporating our Damen distinctive hull and accompanying advantages with the client-specific well stimulation spread.

The driver in this field of work is to reduce costs and make it economically viable upgrading the capacity of the well or tie-in satellite wells enhancing the facility’s output. Damen recognises this need to be cost effective and hence our vessels are designed to minimise operational costs.
PSV 5000 IN IRM EXECUTION

FACILITY UPGRADE - Vessel activities ranging from well stimulation, Inspection Repair & Maintenance to tie-in of satellite platforms, in short; life-of-field extension.
The Damen Fast Inspection Repair & Maintenance Vessel is a new development which underpins our aim of setting up a new line of innovative offshore vessels. This vessel is specifically designed to achieve high mobilisation speeds in combination with a high functionality level with respect to repair & maintenance activities.

A dedicated roll reduction system will optimise sea keeping behavior at zero-speed while the special Sea-axe bow reduces the vertical accelerations and increases comfort levels at high speed.

**FAST INSPECTION & MAINTENANCE VESSEL**

- High transit speed: 22kn
- AHC offshore crane
- Launch & Recovery system
- Moonpool functionality
- Oil Spill Recovery system
- Optional dive support system
The layout and functionality of the W2W vessel has been designed to get offshore maintenance engineers quickly and safely on-site. It features a motion-compensated gangway for maintenance crew transfer and guarantees unrivalled availability. The W2W vessel will support maintenance crews in comfort for sustained periods at sea, reflecting this shift further from shore.

By optimising the hull form and positioning accommodation amidships, vertical accelerations have been reduced by 30%. Internal spaces have also been mapped to optimise workflow and storage, while accommodation areas have been designed to create a high level of comfort.

For years Damen has been active in the offshore industry by creating new designs and delivering vessels, whether standardised or custom-built. To satisfy our customers and better understand their specific needs we are in constant contact with the oil majors, ship owners and operators, defining trends, reviewing current innovations and investigating which improvements can be incorporated in our designs. These activities together with our extensive vessel knowledge have resulted in a number of new developments such as the W2W, FCS and FIRM concepts. We support our clients by providing cost effective solutions and we see this as a strong company value.
Damen Shipyards developed a range of Anchor Handling Tug Supply vessels as a response to the AHTS’s market demand. With a distinctive design these versatile vessels range from 75 ton bollard pull up to 200 ton bollard pull. The latter version is specifically meant to serve deep water offshore operations with a current maximum depth of 3,000m. The 200 ton BP vessel has a large working deck, an extensive winch lay-out, state-of-the-art deck equipment as well as ROV functionality. It provides a suitable platform for additional features such as FIFI, oil recovery, diving support and potentially subsea construction.

The propulsion installation may be either Diesel-Direct, Diesel electric or Hybrid, depending on the anticipated operational profile of the vessel. The carefully modelled hull lines together with a dedicated propulsion design and power generation system are tuned to reduce fuel consumption.
WORLD WIDE SUPPORT SHIP

OFFSHORE SECURITY VESSEL 3307

DAMEN PONTOONS

OFFSHORE FEEDER 4500

MULTI PURPOSE VESSEL 5212
DAMEN SERVICE SUPPORT VESSELS

Damen is able to deliver vessels from straightforward suppliers with the best price-quality ratio, to ultra-silent, fishery research vessels and Fast crew Suppliers. With many years of ship building practice Damen has the know-how to design and build complex vessels to support specialist tasks, particular important in the offshore sector.

However we have built an extensive number of vessels, barges and pontoons with similar complexity operating in close relating sectors. These vessels are utilized in dredging- or civil projects, performing coastal- and harbor activities but also supporting the coast guard, effecting the security of offshore assets and performing coastal transport. Therein lies the strength of Damen to understand our customer and build these one-off vessels based on our very broad experience.
Via the Wilson, Sons yard in Brazil a significant number of DTC vessels have been delivered. Our track record is quite extensive with approx. Ten PSV’s delivered and six vessels are under construction including large PSVs, four Oil Spill Recovery Vessels and an ROV Support Vessel. This cooperation broadens our experience in building abroad and gives us a better understanding of the local requirements.

Damen Technical Cooperation provides the opportunity to build Damen vessels locally, anywhere in the world from a prefabricated shipbuilding package in combination with assistance, training and back-up from Damen’s headquarters. By using standard components it is possible to make custom-built designs fulfilling the specific local requirements. This cost-friendly concept can be applied to a full range of vessels.
All vessels are supplied with well documented and comprehensive material packages to optimise the customer’s working methods. Experienced Damen engineers can assist for the duration of the project.

The degree of involvement of Damen Technical Cooperation is entirely dependent on the customer’s preferences. It varies from the supply of a component or a set of drawings, to the delivery of a complete and carefully documented prefab shipbuilding kit. All necessary services can be made available during construction. During the building process, transfer of knowledge takes place and this provides your building yard’s competitiveness in the market. By using Damen designs and packages the customer has access to support from our purchase and services but also from our after-sales, product development and customer finance departments.

Since establishing Damen Technical Cooperation in 1976, over 1,000 vessels have been built locally in more than 70 countries all over the world.
At the Damen ship repair & conversion yards we offer our clients the full range of services a shipowner might require. Whether it concerns normal dry dockings for scheduled maintenance, damage repair or extensive refit and conversion jobs, Damen Shiprepair & Conversion handles it. Our facilities range from full size dry docks and covered facilities to smaller ship repair yards, more practical for inland vessels.

MAINTENANCE
Damen Shiprepair & Conversion yards are strategically located and always have capacity to facilitate your requirements. We service over a thousand ships annually and are experienced in blasting and conservation work, maintenance on propulsion systems, engine works, bow thrusters, rudders, valves, hatches, piping, cleaning, winches and generators.

REPAIR
At the Damen Shiprepair & Conversion yards we are 24/7 available in order to assist you in the best possible way. Our reputation in damage repair is built on a good communication between client, insurance company and the yard, short lead times, high quality work and therefore minimal vessel downtime. With our highly skilled teams and years of knowledge we are able to repair all kinds of damages. Whether it concerns collisions, engine failure, fire, water damages or malfunctioning of systems such as rudders, tail shafts, bow, thrusters, etc.

CONVERSION
Damen Shiprepair & Conversion has been active in the conversion of ships for 30 years. Over the years we have gathered extensive knowledge and experience with regards to all kinds of conversions: lengthening of ships, conversions from cable-laying into pipe-laying, from containerships into wind farm construction vessels, from single hull tanker to double hull tanker and from accommodation ship into flexible pipe-laying vessel. We have sufficient engineering and project management capacity in order to be able to assist you with the design, engineering and planning of your project.

REFIT
In all segments of shipping, when ships age, owners either decide to sell their ship or to invest in their assets. Damen Shiprepair & Conversion has the competence to refit, execute life-extensions and/or second-youth programs in all product markets. We are able to assist the owner with a thorough preparation of a refit project. Work scope, planning, engineering, parts and deliverables are all important factors in a refit program.
Convert the jack-up drill rig ‘Atlantic Amsterdam’ into an offshore hotel accommodation for Atlantic Amsterdam Pte. Ltd. (subsidiary of Ezion Holdings Ltd.)

The Atlantic Amsterdam was on dry tow from Singapore to Rotterdam onboard the Dockwise Heavy Lift Vessel ‘Black Marlin’. She arrived in Rotterdam where a Damen Shiprepair Vlissingen team carried out repairs of the spud cans while she was still mounted on the HLV. The rig was offloaded and towed to Vlissingen.

Demolition work started with removing the derrick and drilling installation completely, including the mud pumps and tanks, sliding piece and cement installations as well as all the remaining drilling equipment with its cabling and piping.

The new accommodation block, which will house approximately 135 people in single person cabins, was prefabricated and installed on a cofferdam. This cofferdam is the adaptor between the existing work deck and the new accommodation block. The existing accommodation facilities were stripped to bare metal and fully refurbished with a new interior. New life saving boats and other safety equipment were installed to comply with the latest regulations.

Repairs and Lifetime extension of the FPSO ‘Gryphon A’ for Maersk Oil UK

The Gryphon A project involved dry docking, damage repairs and a complete refit program. She arrived in Rotterdam in June 2011 after removal of the UW fairleads and thrusters at the offshore lay-by berth in the Port of Rotterdam.

The SOW involved dry docking of the vessel, complete overhaul of the turret and fairleads, steel renewals in way of the cargo area (approx. 800 tonnes), extensive coating program of the complete vessel, both inside and outside, involving over 200,000 m² of ballast tank coating. Furthermore renewal and modification of the topsides process piping and vessels, an overhaul of all thrusters, pumps, motors and winches. An upgrade of the accommodation and a major electrical refit.

Gryphon A, left the yard in July 2012 for the offshore lay-by berth in the Port of Rotterdam to finish the underwater works. Finally the 18th of August she left to her production site.

Upgrading and installing a pipelay system on board

The majority of work consisted in upgrading of systems which were already in use since the conversion of the vessel in 2010 and a class renewal docking. For Damen Shipyreip Vlissingen the main focus was changing out the two aft azimuth thrusters for newer ones with higher output power (output went up from 108 Ton to 132 Ton bollard pull) and an upgrade from DP2 to DP3. For the exchange the Yard removed, under 100% WorkSafe®, the old thrusters including the upper part containing the gearbox and hull section and rebuilt the entire system again. In order to line up the new thruster hull section the individual frames and girders were tailor made.

Other main jobs were coating of hull and several tanks, increasing the wood cladding on the main deck with approx. 400 m² Douglass timber and introducing 32 additional scuppers throughout the vessel including pipelines, penetrations and all associated NDT and tank testing.

Furthermore a structural survey, including thickness measurements and NDT, of the pipelay steel structure at the location of the tensioners and straighteners was taken care off by the yard in order to make the possible problem areas visible. Steelworks associated with the report were carried out to comply with the latest regulations.
GLOBAL PRESENCE
FOUND IN THE NETHERLANDS

THE NETHERLANDS
Damen Shipyards Gorinchem
Damen Marine Services
Damen Trading
Damen Schelde Naval Shipbuilding
Damen Schelde Gears
Damen Schelde Marine Services Vlissingen Amels
Bodewes Binnenvaart Millingen
Damen Dredging Equipment
Damen Marine Components
Damen Anchor & Chain Factory
Damen Shipyards Bergum
Damen Shipyards Den Helder
Damen Shipyards Hardinxveld
Maaskant Shipyards Stellendam
Damen Shiprepair Rotterdam
Damen Shiprepair Vlissingen
Oranjewerf Amsterdam
Shipdock Amsterdam
Shipdock Harlingen
Van Brink Rotterdam

FRANCE
Damen Shipyards Brest
Arno Dunkerque

POLAND
Damen Shipyards Gdynia
Damen Shipyards Koźle
Damen Marine Components Gdansk

ROMANIA
Damen Shipyards Galati

SWEDEN
Damen Shipyards Göteborg
Damen Oskarshamnsvarvet

TURKEY
Damen Shipyards Antalya

UNITED KINGDOM
Brixham Marine Services

BRAZIL
Wilson, Sons**

CUBA
Damen* 

QATAR
Nakilat Damen Shipyards Qatar*

SOUTH AFRICA
Damen Shipyards Cape Town

U.A.E.
Albwardy Marine Engineering*
Damen Shipyards Sharjah (FZE)*

CHINA
Damen Marine Components Suzhou
Damen Trading Suzhou
Damen Yichang Shipyard*
Damen Shipyards Changde
Afai Southern Shipyard**

INDONESIA
PT Dumas**
PT Pal**
PT Steadfast Marine**

SINGAPORE
Damen Shipyards Singapore
Damen Schelde Marine Services Singapore

VIETNAM
Damen Song Cam Shipyard
Song Cam Shipyard**
Song Thu Shipyard**
189 Shipyard**
Damen offers a wide-ranging portfolio of customer support services, covering the complete vessel’s lifecycle; from start-up, through deployment to lifetime extension.

We help our customers achieve their goals in terms of uptime, reliability and costs. By working closely with the customer, Damen Services is able to develop and improve its portfolio to meet any specific requirements.

If a ship is unable to sail to a Damen Ship Repair & Conversion Yard, then Damen Repair & Conversion, in cooperation with Damen Services, is capable of executing maintenance and repair activities on a location indicated by the customer.

ONE-STOP-SHOP
Maintenance Management Solutions assist our customers in performing preventive maintenance. The Damen Asset Management Operating System (DAMOS), in combination with a spare part delivery solution, is developed to maximize vessel uptime and minimize operational costs.