

2010/1

PERIODICAL NEWSLETTER



Photo: FotoFlite

M.V. Arklow Manor


CONOSHIP
INTERNATIONAL

FINDING FIRMER GROUND AGAIN



Reports of steady economic growth on certain continents and higher than expected growth in European countries lead us to predict that there will be a positive effect on transport demand and freight rates. Already evident is an upturn in demand for bulkers, and sooner or later this will have a bearing on the short sea shipping industry.

Various other segments of the maritime industries, such as dredging, have endured the global economic turmoil well. The market requirement for new and relatively small dredgers has increased as a consequence of numerous port development and waterway maintenance projects in the Middle East and Far East. Furthermore, European contractors have made fresh commitments to fleet extension and renewal.

Barkmeijer Shipyards, the recipient of an order from the Dutch Pilot Organization for the construction of a series of pilot station vessels, has just delivered a 2,300m³ hopper dredger (see page 5). In addition, Barkmeijer and Conoship are together working on sophisticated new dredger designs for various owners.

We are proud to be the designer of innovative and diverse classes of short sea vessel for entrepreneurial owners from all over the world. Hallmarks of our work are designs that offer a higher cargo intake with lower fuel consumption and CO₂ emissions, developed in close collaboration with owners, and dedicated to specific trades and trading areas, and designs which offer outstanding, truly “multi purpose” capabilities. Because the owners involved wish to maintain a competitive edge, publication of details of these new designs is embargoed.

Complementing the latest vessel design initiatives, Conoship has drawn up a new, pragmatic “aft hull and propulsion optimisation method” in cooperation with Delft University of Technology and MARIN

Wageningen. This results in fuel reductions of up to 10-15%. The improvements in efficiency have been achieved by combining developments in hydrodynamics and CFD calculation techniques in a new way, applicable to both hull lines and propulsors. The method lends itself to vessels of different types and distinct operating areas, including inland and deep sea traders.

Conoship has augmented the range of consultancy services to clients. For the construction engineering stage, which can be performed outside Conoship's liabilities, the company now offers design supervision, to better safeguard the original, principal design parameters. There has been a positive response by the industry to another newly-launched service, whereby Conoship can undertake a design review of a fleet's existing vessels, to ascertain ways of improving capabilities without major structural changes.

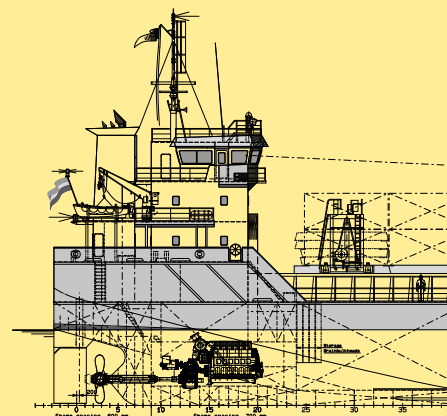
We trust that you will enjoy reading this newsletter, and that it will help fuel your enthusiasm and your entrepreneurial nature, and ultimately contribute to your design and newbuilding plans for the future.

We remain at your disposal should you require further information or clarification.

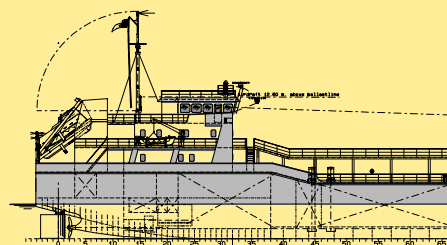
Best regards,
Guus van der Bles
Leo van Ingen

Front cover : 14000tdw Bulker 'Arklow Manor'
Yard : Mokpo Shipbuilding Ind. Co., Korea
Mokpo, South Korea
Owner : Arklow Shipping Ltd.,
Arklow, Ireland

NEW DESIGN 4800 TDW



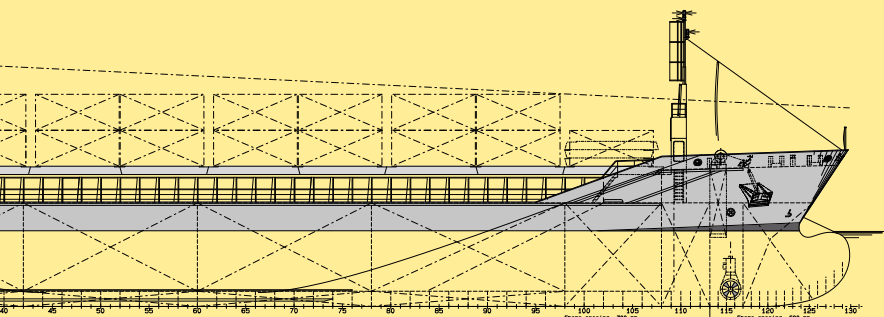
NEW DESIGN 6750 M³



GENERAL

For Russian inland waterways as well as for not-arctic sea areas, Conoship International B.V. developed a new IMO II tanker design. The vessel will be used for transportation of oil products with a specific gravity up to 0.99 t/m³ and a flash point below 60°C. The propulsion consists of two fixed pitch propellers, each driven by a 900 kW main engine. The cargo area is subdivided in twelve cargo tanks and two slop tanks. Cargo handling is designed for six segregations.

MPP VESSEL



GENERAL

Our recently developed 4800 tdw multipurpose vessel is a new member within the Conoship range of dry cargo vessels. It features excellent capabilities for transportation of general cargoes, such as forest products, steel, bulk and project cargo. The vessel is intended for services in the European waters from Baltic to Mediterranean Sea but it also has the ability for worldwide operation. A unique combination of hull form and propeller design results in a relatively low fuel consumption at a relatively high speed.

PRINCIPAL PARTICULARS

Length over all	89.97 m
Length between p.p.	84.95 m
Breadth moulded	15.40 m
Depth	7.50 m
Draught (design)	5.95 m
Deadweight	4800 ton
Gross tonnage (abt.)	3300
Speed (trial)	13 kn
Ice Class (optional)	1B

EQUIPMENT

Main engine (85%MCR)	1800 kW
Shaft generator	350 kW
Auxiliary engine	140 kW
Emergency generator	140 kW
Bow thruster	300 kW

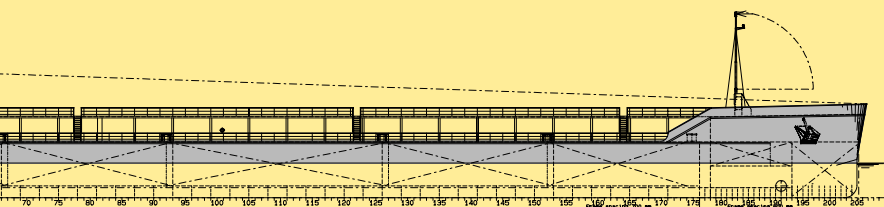
HOLD PARTICULARS

Hold dim.	58.80 x 12.80 x 8.47 m
Cargo hold capacity	217000 cb.ft.
Tank top load	15 t/m ²

CAPACITIES

HFO	260 m ³
Gasoil	34 m ³
Potable water	50 m ³
Ballast water	2000 m ³

IMO TYPE II CHEMICAL OIL TANKER



PRINCIPAL PARTICULARS

Length over all	140.95 m
Length between p.p.	137.55 m
Breadth moulded	16.80 m
Depth	6.15 m
Draught (design)	3.60 m
Deadweight	5300 ton
Draught (summer)	3.82 m
Deadweight	5800 ton
Speed (trial)	10 kn

EQUIPMENT

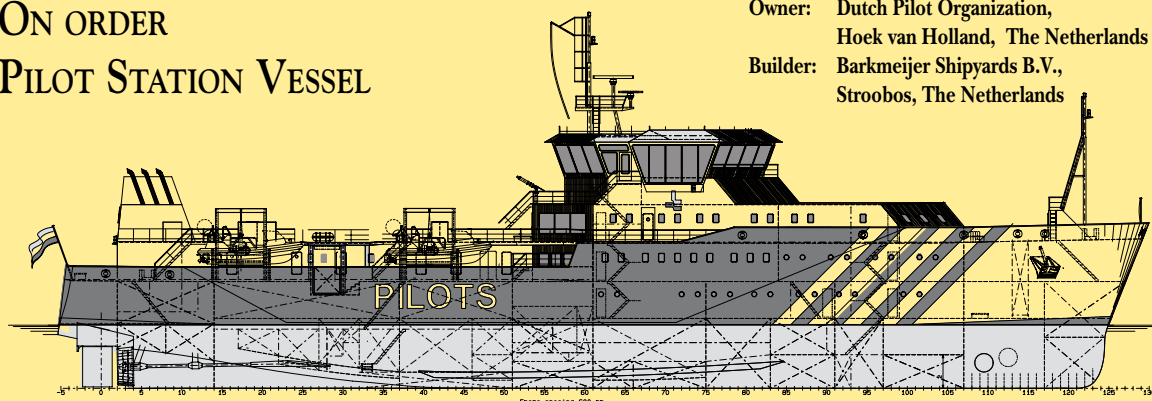
Main engines	2 x 900 kW
Auxiliary engines	3 x 450 kW
Emergency generator	168 kW
Bow thruster	350 kW

CAPACITIES

Cargo tanks (100%)	6750 m ³
Slob tanks	135 m ³
MDO	250 m ³
Potable water	40 m ³
Ballast water	3800 m ³

ON ORDER PILOT STATION VESSEL

Owner: Dutch Pilot Organization,
Hoek van Holland, The Netherlands
Builder: Barkmeijer Shipyards B.V.,
Stroobos, The Netherlands



In close cooperation with Barkmeijer Shipyards, SasTech and the Dutch Pilot Organization (DPO), Conoship developed a design for a Pilot Station Vessel (PSV). This design will replace the more than thirty years old cutters currently operated by the DPO. Pilot Station Vessels are deployed offshore on a semi-permanent basis, providing a 'floating' base from where pilots are transferred by fast launches to and from inbound and outbound ships.

The PSV has been specifically designed to meet operational needs and habitability criteria in harsh weather conditions, with significant wave heights up to 3.5 m. The design effectively increases the number of days the pilots can operate from the station vessel, reducing the need for costly transfers by helicopter.

To meet the seakeeping requirements of the DPO, the hull form was optimised with regard to behaviour in a seaway.

The design was extensively tested by MARIN in the institute's large seakeeping basin. The test tank programme included taking a model of the existing SWATH pilot craft alongside a model of the PSV, in heavy weather. These investigations demonstrated that the new design would comply with the DPO's stringent stipulations.

Another major aspect of the design is safety. The vessels need to operate near the busy shipping lanes and in the close vicinity of far bigger ships. The PSV has therefore been designed to be exceptionally manoeuvrable, and to offer impressive "sprint" and stopping capabilities. So as to enhance safety for both crew and pilots, a high level of redundancy has been incorporated, as in the diesel-electric propulsion installation. The diesel-electric system also reduces harmful exhaust gas emissions, such that the new PSV class can aptly be described as a "green design".

Barkmeijer Shipyards has signed a contract with the Dutch Pilot Organization to build three of these vessels, of which the first is scheduled to be delivered during the autumn of 2012. The development of the PSV design illustrates Conoship's enduring strength in the design of specialised and complex tonnage, including hydrographic research vessels, oil spill response vessels, or trailing suction hopper dredgers.

MAIN DIMENSIONS

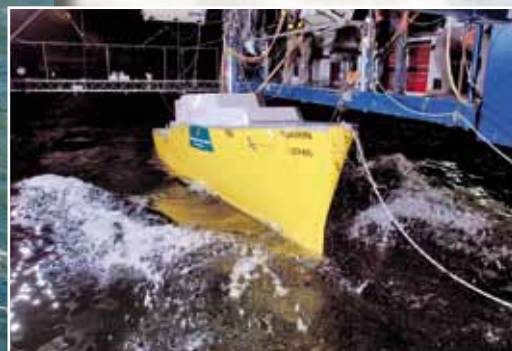
Length between p.p.	74.80 m
Breadth	13.30 m
Depth	7.95 m
Speed(trail) abt.	16 kn

ACCOMMODATION

Pilots	18
Crew	17
Spare	10



Artist impression



Seakeeping test at MARIN

4500 m³ HOPPER DREDGER

T.S.H.D. "SHOALWAY"

Owner: Boskalis,
Papendrecht, The Netherlands
Builder: Intervak
Scheepsbouw & Constructie,
Harlingen, The Netherlands



GENERAL

The dredger fleet of Royal Boskalis Westminster was recently complemented with TSHD 'Shoalway'. The dredger combines a relatively shallow draught with flexible dredging capabilities. Discharge of hopper loads can be achieved through bottom doors or a bow coupling. The bottom doors are integrated in the double bottom structure. A high manoeuvrability is effected by two rudder propellers. Contractor and designer worked closely together. The design was focused on maximum operational flexibility in various dredging environments and state of the art technology.

PRINCIPAL PARTICULARS

Length over all	90.00 m
Length between p.p.	83.08 m
Breadth moulded	19.00 m
Depth	7.25 m
Draught	5.85 m
Deadweight (T= 5.85)	5490 ton
Dredging draught	6.70 m
Deadweight (T= 6.70)	6800 ton
GT	4082
Speed (service)	11 kn

EQUIPMENT

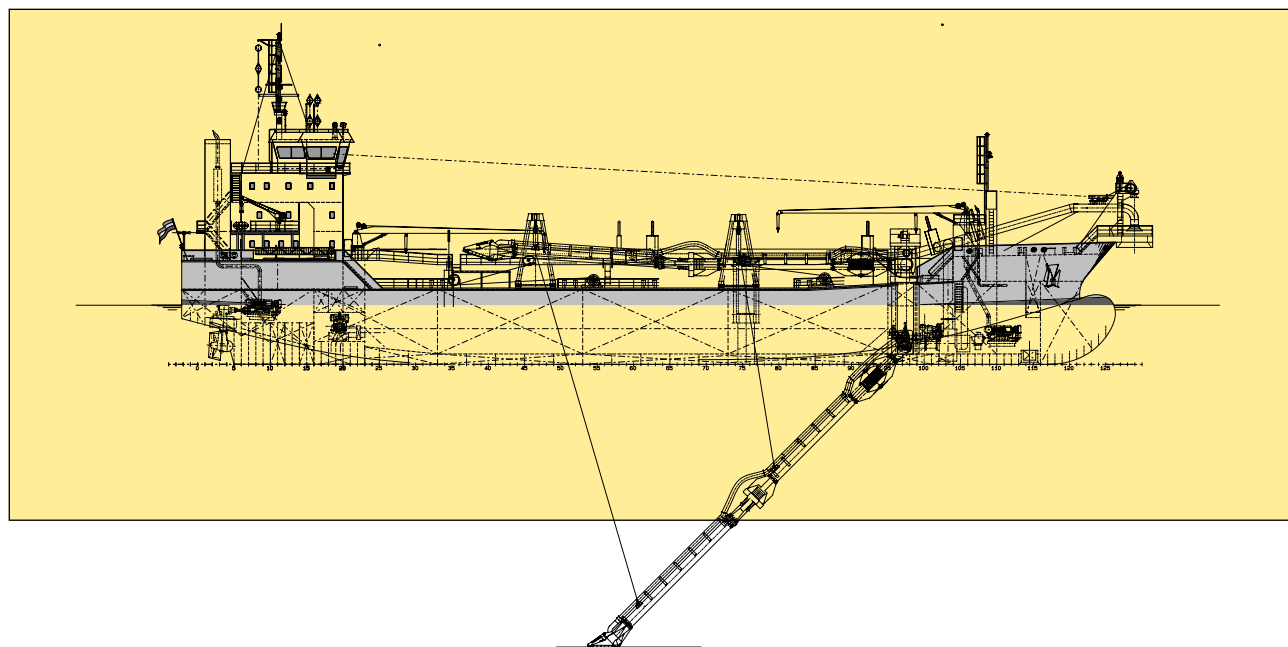
Main engine (total output)	3000 kW
2 x Rudder propeller, each	1500 kW
Bow thruster	500 kW

DREDGING PARTICULARS

Diameter of drag arm	900 mm
Max. dredge depth	30 m
Sand pump output	1680 kW
Jet pump output	2 x 750 kW
Hopper capacity	4500 m ³
Density of hopper load	1.0 – 2.2 t/m ³

CAPACITIES

Gasoil	384 m ³
Lub. oil	15 m ³
Potable water	83 m ³
Ballast water	290 m ³



2400 M³ HOPPER DREDGER

T.S.H.D. "UKD ORCA"

Owner: UK Dredging,
Cardiff, United Kingdom
Builder: Barkmeijer Shipyards B.V.,
Stroobos, The Netherlands



GENERAL

The Diesel Electric driven dredger 'UKD Orca' is the latest delivery of Barkmeijer Shipyards. This sophisticated vessel has been designed especially for port maintenance environments. Therefore a dual suction dredging pipe has been installed on portside as well as on starboard. To guarantee an excellent manoeuvring flexibility, the vessel is equipped with two azipod-thrusters. Discharging of the hopper load is established by six bottom doors or by dredging pump via a shore connection portside or starboard.

PRINCIPAL PARTICULARS

Length over all	78.00 m
Length between p.p.	75.95 m
Breadth moulded	15.85 m
Depth	6.35 m
Draught	4.50 m
Deadweight (T= 4.50)	2570 ton
Dredging draught (max.)	5.60 m
Deadweight (T= 5.60)	3750 ton
Speed (trail)	12 kn

EQUIPMENT

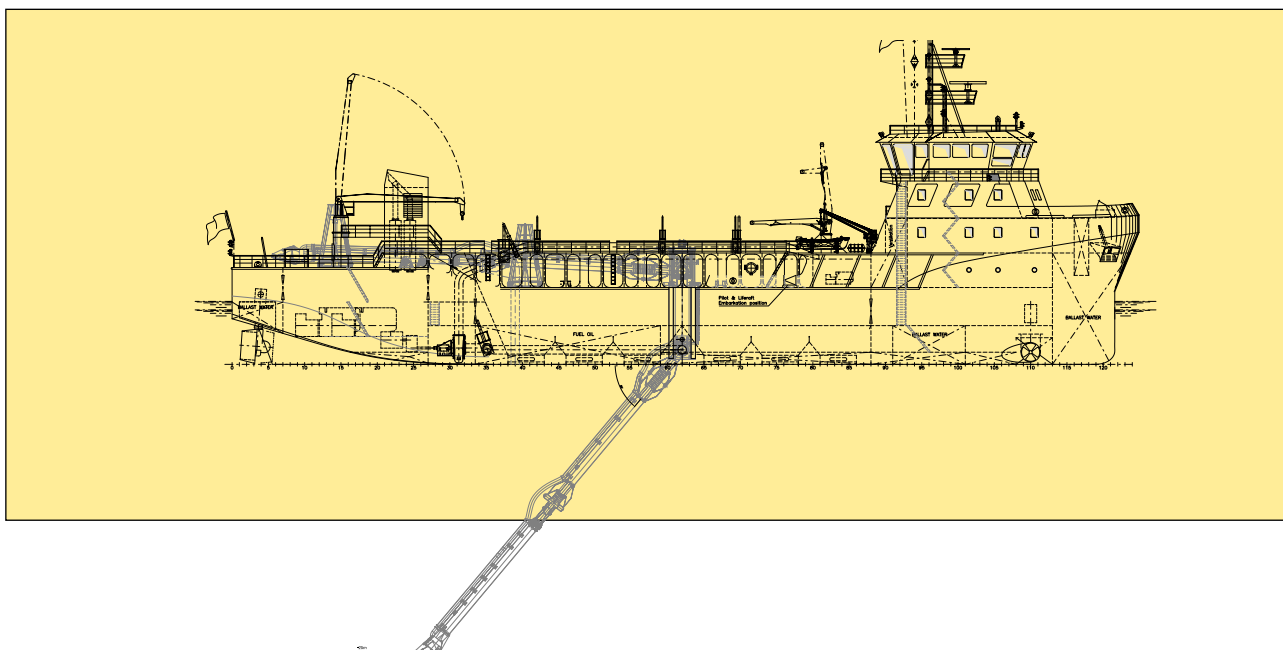
Main engine (total output)	
3 x Diesel alternator	3600 kW
2 x Rudder propeller, each	1500 kW
Bow thruster	500 kW

DREDGING PARTICULARS

Diameter of drag arm	2 x 700 mm
Max. dredge depth	25 m
Dredge pump	1 x 800 kW
Hopper capacity	2400 m ³
Density of hopper load	1.0 – 2.2 t/m ³

CAPACITIES

Gasoil	250 m ³
Lub. oil	26 m ³
Potable water	76 m ³
Ballast water	570 m ³



14000 TDW BULKER

M.V. "ARKLOW MANOR"

Owner: Arklow Shipping Ltd,
Arklow, Ireland
Builder: Mokpo Shipbuilding Ind. Co.,
Mokpo, South Korea



GENERAL

Arklow Shipping took m.v. 'Arklow Manor' from the Korean based Mokpo yard into service. This vessel, first out of a series, offers flexible loading capabilities and fuel efficiency at relatively high speed. The four holds are of an unobstructed type for easy cargo treatment, cleaning and maintenance. The hydraulically operated folding type hatch covers enable quick cargo operations.

PRINCIPAL PARTICULARS

Length over all	136.47 m
Length between p.p.	128.50 m
Breadth moulded	21.00 m
Depth	11.40 m
Draught	8.49 m
Deadweight	14000 ton
Gross tonnage	9680
Speed (service)	14 kn

EQUIPMENT

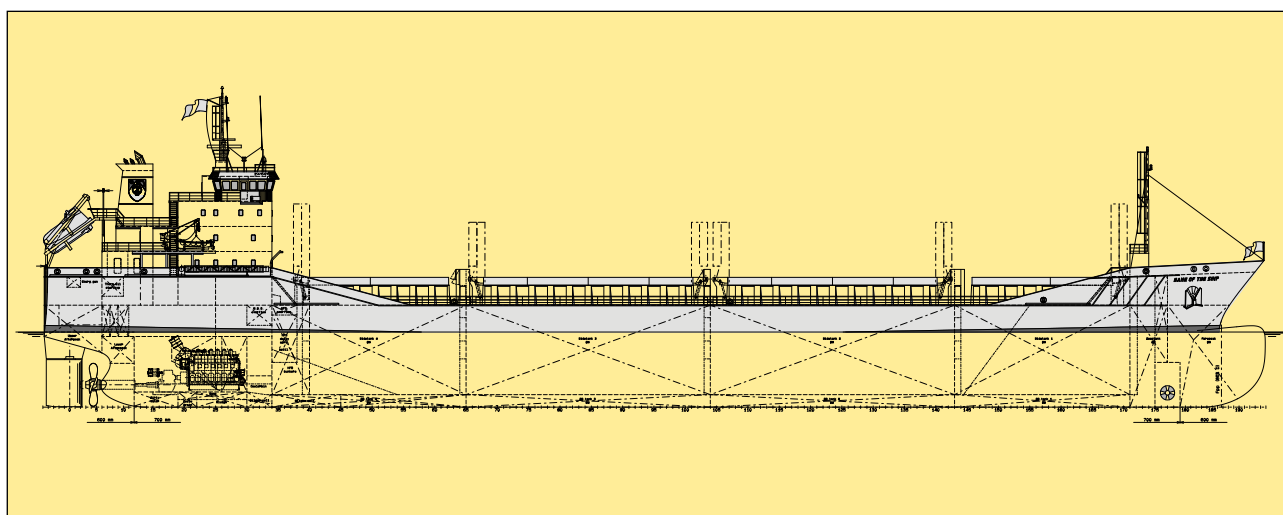
Main engine	4000 kW
Shaft generator	1000 kW
Auxiliary generator (2x)	350 kW
Emergency generator	100 kW
Bow thruster	750 kW

HOLD PARTICULARS

Hold dimensions	
Hold 1	19.25 x 17.60 x 12.25 m
Hold 2	28.00 x 17.60 x 12.25 m
Hold 3	27.30 x 17.60 x 12.25 m
Hold 4	17.15 x 17.60 x 12.25 m
Cargo hold capacity	639500 cb.ft.
Tank top load	20 t/m ²

CAPACITIES

HFO	625 m ³
Gasoil	145 m ³
Potable water	135 m ³
Ballast water	5350 m ³



CONOSHIP: THE INTERNATIONAL MATCHMAKER IN THE MARITIME INDUSTRY

Conoship provides marketing, sales, research, development, design and engineering activities for the maritime industry.

Over the years, Conoship has built up a network in the shipbuilding and shipping industry. Originating from a group of shipyards in the Northern part of Holland, it has expanded its Newbuilding capacities by collaboration with worldwide located associated shipyards.

Conoship supports the process from achieving a firm contract with the owners up to delivery of the vessel.

For more information about Conoship and activities, please visit our website www.conoship.com

THE MEMBER SHIPYARDS OF CONOSHIP INTERNATIONAL B.V.

Barkmeijer Shipyards, The Netherlands

Bodewes Shipyards, The Netherlands

Intervak Shipyards & Construction, The Netherlands

Royal Niestern Sander, The Netherlands

BUSINESS PARTNERS

SEDS, Smart Engineering and Design Solutions Ltd., India

Algoship Brokers Ltd., Bahama's



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