Special Vessels
REMONTOWA SHIPBUILDING S.A. GENERAL DESCRIPTION

REMONTOWA SHIPBUILDING S.A. is the biggest of companies belonging to REMONTOWA HOLDING which gives an opportunity to offer highly technically advanced products – from design to fully equipped ships.

REMONTOWA SHIPBUILDING S.A. owns a hull department consisting of four halls and nine bays (each equipped with overhead cranes of different lifting capacity), two stands for launching vessels using floating cranes, one stand for launching vessels into floating dock or pontoon, one side roller slipway and a 400-metre long quay equipped with essential infrastructure, compressed air, electricity and technical gases supply. The Shipyard’s technical and production capabilities allow to build modern vessels up to 130 metres in length and 24 metres in width.

The Shipyard specialises in building advanced vessels such as:
- offshore support vessels (AHTS, PSV, ERRV, MPV, IMR, ROV);
- cargo vessels (container vessels, open deck carriers, LNG/LPG/LEG carriers);
- car-passenger ferries;
- multipurpose vessels (patrol boats, hydrographic ships, multifunction buoy tenders, research vessels, tugs);
- navy ships;
- fishing vessels;
- partly outfitted hulls, steel/aluminum constructions.

The outfitting of vessels covers:
- painting;
- piping;
- machinery and deck outfitting;
- electric and electronic works;
- accommodation outfitting.

REMONTOWA SHIPBUILDING S.A. maintains certified quality assurance and management systems:
- Quality Management System which conforms to the requirements of the International Standard ISO 9001:2008 (certified by Germanischer Lloyd and Polish Register of Shipping), as well as AQAP 2110:2009 (certified by Department of Management and Quality Systems of Military Technical Academy);
- Internal Control System (for goods of strategic importance) which conforms to the Criteria of WSK (Internal Control System) certified by Polish Centre for Testing and Certification;
- Occupational Health and Safety Management System which conforms to the requirements of OHSAS 18001:2007 certified by Germanischer Lloyd.

The Shipyard also retains:
- License for manufacture and trade turnover of goods and technology for the army and the police and also trade turnover of any kind of the weapon, issued by Polish Ministry of Interior and Administration;
- NATO Commercial and Government Entity Code.

REMONTOWA SHIPBUILDING S.A. builds vessels in conformity to the requirements and under the supervision of the following Classification Societies:
- American Bureau of Shipping;
- Bureau Veritas;
- Det Norske Veritas;
- Germanischer Lloyd;
- Lloyd’s Register of Shipping;
- Polish Register of Shipping;
- Registro Italiano Navale.
B841 RAPID INTERVENTION VESSEL

VESSEL'S NAME
B841 – “Alert”

CLASS
The vessel’s hull, machinery and electrical installations have been built and installed under special survey in accordance with the Rules and Regulations of Lloyd’s Register of Shipping for notation: +100A1, SSC WORKBOAT, MONO G4, +LMC, UMS, MCM, EP, LA, DP (CM).

DESCRIPTION
The vessel has been designed for buoy handling, wreck marking, towing, multi-beam and side scan hydrographic surveying.

MAIN PARTICULARS

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length over all</td>
<td>39,30 m</td>
</tr>
<tr>
<td>Length b.p.</td>
<td>34,65 m</td>
</tr>
<tr>
<td>Breadth moulded</td>
<td>8,00 m</td>
</tr>
<tr>
<td>Depth to Main Deck</td>
<td>4,00 m</td>
</tr>
<tr>
<td>Speed</td>
<td>16,5 kn</td>
</tr>
<tr>
<td>Bollard pull</td>
<td>25 Mt</td>
</tr>
<tr>
<td>Deadweight</td>
<td>60 t</td>
</tr>
<tr>
<td>Complement</td>
<td>10 persons</td>
</tr>
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<td>Length over all</td>
<td>39,30 m</td>
</tr>
<tr>
<td>Length b.p.</td>
<td>34,65 m</td>
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<tr>
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<td>60 t</td>
</tr>
<tr>
<td>Complement</td>
<td>10 persons</td>
</tr>
</tbody>
</table>

TANKS’ CAPACITIES

<table>
<thead>
<tr>
<th>Item</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel oil</td>
<td>45,90 m³</td>
</tr>
<tr>
<td>Lubrication oil</td>
<td>0,70 m³</td>
</tr>
<tr>
<td>Hydraulic oil</td>
<td>3,50 m³</td>
</tr>
<tr>
<td>Fresh potable water</td>
<td>13,00 m³</td>
</tr>
<tr>
<td>Cargo fresh water</td>
<td>15,60 m³</td>
</tr>
<tr>
<td>Ballast water</td>
<td>21,10 m³</td>
</tr>
<tr>
<td>Waste water</td>
<td>12,30 m³</td>
</tr>
<tr>
<td>Shaft Line with CPP</td>
<td></td>
</tr>
<tr>
<td>GENERATING SETS</td>
<td></td>
</tr>
<tr>
<td>Diesel Generating</td>
<td>2 x 140 kW (at 1500 RPM)</td>
</tr>
<tr>
<td>DECK EQUIPMENT</td>
<td></td>
</tr>
<tr>
<td>Bow Thruster</td>
<td>17,5 kN/1500 RPM/ø0,75 m</td>
</tr>
<tr>
<td>Steering Gear</td>
<td>2 x spade type, high efficiency</td>
</tr>
<tr>
<td>Rudder</td>
<td>2,5 t/12,5 m</td>
</tr>
<tr>
<td>Deck crane</td>
<td>2 x (ø0,75 m)</td>
</tr>
<tr>
<td>Buoy chain/Towing winch</td>
<td>8 t</td>
</tr>
<tr>
<td>Central hydraulic system</td>
<td>250 bar</td>
</tr>
<tr>
<td>Rescue boat</td>
<td>4,40 m/6 kn</td>
</tr>
<tr>
<td>Rescue davit</td>
<td>1 t</td>
</tr>
</tbody>
</table>

SURVEY EQUIPMENT

Searching Wreck Finding Sonar 90/160 kHz;
Night Vision System with stabilized Thermal Imaging Camera;
Multi-Beam Echo Sounder 1-150 m range;
Single-Beam Echo Sounder 38/200 kHz;
Position and Orientation System;
Buoy Based Tide Gauge System;
Side Scan Sonar System.

DESIGN
Remontowa Marine Design & Consulting.

OWNER
Trinity House (UK)

YEAR OF DELIVERY
2006
**B846 FISHERY PROTECTION VESSEL**

**VESSEL’S NAME**  
B846 – “Hirta”

**CLASS**  
The vessel’s hull, machinery and equipment have been built and installed under special survey in accordance with the Rules and Regulations of Lloyd’s Register of Shipping for notation: +100A1, LMC, UMS, CAC, EP, SCM-Fisheries Protection Vessel.

**DESCRIPTION**  
The primary function of the vessel is fishery protection in waters surrounding the mainland and islands of Scotland.

**MAIN PARTICULARS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length over all</td>
<td>84,00 m</td>
</tr>
<tr>
<td>Length b.p.</td>
<td>72,00 m</td>
</tr>
<tr>
<td>Breadth moulded</td>
<td>13,00 m</td>
</tr>
<tr>
<td>Depth to Main Deck</td>
<td>8,20 m</td>
</tr>
<tr>
<td>Draught</td>
<td>4,50 m</td>
</tr>
<tr>
<td>Speed</td>
<td>12 kn</td>
</tr>
<tr>
<td>Deadweight</td>
<td>430 t</td>
</tr>
<tr>
<td>Complement</td>
<td>22 persons</td>
</tr>
</tbody>
</table>

**TANKS’ CAPACITIES**

<table>
<thead>
<tr>
<th>Type</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>230 t</td>
</tr>
<tr>
<td>Fresh water</td>
<td>90 t</td>
</tr>
<tr>
<td>Lubricating oil in storage tanks</td>
<td>6 t</td>
</tr>
<tr>
<td>Hydraulic oil in storage tanks</td>
<td>2 t</td>
</tr>
<tr>
<td>Provisions and stores</td>
<td>20 t</td>
</tr>
</tbody>
</table>

**PROPULSION**

- **Diesel Electric** 2 x 2000 kW (at 1000 RPM)
- **Main Gearbox** Twin input/single output
- **Propeller** ø3,6 m

**GENERATING SETS**

- **Main Generator** 3 x 1620 kW (at 1000 RPM)
- **Harbour Generator** 296 kW (at 1500 RPM)
- **Emergency Generator** 99 kW (at 1500 RPM)

**DECK MACHINERY**

- **Bow Retractable Combo Thruster** 500 kW
- **Stern Thruster** 350 kW

**DESIGN**

Remontowa Marine Design & Consulting.

**OWNER**  
Scottish Fisheries Protection Agency (Scotland)

**YEAR OF DELIVERY**  
2008
B812 RESCUE VESSEL

VESSLE’S NAME
B812 – “Sztorm”

CLASS
PRS*KM RESCUE VESSEL II AUT NAV 1

DESCRIPTION
The building of the vessel was partly financed by UE as part of The Operational Program Infrastructure and Environment 2007–2013. The main purpose of the vessel is search and rescue operations, also in bad weather conditions, at Baltic Sea including:
– evacuating survivors from other vessels, lifeboats or directly from water surface;
– providing first aid to injured;
– co-operating with helicopter.

MAIN PARTICULARS
Length over all 36,90 m
Length b.p. 33,85 m
Breadth moulded 8,10 m
Depth to Main Deck 3,90 m
Draught 2,50 m
GT 276 t
Speed 24 kn

TANKS’ CAPACITIES
Fuel oil 54,60 m³
Fresh water 4,40 m³

ACCOMMODATION
Crew 7+3
Passengers 12

PROPULSION
Aft Engine Room 2 x 1440 kW (at 2250 RPM)
2 x Marine Reduction Gear (single step, non reverse type with vertical offset)
2 x Shaft Line with Propeller

Fore Engine Room 1 x 2040 kW (at 2100 RPM)
1 x Marine Reduction Gear (single step, reverse type with vertical offset)
1 x Shaft Line with Propeller

GENERATING SETS
Diesel Generating Sets 2 x 160 kW

DESIGN
Remontowa Marine Design & Consulting
in cooperation with the Owner.

OWNER
Maritime Search & Rescue Service
– Gdynia (Poland)

YEAR OF DELIVERY
2012
B602 OPEN DECK CARRIER

VESSEL’S NAME
B602 – “Aura”

CLASS
BV I + Hull, +Mach, Deck Ship/Container Ship,
Unrestricted Navigation, Ice Class 1A, AUT-UMS

MAIN PARTICULARS
Length over all 101,30 m
Length b.p. 95,50 m
Breadth moulded 18,80 m
Depth to Main Deck 6,55 m
Design draught 4,00 m
Maximum speed 13 kn
Economy speed 9-10 kn
Deadweight 4710 t
Complement 8 persons

TANKS’ Capacities
Fuel MDO 234,00 m³
Fuel DO 54,00 m³
Lubricating oil 10,00 m³
Potable water 38,00 m³
Ballast water 3900,00 m³
Overflow tank 6,00 m³
Sludge 10,00 m³
Grey water 5,00 m³

PROPELLSION
Main Engine 2 x 2220 kW (at 750 RPM)
Azimuth Thrusters 2 x CPP of 1700 kW (at 750 RPM)
PTO Generator 2 x 650 kW (at 750 RPM)
Oil Fired Water Boiler 1000 kW

GENERATING SETS
Diesel Generator 276 kW (at 1500 RPM)
Emergency Generator 80 kW (at 1500 RPM)

DECK EQUIPMENT
Bow Thruster 450 kW, ø1,24 m, el.
Mooring/anchor winches 2 units of 60 kN each
Capstans 2 aft + 1 fore of 60 kN each
Anchors 2 x 2,85 t
Anchor chains 2 units of 42 mm,
18 x 27,5 m each
Stern ramp 14 x 2,5 m
Life boats 2 x off (one as MOB)
Davits 2 units

NAVIGATION EQUIPMENT
ARPA S-Band + ARPA X-Band Radar;
Gyrocompass;
Magnetic compass;
Autopilot;
Speed Log;
Navigational Echo Sounder;
Automatic Identification System (AIS);
2 x Differential Global Positioning System (DGPS);
Electronic Chart System;
Wind Indicator;
Voyage Data Recorder.

DESIGN
Remontowa Marine Design & Consulting.

OWNER
OY Gaimare (Finland)

YEAR OF DELIVERY
2008
B603 CARGO VESSELS

VESSELS’ NAMES
B603/1 – “BBC Kwiatkowski”;
B603/2 – “BBC Gdańsk”;
B603/3 – “Emma”;
B603/4 – “BBC Polonia”

CLASS
Gl. +100 A5, E3, BMW, Solas-II-2, Reg. 19,
Multi-Purpose Dry Cargo Ship equipped for carriage of containers, Strengthened for heavy cargo, Gl. +MC, E3, AUT, IW fulfilled

MAIN PARTICULARS
Length over all 122,45 m
Length b.p. 115,15 m
Breadth moulded 18,20 m
Depth to Main Deck 9,50 m
Design draught 6,60 m
Scantling draught 7,15 m
Service speed 15 kn
Deadweight 7700 t
Navigational range (approx.) 9000 Nm

CONTAINER CAPACITY
Standard ISO containers 532 TEU
In holds/on hatches/on deck 164/318/50 TEU
14 t/TEU homogeneous (abt.) 250 TEU

PROPULSION
Main Engine 1 x 4320 kW (at 600 RPM)
Main Gear with PTO 720 kW (at 1800 RPM)
Bow Thruster 1 x 450 kW

GENERATING SETS
Main Diesel Generators 2 x 572 kW
Auxiliary Diesel Generators 1 x 140 kW

DECK EQUIPMENT
The Panama and Suez Canal Rules fulfilled;
The St. Lawrence Seaway Regulations and
Australia Authority requirements fulfilled;
32 reefer container sockets on deck.

CARGO CRANES
Two (2) SWL 120 t cranes, heavy cargo type at PS for lift up to 240 t;
Stepless control from 0 up to 120 t;
2 x 120 t = 240 t, combinable with beam of SWL 222 t stored on board.

DESIGN
Remontowa Marine Design & Consulting.

OWNER
B603/1 – BBC Chartering (Poland)
B603/2 – BBC Chartering (Poland)
B603/3 – Nimmrich und Prahm (Germany)
B603/4 – BBC Chartering (Poland)

YEAR OF DELIVERY
B603/1 – 2008
B603/2, 3 – 2009
B603/4 – 2010
B604 LNG/LEG/LPG CARRIER

VEssel's Name
B604/1 – “Coral Methane”

Class
BV I *HULL *MACH *AUT-UMS, Liquefied Gas Carrier, Unrestricted Navigation, Ice Class IB, MON-SHAFT, Clean Ship Super, In Water Survey. Fulfilled requirements of Panama Canal, Suez Canal and USCG.

Main particulars
- Length over all: 117,80 m
- Breadth moulded: 18,60 m
- Depth to Main Deck: 10,60 m
- Scantling draught: 7,15 m
- Deadweight: 5550 t
- Complement: 19 persons

Tank’s capacities
- Heavy fuel oil: 640,00 m³
- MDO: 120,00 m³
- Lubricating oil: 30,00 m³
- Water ballast: 2500,00 m³
- Fresh water: 150,00 m³
- LNG/LEG/LPG: 7500,00 m³

Propulsion
- Diesel Engines: 2 x 3840 kW
- Gas Generators: 2 x 2260 kW
- Azimuth Thrusters: 2 x 2500 kW
- Bow Thruster: 1 x 650 kW

When transporting LNG, the gas engines are used for power generating. In case other cargo is carried, the diesel engines will be used.

Design

Owner
Anthony Veder Reederijzaken (The Netherlands)

Year of delivery
2009
B202/1, 2 ARCTIC CARGO VESSEL 36 TEU

CLASS
DNV +1A1, General Cargo/Container Carrier, PC6, TMON, E0, NAUT-AW, DG-P, BIS, CLEAN, DAT (-35°C), HULL – PC5

MAIN PARTICULARS
Length over all 45,35 m
Length b.p. 42,83 m
Breadth moulded 12,80 m
Depth to Main Deck 9,10 m
Scantling draught 4,25 m
Design draught 3,50 m
Speed 10 kn
Deadweight 650 t
TEU capacity 36
Complement 8 persons

TANKS’ CAPACITIES
Fuel oil 130,00 m³
Fresh water 30,00 m³
Water ballast 400,00 m³

PROPULSION
Main Diesel Engine 1 x 1050 kW (at 1200 RPM)
Shaft Line with Propeller 1 x CPP, ø2,1 m
Bow Thruster 1 x 200 kW
Stern Thruster 1 x 200 kW

GENERATING SETS
Generating Set 2 x 370 kW (at 1500 RPM)
Harbour/Emergency Generator 1 x 200 kW (at 1200 RPM)

DESIGN
Remontowa Marine Design & Consulting.

OWNER
Royal Arctic Line A/S (Denmark)

YEAR OF DELIVERY
2016
B203/1, 2 ARCTIC CARGO VESSEL 108 TEU

**CLASS**
TDNV +1A1, General Cargo/Container Carrier, PC6, EO, NAUT-AW, TMON, DG-P, BIS, CLEAN, BWM-T, DAT (-35°C), HULL – PC5

**MAIN PARTICULARS**
- Length over all: 74,20 m
- Length b.p.: 70,01 m
- Breadth moulded: 15,20 m
- Depth to Main Deck: 8,40 m
- Design draught: 4,00 m
- Scantling draught: 6,00 m
- Speed: 12,5 kn
- Deadweight: 2890 t
- TEU capacity: 108
- Complement: 16 persons

**TANKS’ CAPACITIES**
- Fuel oil: 300,00 m³
- Fresh water: 38,00 m³
- Water ballast: 1320,00 m³

**PROPULSION**
- Main Diesel Engine: 1 x 2040 kW (at 800 RPM)
- Shaft Line with Propeller: 1 x CPP, ø2,6 m
- Bow Thruster: 1 x 400 kW
- Stern Thruster: 1 x 400 kW

**GENERATING SETS**
- Generating Set: 2 x 450 kW (at 1500 RPM)
- Harbour/Emergency Generator: 1 x 200 kW (at 1500 RPM)

**DESIGN**
Remontowa Marine Design & Consulting.

**OWNER**
Royal Arctic Line A/S (Denmark)

**YEAR OF DELIVERY**
2016
B204 ARCTIC CARGO VESSEL 606 TEU

CLASS
DNV +1A1, General Cargo/Container Carrier,
DG-P, PC6, BIS, TMON, BWNT, CLEAN,
NAUT-AW, E0, DAT (-35°C), HULL – PC5

MAIN PARTICULARS
Length over all 114,37 m
Length b.p. 103,82 m
Breadth moulded 22,70 m
Depth to Main Deck 15,15 m
Design draught 8,20 m
Scantling draught 7,00 m
Speed 15,3 kn
Deadweight 8609 t
TEU capacity 606
Complement 16 persons

TANKS’ CAPACITIES
Ballast water 6150,00 m³
HFO 1170,00 m³
MDO 260,00 m³
Miscellaneous water 140,00 m³
Miscellaneous oil 90,00 m³
Fresh water 115,00 m³

PROPULSION
Main Diesel Engine 1 x 7860 kW (at 129 RPM)
Shaft Line with Propeller 1 x CPP, ø5,2 m
Bow Thruster 1 x 800 kW
Stern Thruster 1 x 900 kW

GENERATING SETS
Generating Set 2 x 880 kW + 1 x 500 kW
(at 1200 RPM)
Harbour/Emergency Generator 1 x 230 kW
(at 1800 RPM)

DESIGN
Remontowa Marine Design & Consulting.

OWNER
Royal Arctic Line A/S (Denmark)

YEAR OF DELIVERY
2016
MINEHUNTER KORMORAN II

DESCRIPTION
The ship is dedicated to minehunting tasks in Polish EEZ (Exclusive Economic Zone), as well as in tactical task forces in Baltic and North Sea and other auxiliary tasks defined by Polish Ministry of Defense. The vessel will be designed and built with great care to achieve low signature and high maneuverability, thanks to use of cycloid propellers driven by diesel engines.

MAIN PARTICULARS
- Length over all: 58.50 m
- Breadth max.: 10.30 m
- Height (forecastle): 6.40 m
- Height (aft deck): 4.70 m
- Displacement: up to 850 t
- Complement: 45 persons

PROPULSION
- Main Engines: 2 x 1000 kW
- Thrusters: 2 x 1000 kW, cycloidal propellers
- Bow Thruster: 1 x 100 kW

GENERATING SETS
- Main Generating Sets: 3 x 380 kVA

SPECIAL EQUIPMENT
- Non-magnetic hull minimizing vibrations as well as the vessel’s physical field signatures;
- Sub-keel sonar station;
- Self-propelled variable depth sonar;
- Autonomous underwater vehicle;
- Remotely-controlled reusable underwater vehicle;
- Remotely-controlled single use underwater vehicles mine hunting system;
- One (1) caliber 23 mm double barrel “Wróbel-II”;
- Two (2) caliber 12.7 mm machine guns;
- Four (4) man-portable air-defence system “Grom”;
- Two (2) Type TM-609 IB hybrid boats;
- IFF transponder;
- Surveillance System;
- Degaussing system;
- NBC system.

DESIGN
Remontowa Marine Design & Consulting / OBR CTM.

OWNER
Polish Navy.

YEAR OF DELIVERY
2016
B103 SAIL TRAINING SHIP

CLASS
BV I +HULL +MACH, Sail Training Ship,
+AUT-UMS, unrestricted area navigation

MAIN PARTICULARS
Length over all 110,00 m
Length b.p. 78,00 m
Breadth moulded 14,50 m
Depth to Main Deck 8,60 m
Design draught 5,75 m
Speed
On Main Engine 12,0 kn
On sails 17,0 kn
Sails area 3000 m²
Displacement 3000 t
Deadweight 521 t
Complement
Crew 84 + 18 persons
Cadets 120 persons

PROPULSION
Main Diesel Engine 1 x 1320 kW (at 1800 RPM)
Shaft Line with Propeller 1 x CPP, ø2,6 m, 4 blades

GENERATING SETS
Main Generating Sets 2 x 540 kW (at 1500 RPM)
Shaft Generator 1 x 540 kW (at 1500 RPM)
Emergency Generator 1 x 150 kW (at 1500 RPM)

DESIGN
Choreń Design & Consulting in cooperation with

OWNER
Algerian Navy.

YEAR OF DELIVERY
2016