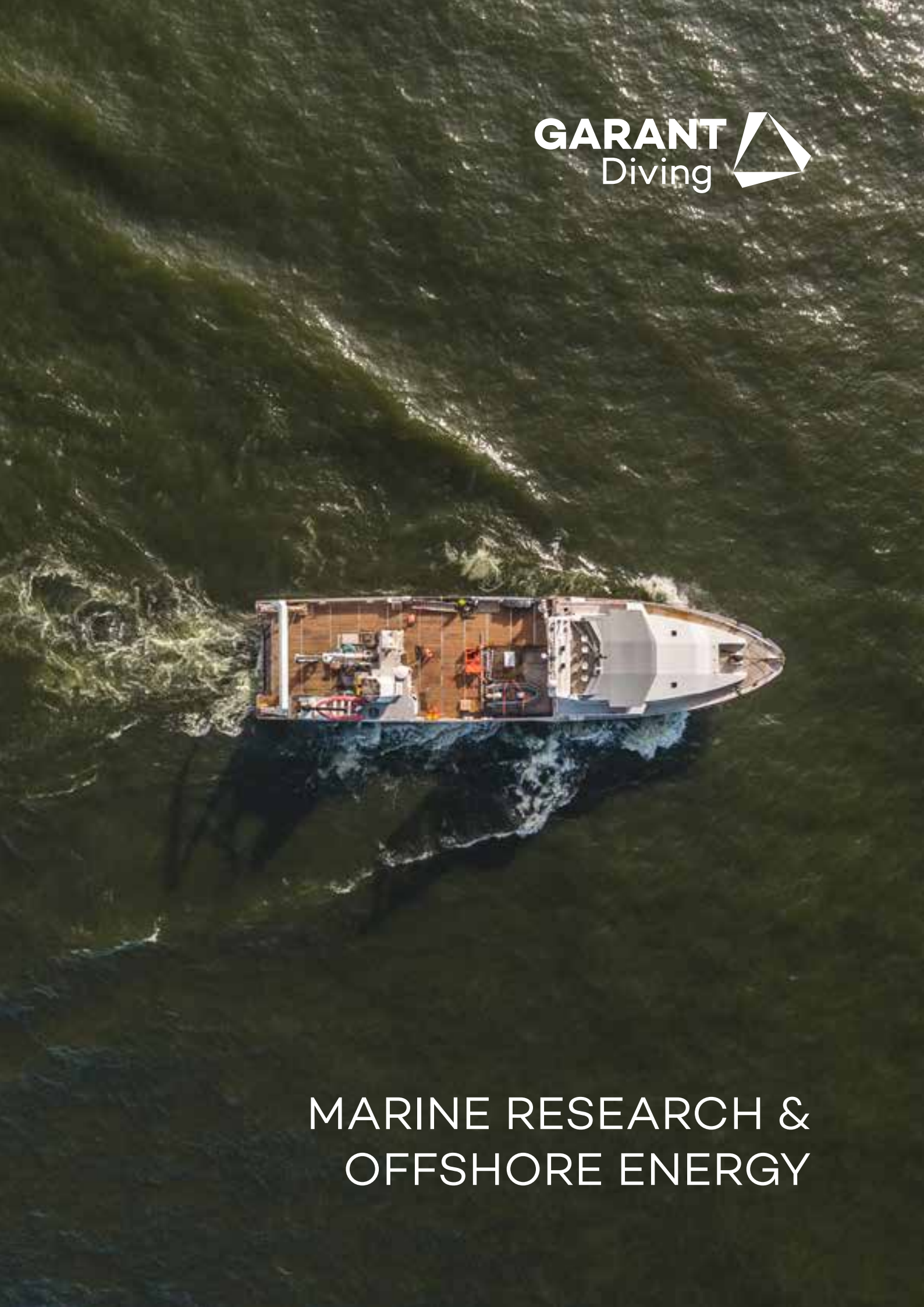
GARANT Diving



MARINE RESEARCH & OFFSHORE ENERGY

GARANT GROUP

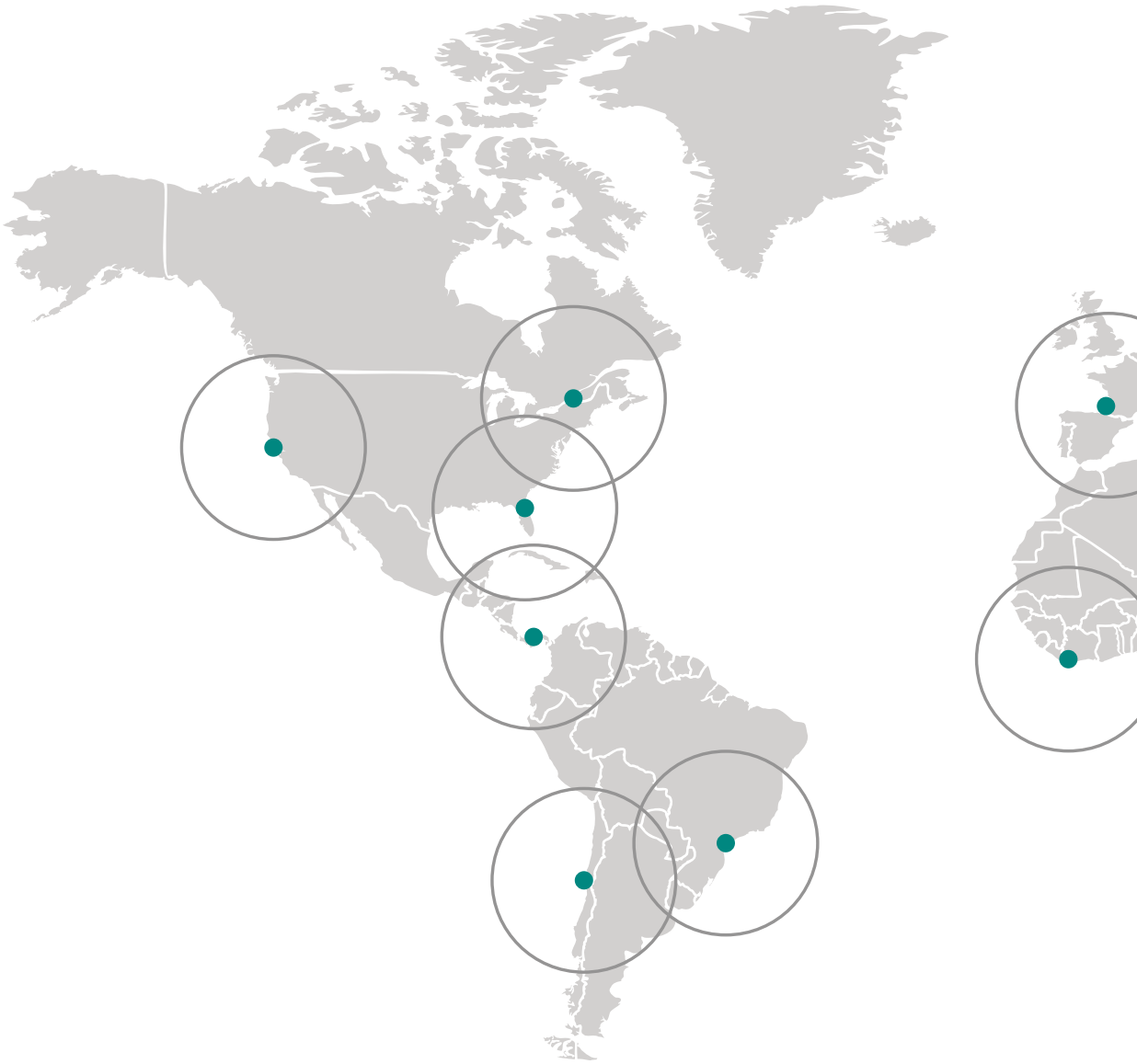
80%	of all the projects are carried out outside the Baltic Sea region
~300	employees and specialists
2100	ships served annually
7400	projects worldwide
5000	m^2 of warehouse and workshop facilities
1M	EUR third party liability insurance

GARANT DIVING is a part of GARANT GROUP - international group of companies which offers custom solutions for port infrastructure, shipping, oil & gas industry as well as offshore wind farms in the Baltics and Northern Europe.

For more than 30 years GARANT GROUP subsidiaries have been providing full support to keep your fleet and equipment safe and operational. To ensure your business continuity we stock our global warehouses according to your needs and organize services at the most convenient location:

- expert overhaul & maintenance for hulls, mechanical and industrial equipment, marine engines
- timely inspections for lifesaving and fire protection equipment
- experienced divers, underwater works and scientific research services
- custom-made production for metal structures and steel wire rope products for hoisting and luffing
- safe AMBER mooring ropes with Snap Back Arrestor technology and other technical marine supplies.

GARANT GROUP is a reliable and innovative business partner which executes multi-purpose and large-scale projects for any of your requests. We perform services 24/7 across the globe and regularly upgrade our knowledge to enhance our capabilities and workmanship to be able to offer unique solutions for each individual case.



GARANT DIVING offers chartering services and assistance within following projects:

- Marine Research
- Offshore Renewables (Wind)
- Submarine Telecoms
- Oil & Gas
- Ports & Harbors

GARANT DIVING is a member of the Lithuanian Wind Power Association (LVEA)

Lvea
Lietuvos vėjo elektrinių asociacija

By operating modern research vessels, GARANT DIVING provides high quality oceanographic research with relevant hydrographic and geophysical services to support international offshore wind farms' development projects.

Having a long-term expertise, we are also engaged in complex hydro construction works of the port infrastructure and seabed dredging projects. Experienced divers supported by fully equipped mobile diving stations carry out underwater services at the most convenient location.

Together with our reliable international partners we have established GUSPA - Global Underwater Services Provider's Alliance – in order to assist your vessels around the world.

MANAGEMENT SYSTEM CERTIFICATION
DNV
ISO 9001 • ISO 14001
ISO 45001

CHARTERING SERVICES & RESEARCH SUPPORT

We understand the specific needs of the marine industry. That's why we shape our fleet to support its vital activities. Our fleet of specialized vessels and modern equipment for various works at sea includes:

- Crane vessel BALTIC WORKER equipped with diving station
- Research vessels MINTIS & BALTIC EXPLORER
- Mobile diving stations
- BrushKarts
- CaviBlasters
- ROV's

These versatile vessels participate in various international projects and commonly used for:

- Cable lay
- Remotely Operated Vehicle (ROV) support and maintenance
- CPT/ Vibrocore campaigns
- Cable burial and remedial burial
- Seismic support
- Geotechnical activities
- Backfilling of trenches in shallow waters
- Implementation of survey activities
- Assistance during port operations and offshore wind farm construction
- Dredging activities
- Anchor handling

BALTIC EXPLORER

A compact research vessel designed to carry out complex oceanographic research and to support marine business with high quality hydrographic and geophysical services. The vessel provides an efficient and stable working platform to assist in survey, engineering, salvage, and diving operations.

Equipped with dynamic positioning system (DP1) and advanced integrated communication systems, she is ready to accommodate modern research equipment to provide:

Geological and hydrographic investigations of the sea floor

- Sea bottom inspection & morphology
- Soil and water sampling
- Vibro-coring and CPT testing
- ROV services

Geophysical investigation

- Shallow and deep seismics
- UXO and other buried objects

For your convenient stay onboard the vessel

- 24h accommodation facilities for 19 PAX (including crew)
- Comfortable and economical cruise at 12 knots
- Air-conditioned mess room and accommodation area
- Comfortable PC lab for surveyors
- Wi-Fi and Satellite internet facilities


BALTIC EXPLORER

VESSEL SPECIFICATIONS

General Characteristics

Building year: 1991
Call sign / IMO: LYBW / 8917663
Classification BV 1 HULL • MACH (Dynapsos AM / AT)
Type: Special service / Support vessel
Flag: Lithuania
MMSI n°: 277199040
DP: 1
VSAT: +47 23678607

Power Supply

Generator set: Mitsubishi 2 x 230 KVA S6BMPTA
Port generator: 1 -100 KVA 6D16T
Electric system: 24 / 220 / 380 V
Air compressor: ATLAS COPCO
IP: 55, 7,25 KW 10 BAR / Capacity 250 LTR
Nu AIR Type: NB7-14 bsa
Hydrovane: HV 02 Model 502C 10-201-11bar

Principal Dimensions

Length O.A: 45,6 m
Beam O.A: 11,5 m
Draft: 3,1 m
Tonnage: GRT 498 / NRT 153
Clear deck area: 300 m² (total load max 40 t)
Length (m) x Breadth (m): 12x11 wooden area, 7x6 metal framed area
Load Bearing Capacity: 0.2 t/m², (1 t/m² on the metal frame)

Consumption (depends on the weather)

Max speed cons: 150 L/h
Cruising speed cons: 125 L/h
Stand by cons: At Sea 50 L/h
Stand by cons. In Port 20 L/h
DP mode cons: 100 L/h

Machinery

Main engine: Mitsubishi V16: 2x 625kW Type S16 R MPTA / Schottel AZIMUT 360° / Twin propellers Type / Schottel STP 550
Maximum speed: 15 knots
Cruising speed: 12 knots
Main thrusters: Schottel AZIMUT 360° / Twin propellers Type Schottel STP 550
Bow thruster: 1,5 T Thwart. FP thruster (f)

Control, Navigation & Communication Systems

Sounder: Furuno FCV 262
Set Radar: Furuno FR 2120 X BAND 9 GHZ with ARPA
Autopilot: ANSCHUTZ
GPS: MLR Valsat 2008 / MLR FX 312
DGPS: Furuno GP-150D / GP-32
Gyrocompass: Furuno SC-50
SAT compass: SIMRAD MX575D
SART: Jotron Tron Sart 20 / S100
VHF: Furuno FM-8800
AIS: Furuno FA-150

Deck Machinery

Hydraulic crane FWD: Viscovo 14T/m (800 kg @ 10,5 m)
Hydraulic crane AFT: Hydro Armor 40T/m (2300 kg @ 11,8 m)
Tugger winch: 10T
Moonpool: Yes
Anchor handling winch: 50T
A-FRAME: Max SWL-12t (8t, 2t, 2t)

Accommodation

POB: 19
Cabins: 1 Single / 6 Double / 2 Triple (for 19 persons)

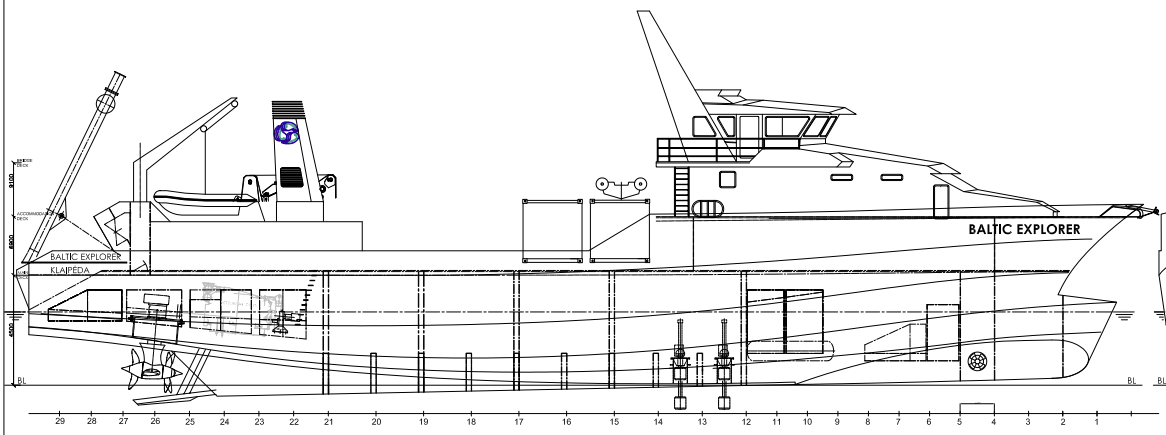
Capacities

Fuel capacity: 56,7 m³
Fresh water: 4,5 m³ (0,2 m³/h) with AQUA-BASE watermakers YC2-4320-07/12
Sewage tank capacity: 9,4 m³

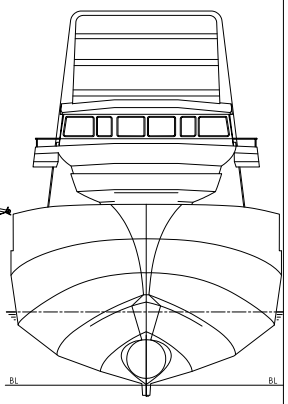
Various

Air-conditioning system, SPLIT-Type air conditioners MSZ-SF50VE2
electric heating in each compartment

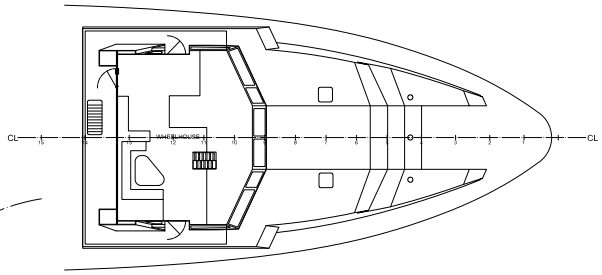
PROFILE VIEW



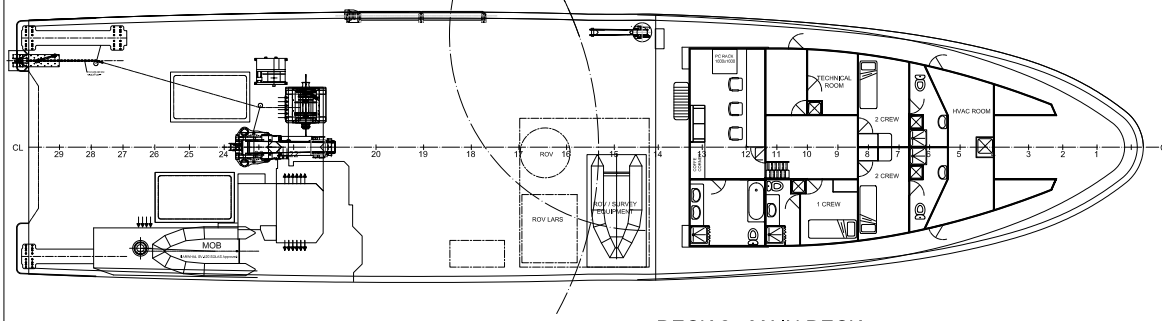
FRONT VIEW



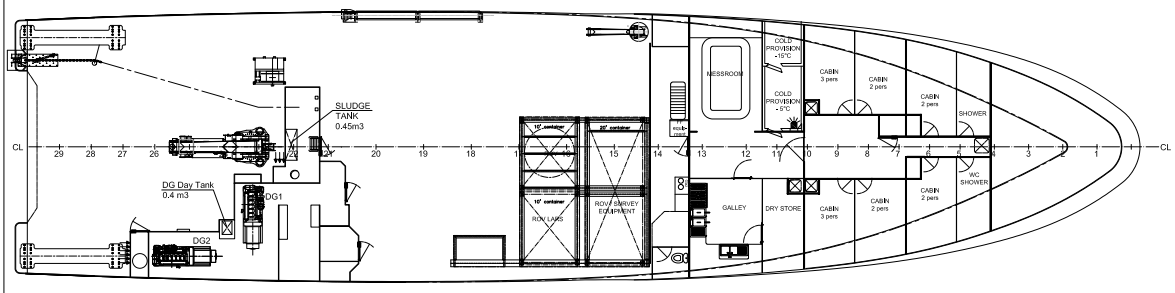
DECK 4 - BRIDGE DECK



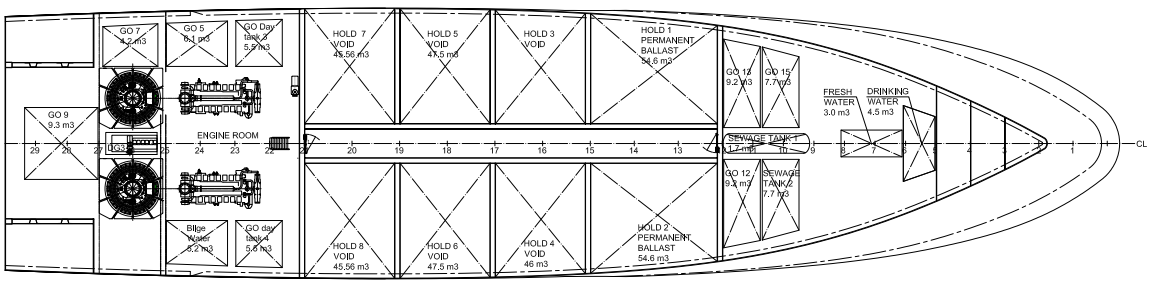
DECK 3 - ACCOMMODATION DECK



DECK 2 - MAIN DECK



DECK 1 - ENGINE ROOM DECK



SHIP'S NAME:	**BALTIC EXPLORER**
SHIP'S IMO NUMBER:	8917663
FLAG:	LITHUANIA
PORT OF REGISTRY:	KLAIPĖDA
SHIP'S CALL SIGNAL:	LYBW
DELIVERY:	1991
CLASSIFICATION:	
BV: ✠ 1 HULL MACH Support vessel Dynapsos AM / AT	
MAIN PARTICULARS:	
LENGTH OVER ALL:	45,6 m
BREADTH MOULDED:	11,10 m
DEPTH MOULDED:	4,50 m
DRAFT SUMMER:	3,13 m
DESIGN SPEED:	14 kn
CREW :	6 pers.
PASSENGERS:	12 pers.

RevNo	Revision note	Date	Signature	Checked
1	Draft value changed to 3.03 m	05.03.2021	VD	ULDA
2	Container fittings arrangement added	22.03.2021	VD	ULDA

TITLE: **GENERAL ARRANGEMENT** Baltic Explorer IMO 8917663	SCALE: 1:100	DRAWN VD CHCD ULDA APPR. HP	
UAB „GARANT DIVING" Dubysos str. 27a, LT-91181 Klaipėda Company Reg. No. 302566968	PROJECT NO.:	YARD NO.:	SIN
	FILE NAME / DRAWING NO.: 21008-101-001		REV.NO.: 2

Format A1

MINTIS

A compact catamaran type vessel built to carry out oceanographic research. The vessel is equipped with modern hydrographic, geological, geophysical, biological equipment, high accuracy positioning and advanced integrated communication systems to provide:

Geological and hydrographic investigations

- Sea bottom inspection & morphology
- High resolution bathymetry measurements is shallow (up to 40 m) and deep (up to 600 m) waters
- Marine biodiversity
- Soil and water sampling
- Shallow coring

Geophysical investigation

- Shallow and deep seismics
- Identification of buried objects

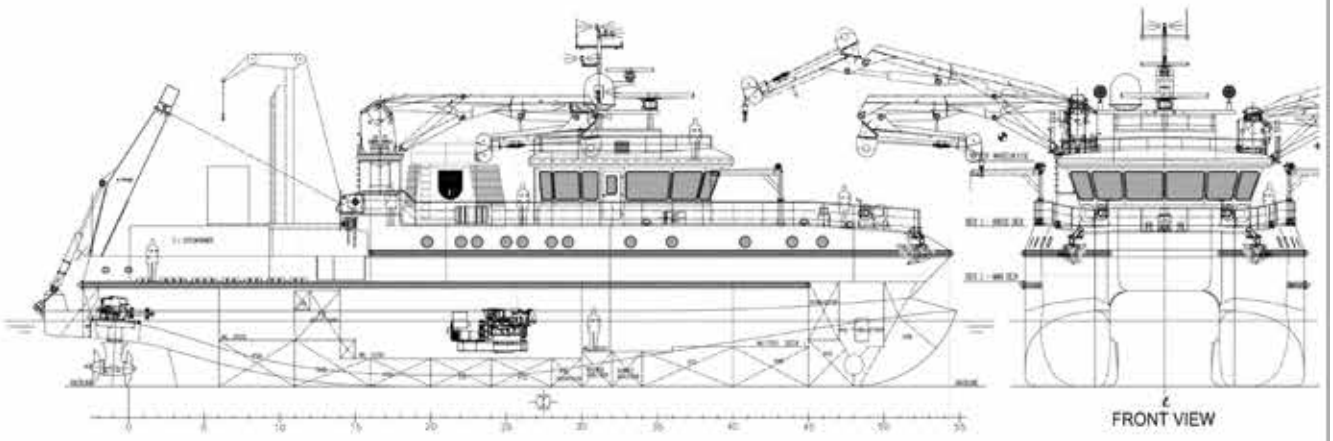
Hydrological investigation

- Content of suspended matter
- Current velocity
- Turbidity
- Salinity
- Pressure
- Conductivity
- Temperature
- Oxygen and other

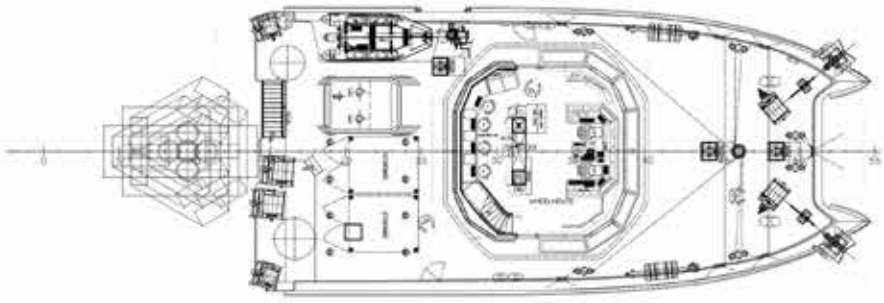

MINTIS

VESSEL SPECIFICATIONS

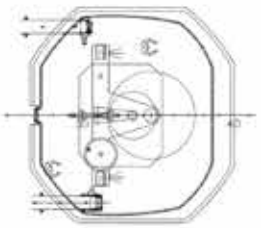
Multibeam	Reson Seabat 7125, Monpool	**Tomography**	
Echosounder	Mount MRU Octans 3000, Hemisphere RTK GPS	**Current profiler**	Teledyne WorkHorse ADCP
Sidescan	Klein 3000, Klein 3900, Edge Tech 272TD	**ROV**	Mariscope Inspection class ROV
Interferometric	Geoswath Compact 500 kHz	**CTD**	2 x Sea&Sun CTM48M CTD90M with Inductive Curent meter ISM 2001 Teledyne NXIC CTD
Cz	2 x Geometrics G882	**Water sampling**	Hydrobios PRS with integrante Sea&Sun CTD – 115
Magnetometer USBL	Evologics underwater modems with USBL	**Suspension sampling**	3 x Multi Sediment Trap MST24
Gradiometer	TVG frame geomatrix G882	**Plankton sampling**	Set of Apstein plankton nets
Seismics	GeoEel Digital Streamer	**Seabed sampling**	Hydrobios Van Veen Grabs Vibro core VKG 3 – 3 core up to 6 m Gravity cores up to 3 m
Energy source	SIG Mille Sparker and Boomer up to 1000 J	**Software**	Hypack 2015 QPS QUINSy, Fledermaus, Quimera
Sub Bottom	Inomar Ses 2000 Light	**Workstation**	2 x HP Z820, 18 x rs232 ports, 128GB RAM, CPU Intel Xenon E5- 2680 v2, NVIDIA K5000, NVIDIA
Electric	SuperStingTM R8/IP/SP		



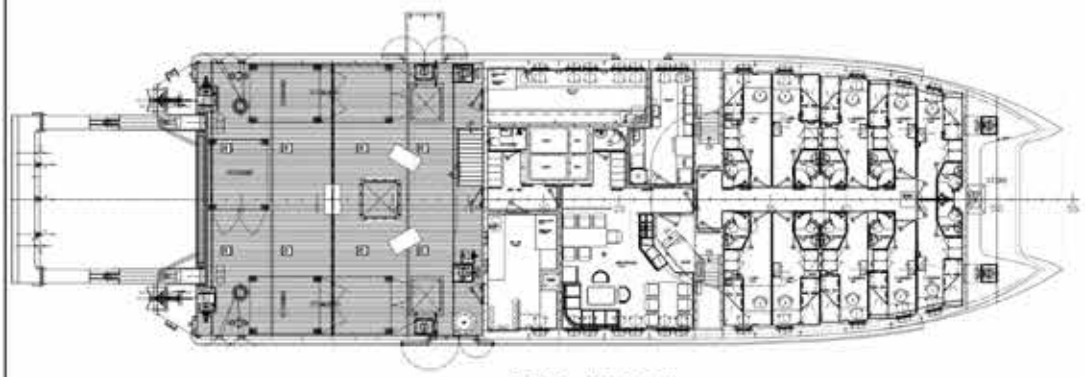
FRONT VIEW



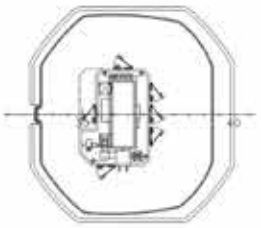
DECK 3 - BRIDGE DECK



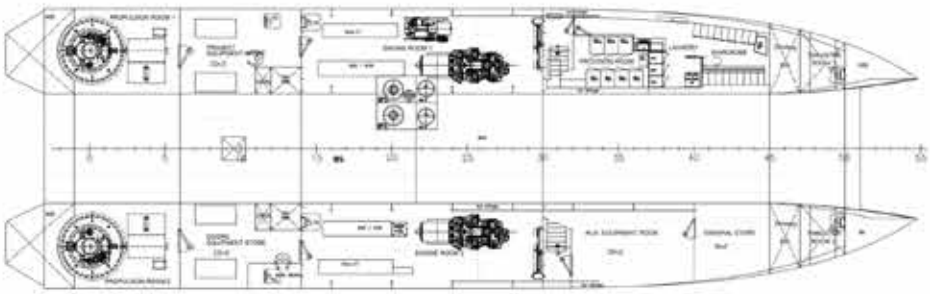
WHEELHOUSE TOP



DECK 2 - MAIN DECK



VENTILATION ROOM



DECK 1 -TANK TOP

MAIN DIMENSIONS

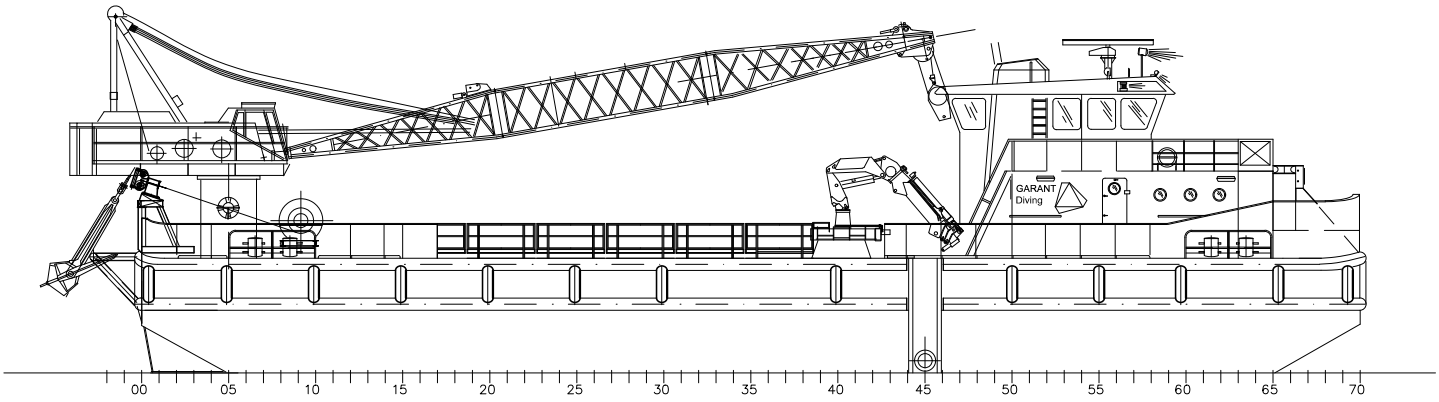
LENGTH OVER ALL	APPR. 39.20 m
BREADTH, MOULDED	12.00 m
DEPTH, MOULDED	4.50 m
DRAFT, SUMMER	MAX 3.00 m
CREW	MAX 8
SPECIAL PERSONEL	MAX 10
NUMBER OF CABINS	10
NUMBER OF BEDS	18
GROSS TONNAGE	DELOW 500
SPEED	8.5 knots

BALTIC WORKER

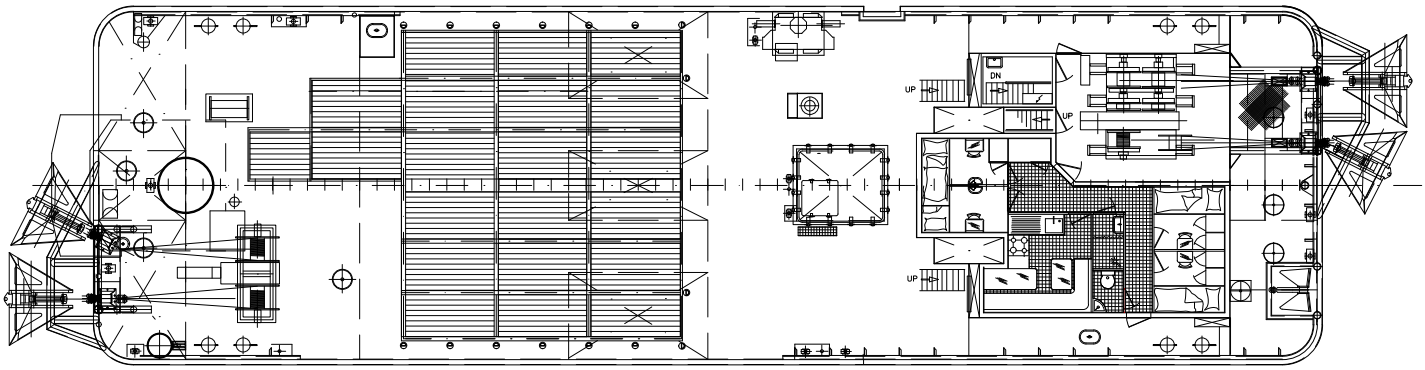
VESSEL SPECIFICATIONS

Classification / Flag	Flag : Lithuania Trading area : Unrestricted Call sign / IMO : PHLC / 8829426 Classification society : Lloyd"s Register Class ship type : Multipurpose Offshore Support Vessel Class notation : 100A1 LMC
Principal dimensions	Length o.a. : 35,36 m Breadth o.a. : 10,34 m Draft : 1,42 (shallow) - 2,39 (max) m GRT : 359 NRT : 107 Max. deck load : 5 ton/m² Free deck space : 150 m²
Machinery / Propulsion	Maximum speed : 6 knots Bollard pull : 6 ton Power output : 800 kW / 1088 hp Propulsion : 4 x 360 deg. Schottel pumpjets Main engines : Mitsubishi S6N-MPTA Auxiliary engines : 51 kVA 290 kVA 111 kVA / 89 kW
Miscellaneous	4-point mooring : yes Anchor winch aft : 13 ton Anchor winch fore : 5-7 ton Deck crane : 178 tm Dredging pump : 1600 m3/hr Fuel transfer pump Aft: See certificate Fuel transfer pump: See certificate Fore Hydraulic deck crane : 40 tm, 1 ton at 14,3 m Jet pump : 1000 m3/hr
Tank capacities	Fuel : 135 m³ Fresh water : 25 m³
Accommodation	Fully airconditioned, galley, messroom, sanitary facilities, 2 x single cabins & 2 x double cabins.
Navigation and communication systems	- AIS Furuno FA-100 - Auto pilot RZ/RHM Seapilot 75 - Echosounder Furuno FCV-581L - Epirb Jotron Tron 40 S - FleetBroadBand 250 JRC JUE-250 - GPS Furuno GP-500 - GPS Furuno GP-90 - GPS Furuno GP-150 - Gyro AD converter Furuno AD100 - Inmarsat-C Sailor H2095C - Inmarsat-C Sailor H2095C - Iridium System Sailor SC4000A/MKIII - Magnetic compass Observator Pilot MK3 - Magnetic compass Cassens & Plath 21 - MF / HF transceiver Furuno FS-1562-15 - Navtex Lokata Navtex 2 - Radar JRC JMA-5310/6 - Sart Jotron Tronsart 20 - Satelite compass Furuno SC-502 - Sonar (2x) Tritech International Limited Super Seaking - VHF Sailor RT2048 - VHF / MF DSC controller Furuno DSC-6A - VHF DSC Furuno FM-8500 - VHF DSC Sailor RT5022 - VHF GMDSS handheld ICOM IC-GM1500E - VHF GMDSS handheld ICOM IC-GM1500E - Wind indicator Obsermet OMC / OMO160

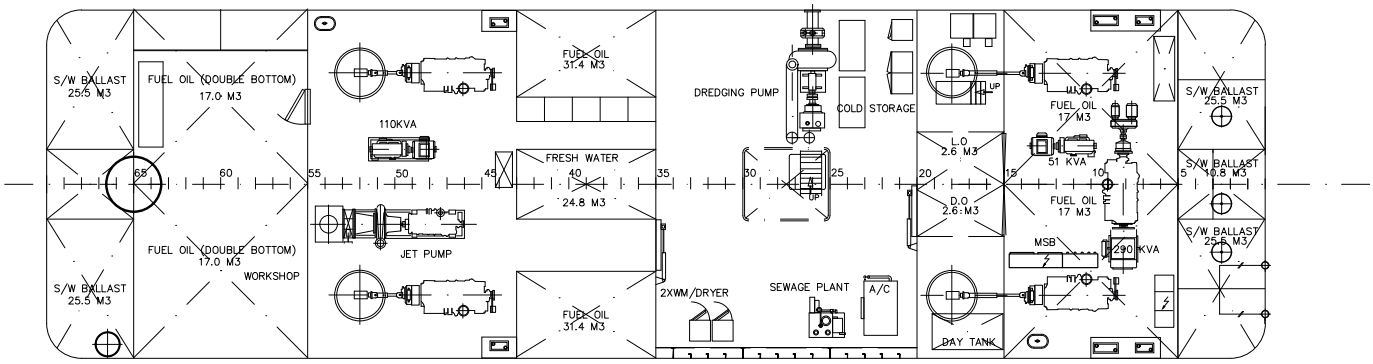
SIDE VIEW



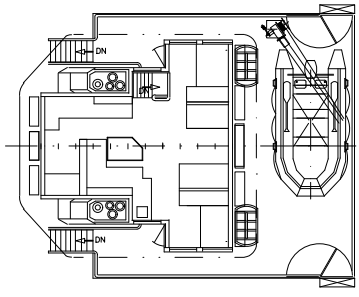
MAIN DECK



BELOW MAIN DECK



BRIDGE DECK



BALTIC NAVIGATOR

Garant Diving operates Survey/Diving Vessel “Baltic Navigator" for various international projects.

This vessel is fully certified and ready to support Survey, Engineering, Salvage, Diving or Research projects:

- 24h accommodation
- Dimensions of the vessel provides an efficient and stable working platform
- Comfortably and economically cruise at 15 kts, survey speeds at 1-6 kts Extensively
- re-fitted during winter 2008 / 2009
- Full complement of electronics equipment
- Cat 2 certification (can easily be upgraded to a Cat 1)

BALTIC NAVIGATOR SPECIFICATIONS

General characteristics	Builder : McTay Marine Limited – Wirral Launched : Originally launched in 1989, completely re-fitted in 2009 Flag : Lithuania Call sign / IMO : MHGV6 / 8807961 Vessel type : Survey/Diving Vessel Operating code : MCA SCV Category 2 (60 miles from safe haven).
Principal dimensions	Length (LOA) : 26,60 m Beam : 5,9 m Draft : 1,8 m Tonnage : 106 m³ Maximum Range : 750 nm
Machinery / Propulsion	Cruising Speed : 15 knots Main engines : 2 x MAN 800 hp, ZF trolling gearboxes Generators : 2 x 65 kVa & 1 x 30 kVa
Miscellaneous	Reverse Osmosis Water Plant Full 4 Point Mooring System Large Extendable Rear Dive Deck
Accommodation	Fully equipped galley, mess area, shower room, 2 separate WC, storage space, laundry facilities, 3 double cabins & 3 single cabins, max 9 beds per shift (max POB 16).

Tank capacities	Fuel : 10 m³
Communication, navigation and security systems	- Satellite broadband - Wireless network - GSM broadband connectivity - AIS - VHF DSC radios - Navtex - Weather station - NAVNET electronic chart plotters - Dual frequency echo sounder - Advanced autopilot - Safety equipment complies with the MCA code of practice for Small Commercial Vessels (SCV Code) - Category 2 certification under the SCV code - Full complement of immersion suits
Advanced equipment	- Data recording systems, housed in 19” racking units, protected by UPS - CCTV monitoring of all on deck activities - On-line survey room with easy access to the working deck - Multiple monitors at each work station - 6 m hydraulic A-Frame with a SWL of 1 ton - Hydraulic capstan - Hydraulic side scan sonar winch - Hydraulic crane - Side sensors

FLOATING BUOYS INSTALLATION

Together with our partner EOLOS we assist in floating LIDAR buoys set up. They are indispensable in providing accurate data for sound business decisions in offshore wind development projects.

EOLOS, head-quartered and incorporated in Spain since 2013, provides turn-key resource measuring campaigns exclusively for the offshore wind industry, via a cost-effective, accurate and reliable floating LiDAR buoy.

Deploying our versatile fleet and experienced divers, GARANT DIVING safely launches floating buoys to the needed location or depth to start your wind, wave and current measuring campaign.

CONTACT US TO FIND OUT MORE

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