



The Nautical Geo is a research vessel available for worldwide operations. Fitted with cutting-edge survey equipment, she can undertake complex survey operations as well as light construction support, ensuring cost effectiveness and saving time.

Ready to work:

- GEOPHYSICAL SURVEY
- WELL SITE SURVEYS
- GEOTECHNICAL SURVEY
- CABLE AND PIPELINE SURVEY
- ENVIRONMENTAL SURVEY
- UNDERWATER CONSTRUCTION & SUPPORT
- INSPECTION, REPAIR AND MAINTENANCE

VESSEL IDENTIFICATION

Year Completed	2000 by Yantai Raffles
Port of Registry	Valletta
Flag	Malta
Call Sign	9HA4507
RINA Classification	C special service - research ship unrestricted navigation DYNAPOS AM - R
IMO	9223708

LIGHTHOUSE S.p.A.

Via Prati, 1/1 · Ponte Ronca · 40069 Zola Predosa, Bologna · Italy

T +39 051 6516716 · F +39 051 6516719

www.lighthouse-geo.com

TECHNICAL SPECIFICATION

MACHINERY

Main Engines	(2) Electrical (4000 bhp tot)
Propellers	(2) 4 BLADE CPP
Kort Nozzles	(2) KHI 2 DRIVE 4 blade CPP
Bow Thrusters	(1) Azimuthing FPP (1) Tunnel CPP
Primary Generators	(4) 5760 kW 440 V 60 Hz
Secondary Generators	(1) 500 kW 440V 60 Hz
Emergency Generators	(1) 99 kW 440V 60 Hz

DECK FACILITIES

Deck	2.5 t/m ² - steel
Clear Deck Space	252 m ²
Deck Load	1,525 t
Fuel Oil	997 t
Potable Water	286 t
Lube Oil	9.2 t
A-FRAME	SWL - 22.7 t
Rescue Boat	SOLAS
Geophysical winch	Romica – Electric Side Scan Sonar Winch – Drum capacity 5500m - 17.3mm diameter – SWL 5.0 t (first Layer)
CPT winch	OLEO MEC BUCCELLA Hydraulic SWL = 10.0 t; Drum capacity max: 4000 m of ø 18mm wire rope
Service winch	SWL = 5.0 t; Hydraulic - Drum capacity max: 500 m of ø 20mm wire rope.
CRANES	SWL 14.5 t SWL 7.1 t

PERFORMANCE

Maximum Speed	12 kts
Economy Speed	10 kts

DIMENSIONS

Length Overall	74.5 m
Beam	17.8 m
Depth	5.8 m
Maximum Draft	4.7 m
Maximum Draft with Multibeam	5.9 m
Light Draft	2.7 m
Deadweight at max Draft	2276.9 t
GRT	2,367 t
Free Board	1.1 m
Free Board, summer	1.1 m
Back Deck Area	252 m ²

NAVIGATION EQUIPMENT

Radars	(2) Furuno FAR 2117
Radio Stations	(1) FURUNO Radio telephone VHF FM8500 (1) FURUNO SSB radio transceiver FS 1562-15
Auto Pilot	(1) Alphatron Alphasea Pilot MFC
Satellite Navigation	(2) DGNSS Fugro 9205 Seastar (1) FURUNO GP-150
Hydroacoustic Position Reference	(1) Kongsberg HiPAP 502 - High Precision Acoustic Positioning and underwater navigation system
Navtex Receiver	(1) FURUNO NX-500
AIS	(1) FURUNO universal AIS FA-100
Echosounder	(1) SIMRAD EA500 (1) JMC F 3000 W

MOORING

Windlass	Yes
Anchors	(2) 5000 lb stockless
Chain (per side)	900 ft 1.6 in

FACILITIES

1 Survey room;
1 Processing room;
1 Wetlab;
1 Galley;
1 Mess rooms;
1 Laundry with wardrobe room;
1 Hospital;
1 Sample storage, temperature controlled in range from -25° to +12° C

DYNAMIC POSITIONING SYSTEM

DP System	(1) ALSTOM DPS 900 series ALSPA 80-75
-----------	--

MANNING

Marine Crew	16
Survey Crew / Passengers	30
Total	46

SAFETY EQUIPMENT

Acc. to SOLAS for world wide operation
Engine Monitoring System - Watch free system WE 300
Sea Marshall Man Overboard Alert and Rescue System
CCTV for Back Deck

ACCOMODATION

Cabins	(2) single berth
	(10) double berths
	(6) quadruple berths

VESSEL POSITIONING EQUIPMENT

Primary positioning system	DGNSS-receiver C-NAV 3050 Gyro and motion sensor Ixsea Octans 5th gen
Secondary positioning system	DGNSS-receiver C-NAV 3050 Gyro and motion sensor Ixsea Hydrins
SSBL	HiPAP 502

SURVEY EQUIPMENT:

- DGPS C-Nav 3050, Gyro/MRU ixSea
- USBL HiPAP 502
- Reson 7150 12/24 kHz hull mounted
- Dual frequencies shallow water multibeam
- SBES Simrad EA 500
- SSS/SBP 100-500 KHZ / 4-12 kHz
- UHR Sparker system: Squid 2000 and Minigun
- 2D HR spread: solid streamer 96 to 192 channels
- Air gun volume as appropriate
- Piston/gravity Corers and Vibrocores
- Seabed frame CPT
- Valeport mini SVP/SVS
- Idronaut 701 multiparameter probe - depth rating 4000m
- Rosette Niskin water sampler
- Various plankton nets
- Simrad EK15 multi purpose scientific echo sounder
- Survey room
- Full on board processing room on a 24/7 basis
- Client room

LIGHTHOUSE S.p.A.

Via Prati, 1/1 · Ponte Ronca · 40069 Zola Predosa, Bologna · Italy

T +39 051 6516716 · F +39 051 6516719

www.lighthouse-geo.com



Bridge deck and DP2 consolle



LIGHTHOUSE S.p.A.

Via Prati, 1/1 · Ponte Ronca · 40069 Zola Predosa, Bologna · Italy

T +39 051 6516716 · F +39 051 6516719

www.lighthouse-geo.com

Information may be subject to change without prior notice - last rev Feb 2017



Engine Control Room and Vessel Workshop



LIGHTHOUSE S.p.A.

Via Prati, 1/1 · Ponte Ronca · 40069 Zola Predosa, Bologna · Italy

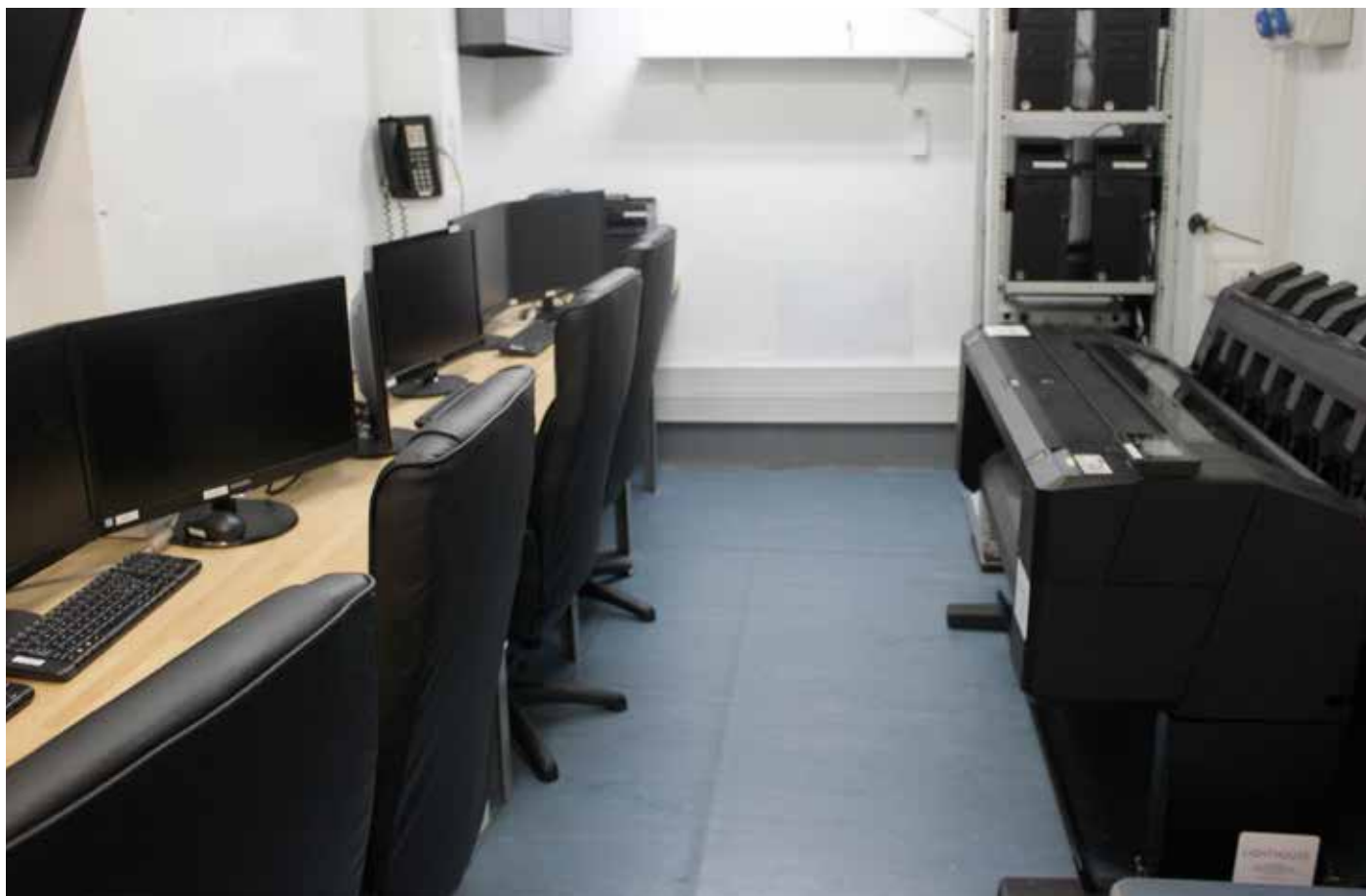
T +39 051 6516716 · F +39 051 6516719

www.lighthouse-geo.com

Information may be subject to change without prior notice - last rev Feb 2017



Survey room and Processing room



LIGHTHOUSE S.p.A.
Via Prati, 1/1 · Ponte Ronca · 40069 Zola Predosa, Bologna · Italy
T +39 051 6516716 · F +39 051 6516719
www.lighthouse-geo.com

Information may be subject to change without prior notice - last rev Feb 2017



Mess room



LIGHTHOUSE S.p.A.

Via Prati, 1/1 · Ponte Ronca · 40069 Zola Predosa, Bologna · Italy

T +39 051 6516716 · F +39 051 6516719

www.lighthouse-geo.com

Information may be subject to change without prior notice - last rev Feb 2017



Cabins



LIGHTHOUSE S.p.A.

Via Prati, 1/1 · Ponte Ronca · 40069 Zola Predosa, Bologna · Italy

T +39 051 6516716 · F +39 051 6516719

www.lighthouse-geo.com

Information may be subject to change without prior notice - last rev Feb 2017