



# FUGRO

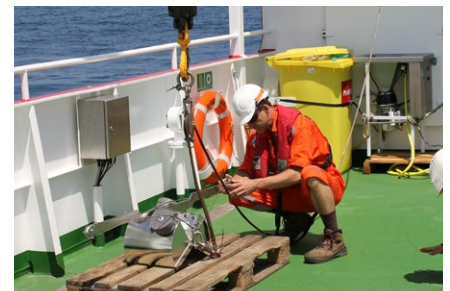
## M.V. FUGRO HELMERT

**The 41m M.V. Fugro Helmert, built in 2013, complements Fugro's existing fleet of vessels of a versatile, high-end and dynamic specification, designed for geophysical and hydrographic survey work on the continental shelf, up to water depths of 2000m.**

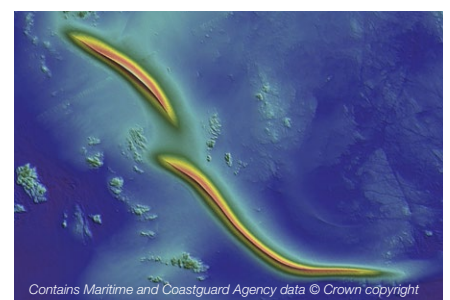
The Fugro Helmert (capable of dynamic positioning – DP 1) is deployed for ROV inspection operations, geotechnical sampling, geophysical seabed charting and environmental data acquisition, catering in particular for the renewable energy market.

The survey systems carried aboard include: a Kongsberg EM 710 Mk2 (0.5 x 1.0°) high resolution multibeam echo sounder, an Innomar SES 2000 (Medium) and Knudsen 3260 (3 x 3 array) sub-bottom profilers, an Edgetech 4200 side scan sonar, a Geometrics G-882 marine magnetometer as well as a Kongsberg HiPAP 500 SSBL underwater acoustic positioning system.

A working deck of 180m<sup>2</sup> features an innovative container / equipment deck-fastening rail system, an interchangeable A-frame (9.4T capacity, working from either the stern or starboard position), an oceanographic, side scan and tugger winches, as well as a foldable-knuckle-boom deck crane. The vessel can accommodate a marine and survey crew of up to 20 persons, with an operational endurance of four weeks.



*Equipment Deployment for Geological Sampling.*



*Shaded Relief Bathymetry showing Sandwave detail.*

## M.V. FUGRO HELMERT

### Technical Specifications

#### General

Name	M.V. Fugro Helmert
Built	2013
Builder	Fr.Fassmer (Germany)
IMO No.	9662978
Call Sign	ZDNM8
Classification	DNV GL Research Vessel (+) MC E AUT DP1
Flag / Port	Gibraltar

#### Dimensions

Length Overall	41.53 m
Beam	10.00 m
Draft	3.4 m
Gross Tonnage	498
Net Tonnage	150
Deck space	180 m <sup>2</sup>

#### Performance

Speed	11 kts (Cont. Transit)
Endurance (days)	20 Transit, 30 Survey

#### Accommodation

	20 (6x1, 7x2)
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#### Capacities

Fuel (MGO)	70 m <sup>3</sup>
Fresh water	15 m <sup>3</sup>
Fresh water production	6 m <sup>3</sup> / day

#### Machinery

Main Engine	2 x 331 kW Shaft Power
Propulsion	2 x Schottel Rudder Propeller
Bow Thruster	1 x 200kW electric-drive
Generator	2 x 285 kVA or 244 kW
Power	400 V / 50 Hz 3 AC / PE 230V / 50 Hz 1 AC / PE

#### Communication

	GMDSS A4 / INMARSAT/ VSAT / IRIDIUM
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#### Facilities

	1 x Data Acquisition room
	1 x Processing room
	1 x Survey workshop
	1 x Client's office
	1 x Survey store

#### Main Survey Systems

Multibeam Echo Sounder	Kongsberg EM 710 Mk2 (0.5 x 1°) Kongsberg EM 2040 (0.4 x 0.7°) dual RX
Side Scan Sonar	Edgetech 4200 (300/600 kHz)
Sub-Bottom profiler	INNOMAR SES 2000 Medium Knudsen 3260 3 x 3
Magnetometer	Geometrics G-882
Other	EIVA ScanFish Profiler Various SVP/CTD, XBTs
Acoustic Positioning	Kongsberg HiPAP 501 SSBL

#### Testing / Sampling

Cone Penetration Tester	
Vibro Corer	
Piston & Gravity Corer	
Grab Sampler	

#### Handling Equipment

Crane	1 x Palfinger PK50002 M knuckle-boom SWL 3 t / 12 m
A-frame	SWL 10 t Interchangeable (stern / stbd)
Winches	1 x 0.5 mt SWL
Primary	1 x Oceanographic SWL 5t, capacity 6,000 m (17 mm Coax), 1 x Geotechnical SWL 9 t Capacity 4,000 m (9 mm Dyneema®)
Secondary	1 x Oceanographic SWL 1.2 t Capacity 2,000 m (11 mm Coax)
Tugger	2 x SWL 3 t
Stern roller	4.2 m wide, max. load 10 t Multi-purpose deck-rail system to fit containers, lifting and handling gear

#### Other

	ROV / Crawler capability
	GL certified Kongsberg K-POS DP-11 (DP 1)

*Information may be subject to change without prior notice.*