

# M.V. Fugro Meridian



The survey vessel, M.V. Fugro Meridian, is operated by Fugro Survey Limited of Aberdeen, UK. Specifically designed as a multi purpose survey vessel, the Fugro Meridian is permanently mobilised and can be rapidly deployed to survey locations worldwide.

Fugro Meridian, a purpose built research vessel is well appointed with a large mess-room, two lounges, en-suite cabins, two geotechnical laboratories and two large instrument rooms. The vessel is fitted with a Kongsberg SDP11 Class 1 DP system, a full suite of analogue and digital geophysical equipment, including an Atlas MD2 50KHZ and Simrad EM300 30KHz multibeam echo sounders. The vessel is provided with a suite of deck equipment which includes a 6 tonne A frame, 20 tonne hydraulic deep sea trawl winch with 8000m of cable, a 3 tonne hydraulic winch with 1500m operating water depth and clear deck area of 20m<sup>2</sup>. The vessel has a multi-role capability including OBC work, ROV inspection (observation or work class ROVs), pipeline and cable route surveys, high resolution seismic acquisition surveys and geotechnical and environmental surveys utilising vibrocorers, CPTs, piston corers and grab samplers. Fugro Meridian is also fitted with a helideck capable of operating helicopters of Bell 412 size. The helideck is not currently certified for helicopter operations but could be re-certified should a client require this for a period charter.

Clients within the oil and gas industry, the cable sector and government agencies utilise the Fugro Meridian to obtain high resolution data for permitting, planning, design activities and cable engineering within the offshore industry.

Fugro Survey is accredited against the international quality standard ISO 9001:2000 and operates in accordance with a Health, Safety and Environmental Management System which is integrated with its Quality Management System. Together these systems conform to all national and international legislation as well as industry guidelines, and provide mechanisms for integration with the company's management system. Fugro Survey is a member of the multi-national Fugro Group of companies with over 250 offices in 58 countries. Clients can benefit from individual and collective experience of hundreds of survey professionals at Fugro Companies worldwide.

## Vessel Capabilities

- Hazard Surveys
- High Resolution Site Surveys
- Mineral Surveys
- Tow Route Surveys
- Cable Route Surveys
- Pipeline Route Surveys
- Pipeline Inspection Surveys
- Swathe Bathymetry Surveys (1000m)
- ROV Inspection Surveys
- CPT and Vibro Coring Surveys
- Shipwreck and Air Accident Searches

# M.V. Fugro Meridian



## Vessel Details

<b>Owner</b>	Fugro
<b>Ship Managers</b>	Louis Dreyfus Armateurs
<b>Type</b>	Site and Hydrographic Survey Vessel
<b>Port of Registry</b>	Nassau
<b>Classification</b>	HELDK ICE C
<b>Official Number</b>	732239
<b>Call Sign</b>	C6QR4
<b>Built</b>	1982
<b>Upgrade</b>	November 1997
<b>Material/Type</b>	Steel/Monohull
<b>International Gross Tonnage</b>	2255 Tonnes
<b>Net Tonnage</b>	677 Tonnes
<b>Length Overall</b>	72.5m
<b>Beam</b>	13.8m
<b>Draft</b>	6.8m
<b>Cruising Speed</b>	12.0 knots (Max)
<b>Main Engines</b>	Normo KVMB-12 2600 BHP
<b>Propulsion</b>	Single Screw, Variable Pitch
<b>DP System</b>	Simrad SDP 600 Class 1
<b>Bow Thruster</b>	2 x 600 BHP
<b>Stern Thruster</b>	1 x 600 BHP
<b>Fuel Capacity</b>	531m <sup>3</sup>
<b>Fuel Consumption</b>	4-5m <sup>3</sup> per 24 hours
<b>Water Capacity</b>	114m <sup>3</sup> fresh water
<b>Water Making</b>	Pau-Rochem RO Atlas Evaporator
<b>Incinerator</b>	Golar Marine OG200

## Electrical Power

5 generators, 380/220 VAC, 60Hz:  
DG1 212 KVA  
DG2 212 KVA  
DG3 212 KVA  
DG4 400KVA  
DG5 28 KVA (auxiliary)

## Navigation Aids

Furuno 10cm FAR 2832S-7AF Radar  
Furuno 3cm FR 2115 Radar  
Furuno GP-31 GPS  
Robertson RGC 11 Gyro  
Robertson AP 9 Auto Pilot  
Simrad NL Doppler Log  
Furuno NX500 Navtex

## Communication Aids

2 x Furuno FM 8500  
Furuno SSB FS1562-25  
Furuno Felcom 12 Sat C  
Furuno MH/HF - NBDP  
Nera Saturn B sat Phone/Fax/e-mail  
Kelvin Hughes Sat C

## Operational Area

Worldwide GMDSS A3

## Deck Machinery

1 x 3 ton Fassi Crane  
1 x 4 ton Crane  
1 x 0.5 ton towing davit  
1 x 3 ton hydraulic A frame

## Accommodation

26 persons, in addition to marine crew

## Air Conditioned

For tropical operations

## Working Area

About 160m<sup>2</sup> shelter deck  
About 150m<sup>2</sup> on main deck  
1 x 17m<sup>2</sup> instrument room  
1 x 37 m<sup>2</sup> instrument room  
1 x 35m<sup>2</sup> store room  
1 x 14m<sup>2</sup> instrument room

## Recreational Areas

Mess Room  
Lounge  
Film/Video  
Gymnasium equipment  
Sauna

## Vessel Safety Equipment

### Lifeboats

2 x 40 person Covered

### Fast Rescue Craft

1 x Naiad RIB

### Life Rafts

5 x (total 50 persons)

### Survival Suits

40 Helly Hansen E-352

### Life Jackets

70 x DNV Approved

12 x Crewsaver 275N Work vests

### Smoke Hoods

In all cabins

### Work Vest

12 x Crewsaver 275N

### Emergency Radios

3 x Skanti GMDSS VHF

### Emergency Beacons

1 x Tron 40S EPIRB

1 x SART

8 x Sea Marshall PLB-8

### Fire Pump

Main: STORK CELV 20-6.5/4 (440V)

Emer: STORK CELV 20-6.5/4 (220V)

CO2 Flooding

Covering room for kerosene

### Foam System

Permanent system for streamer winches and reels. Portable system for compressor room.

## Survey Equipment

### Positioning System(s)

Starfix – HP, MN8 & SPOT

DGPS systems

### USBL System

Simrad HPR300/309T

### GPS Receivers/Demodulators

2 x Trimble, Fugro SeaSTAR &

Starfix Demodulators

### Computer Systems

ONLINE spread includes 3x Pentium

PC' s running Fugro Starfix SEIS and

other survey utility software's.

Offline Spread includes PC running

Fugro Starfix VB Proc

### Heave Compensator

DMS05

TSS HS-50

POS/MV

F180

### Acoustic Positioning

Simrad HPR 410T (Tracking transducer

21-29 kHz)

# M.V. Fugro Meridian



## Real Time Clock

GPS

## Single Beam Echo Sounder

2 x Atlas Deso 25

## Multibeam Echo Sounder

ATLAS MD2/50Khz Swathe System  
Simrad EM300 30KHz swathe system

## Sound Velocity Probe

2 x Valeport 650 MK1  
1 x AML SVPlus  
1x Sippican XBT

## Side Scan Sonar

Geoacoustics 159 Dual Frequency

## Deep Towed Sparker

Nova Scotia DTS

## Through-the-hull Profiler

18 x transducer @ 3.5 kHz Pinger

## Shallow Towed Profiler

EG&G sub-tow Boomer

## Mini Sleeve Gun

10 cu.in. sleeve air gun with wave shape kit

## Hydrophone Streamer

Benthos model MESH 50/24P  
Benthos model MESH 15/10P

## Graphic Recorders

5 Ultra P120 thermal recorders

## Data Logging and Digital Processing

3 x CODA DA-200  
1 x DELL NAS Server

## Swell Filter

TSS HS50 Heave sensor

## TVG Amplifier

3 x Octopus OMS360

## Bandpass Filter/TVF Filter

3 x Octopus OMS360

## Magnetometer

Geometrics G880

## Record Annotator

3 x MUCAS

## Seabed Sampling

Free fall 450kg gravity corer: 3m and 6m barrel. Core diameter 83mm.  
Max 750m cable length (Mid-ships).  
Max 8,000m cable length (Stern).  
Grab sampler.

## Digital Seismic Recording System

<b>Type</b>	I/O MSX
<b>No. of Channels</b>	368
<b>Sample Rate</b>	0.5, 1, 2, 4ms
<b>Group Interval</b>	12.5m
<b>Filters (programmable)</b>	
High Cut	205Hz
Low Cut	4Hz
<b>Tape Format</b>	SEG-D 8058 Rev-1
<b>Recording Medium</b>	3590E Cartridge

## Streamer

I/O MSX

## Digital QC System

Processing UniSeis  
Online Display GS 624-2 Plotter

## Streamer Testing Unit

I/O MSX

## Firing Control

Fugro Ltd Gun Controller

## Channels Display

I/O MSX  
Oscilloscope

## Far Field

TE-11, TE-500

## Depth Controllers

Digicourse model 5010 & 5011

## Gun Source

TI sleeve, G and GI Guns  
1700 in<sup>3</sup>

## Compressor

6 x Price A300 compressors driven by Detroit GM 71 series diesels.  
Delivery each compressor 210 SCFM  
Pressure 138 bar

## Camera

OYO. GS-612 plotter

## Near Trace Analogue Rec

OYO. GS-612 plotter

## Draughting

Microstation SE on Pentium PC  
Digitising tablet  
Hewlett Packard Design Jet plotter

## Network

10/100 mbs 3 COM local computer network