



FUGRO

M.V. FUGRO GAUSS

Fugro's M.V. Fugro Gauss is a purpose-built hydrographic and cable route survey vessel by design, fitted with a bespoke infrastructure for both geophysical and geotechnical survey work.

CABLE ROUTE SURVEYS

At a length of 69 m, with active roll stabilisation, and endurance of up to 45 days, the *M.V. Fugro Gauss* is the ideal vessel for cable route or hydrographic surveys around the world.

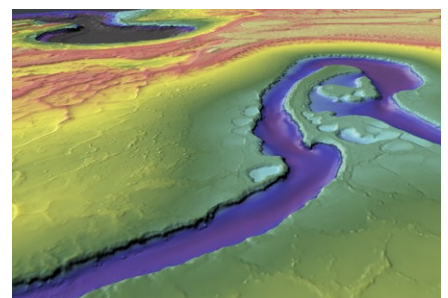
The *M.V. Fugro Gauss* is purpose built for hydrographic and geophysical surveys: A combination of Kongsberg's EM 710 (0.5° X 1°) and EM 122 (1° X 2°) multibeam echosounder systems cover high resolution surveys from shallow waters to full ocean depth.

In addition to deep tow side scan sonar and magnetometer, the *Fugro Gauss* is the only commercial survey vessel with hull-mounted Innomar Deep 2000 system covering depths up to 6000 metres. Along with Fugro' Starfix GNSS equipment, other high precision surface positioning systems complement the survey spread on board.

Equipped with air conditioning, sauna and gym, and comfortable accommodations, *M.V. Fugro Gauss* is also ice-classed and conforms to SOLAS requirements.



Gravity core analysis onboard the Fugro Gauss.



Seabed imagery.

M.V. FUGRO GAUSS

Technical Specifications

General

Name	M.V. Fugro Gauss
Classification	DNV GL + 100 A5 E2 MC E2 AUT 16/24
Owner	Fugro
Built	1980
Builder	Schlichting-Werft Lübeck, Germany
Port / Flag	Gibraltar
Call Sign	ZDIA4
IMO No.	7824883

Dimensions

Length overall	68.87 m
Beam	13.09 m
Draft	~ 5.2 m
Gross tonnage	1684
Net tonnage	445
Deck space	81m ²
Container slots	4 / 6 20 ft. (with stacking)

Performance

Speed	12 kts max / 10 kts cruise
Endurance (days)	30 cruise / 45 survey
Vessel stabilisation	Active anti-roll system

Machinery

Main engines	3 x Diesel-electric MaK
Power	3 x 1300 kW (1743 HP)
Propulsion	Fixed pitch propeller with trailing guide wheel (Grimmsches Leitrad)
Azimuth bow thruster	1 x 600 kW (pump jet)
Rudder	1 x Becker Rudder
Generator	3 x variable kVA from diesel-electric plant, 380 VAC / 50 Hz
Aux. power	1 x 240 kVA Genset

Capacities

Fuel	279 m ³ MGO
Fresh water	99 m ³
Fresh water production	5 m ³ / day

Facilities

Survey	1 x on-line survey room
Processing	1 x off-line survey room
Other	2 x multi-purpose laboratories, 1 x wet lab, 1 x office room, 1 x gym

Accommodation

Crew	12
Survey crew	Typically 12
Passengers	Up to 6

Main survey systems

Echo sounder	Knudsen Chirp 3260 single beam
Multibeam echo sounder	Kongsberg EM 710 (0.5 x 1°) to 2000 m Kongsberg EM 122 (1 x 2°) to full ocean depth
Side scan sonar	Edgetech FS4200; GeoAcoustics 900 series
Sub-bottom profiler	Innomar SES 2000 Deep Knudsen Chirp 3260 (both hull mounted)
Magnetometer	Geometrics G882 deep tow (Caesium)
DGPS positioning	Fugro Starfix HP/XP, Fugro Starpack G2
Acoustic positioning	Kongsberg HiPAP 351 (Cymbal technology)
Sound velocity sensors	Variuss
Gyro	GNSS based (>5 m baseline)
Motion reference unit	2x Seatex seapath 330+ & MRU 5+

Ancillary Equipment

Cone penetration tester	
Piston & gravity corer	
Grab Sampler	

Handling equipment and winches

Crane	14 m / central crane, SWL 3 tons
A-frame stern	1 x SWL 10 tons static and 6 tons dynamic
A-frame side	1 x SWL 4 tons static and 1.5 tons dynamic
SWL 4 tons static and 1.5 tons	1 x 15 ton SWL slide boom
Survey winch	SOSI c/w 6000 m - 17,3 mm Ø coax tow cable, SWL 5 tons
Multi-purpose	2000 m - 17.3 mm Ø coax wire rope, SWL 4 tons
Coring winch	2000 m - 16 mm Ø wire, SWL 10 tons
Bathymetric / hydrographic	5000 m - 10.5 mm Ø
Freefall sampling winch	6000 m Dyneema SWL 4 tons

Bridge/radio room

Navigation	2 x Radar Furuno FAR 2837S (S-Band) Furuno FAR 2127 (X-Band) Gyro compass (Anschütz STD 22) with autopilot AIS Nauticast X-Pack
Communication	High speed VSAT (e-mail & Internet) Fleet 77 Inmarsat, GSM, GMDSS A3

(Inshore work boat optional)

Information may be subject to change without prior notice.