



# GEO HINDSAGAR (EX. GEO BALTIC)

## General

Name	Geo Hindsagar (Ex Geo Baltic)
Owner	Hind Offshore Private Ltd., India.
Type	3D/2D Seismic Research Vessel
Port of registration	Mumbai
Flag	Indian
Class	DNV & IRS
Official No.	3670
Call sign	AVEK
IMO	7806075
Year built/rebuilt	1980 Sweden / 1998 Denmark, 2003 Singapore
Length overall	75.00 m
Breadth	15.50 m
Draught, loaded	4.85 m
Tonnage	2906 gross tons, 872 net tons
Cruising speed	12 knots, 8 knots with one engine
Operation range	5960 N.M. at 12.0 knots
Endurance seismic days max load	30days
Main engine	2 x Wartsila 8L20, 1800 HP each (1320 kW)
Gearbox	Eisenwerhe Reintjes DVAL 1850 rpm in/out, 1200/270
Propulsion	KaMeWa controllable pitch. 4 blades, type 72XF/4, 276 rpm diameter 2550 mm with nozzle
Rudder	Becker, flap type
Steering gear	Servi PR
Azimuth thruster	Rolls Royce Marine, Dep. Propeller Ulstien Aquamaster TCNS 73/50-180 1000 kw / 690V, Propeller dia. 1800 mm, 4 blades.
Azimuth drive engine	Cummins KTA50-D
Main engine monitoring	ASEA ALSY Automation
Electrical power	Total power : 2040 kVA Voltage : 380 / 220, 50 Hz. Generator : 3 x Hedemora V8/10, each 780 hp. 1000 rpm. 680 kVA.

## Safety

Safety manning level	50 persons
Rescue / Mob Boat	Norpower 22' MOB / Offshore
Workboat	Norsafe Magnum 750
Inflatable life rafts	4 x DSB 25 persons
Man overboard life raft	2 x Jonbuoy
Survival suits	54
Life jackets	56
Life rings Smoke hoods	13
	All cabins
Inflatable work vest	20 x Crewsaver 150 N
Emergency radios	3 x McMurdo GMDSS + 1 x Jotron
Emergency beacons (EPIRB)	1 x Jotron Tron 40S / 1 x Jotron Tron 45SX
Radar transponders	2 x Jotron Tron SART
Fire detector system	Eltek Delta Compact
Fire Pump	2 + 1 Emergency fire pump
Fire suits	4
CO2 systems	Engine rooms Compressor room
Foam systems	Streamer winches and streamer deck hand held

## Seismic Recording Instrument

Type	Input/Output, MSX, 24 bit system
Number of channels	1 x 960 channels @ 1ms, 1 x 12000 m streamer 4 x 480 channels @ 1ms, 4 x 6000 m streamer
Number of waterbreaks	4 channels each streamer, 1 every 100m
Number of Auxiliary	32 channels
Sample rate	0.5, 1, 2 and 4 ms
Filters	
Low Cut	Out, 2 Hz, 6 dB/octave 2 Hz, 12 dB/octave 4 Hz, 12 dB/octave 6 Hz, 12 dB/octave 8 Hz, 18 dB/octave
High Cut	1 ms : 412 Hz, 264 dB/octave 2 ms : 206 Hz, 264 dB/octave 4 ms : 103Hz, 264 dB/octave
Recording format	SEG-D

Emergency generator	Scania V8 DS1, 206 kVA
Clean power	INV SitePro, 40 kVA UPS SitePro, 20 kVA
Fuel capacity	691 m <sup>3</sup> , normal 450 m <sup>3</sup>
Fuel consumption	Sailing 14 m <sup>3</sup> , working 20 m <sup>3</sup>
Fresh water capacity	74m <sup>3</sup>
Fresh water consumption	8 m <sup>3</sup>
Fresh water generator	Yes
Sewage treatment plant	Aquamar Bio Unit
Black water	23 m <sup>3</sup>
Grey water	23 m <sup>3</sup>
Bilge water	12.1m <sup>3</sup> + 16.9m <sup>3</sup>
Sludge	3.9m <sup>3</sup>
Lube oil	32.5m <sup>3</sup>
Dirty oil	3.9m <sup>3</sup>
Stabilising system	Yes

### Deck machinery

Crane	1MKG HMC 700-GMC.15.8m, 3.4 T SWL 1Grampian 1.9 T SWL forecastle 1 Grampian 1.9 T SWL mid ship
Winch	Streamer : 4 x 6000 meter Lead-in : 2 x lead-in + 1 x stretch Gun : 4 x 300 meter Capstan : 2 x hydraulic, bow and stern
Paravane	2 x Barovane 44
Hydraulic power pack	MPD 2 x 55 kW, 2 x 133 l/min, 210 bar Odin 155 kW, 400 l/min, 210 bar
Accommodation (Central Aircon)	Single cabins : 14 Double cabins : 19 Total safe capacity : 52
Galley stores	Deep freeze : 25 m <sup>3</sup> Cool room : 36m <sup>3</sup> Store room : 60 m <sup>3</sup>
Mess	Seating capacity : 30 Size : 56 m <sup>2</sup>
Day room	44 m <sup>2</sup>
Exercise room	12 m <sup>2</sup>

### Navigation Aids

Auto pilot	Robertson AP9 MK 3, with Robertson Autotrack ST5500
GPS	Koden and Furuno GP31
Differential GPS	Starlink
Radar no. 1	1 x Furuno ARPA 2825, X-band
Radar no. 2	1 x Furuno ARPA 2235, S-band
Gyro no. 1	1 x Anschutz STD 22
Gyro no. 2	1 x Anschutz STD 20
Gyro no. 3	Octans III, IXSEA
Speed log	Skipper DL 850
Wind sensor	Aanderaa Datalogger 3634
Navigation echo sounder	Furuno FE-700
Electronic chart	Furuno TELchart; PC based C-Map
Backup Electronic chart	Admiral PC based
Navtex	Newcom
Automatic identification system	Furuno AIS FA 100
Sonar	Westmar 600E high definition sonar. Range 250 meter Tracking 360 deg.
SVDR	Rutter VDR-100G2/S
SSAS	Transas Ship Guard

Recording medium	IBM Magstar 3590E / 3592
Raid system	Argus SGI
QC system	All QC data, QC plots-AGC or fixed gain, harmonic distortion analyses, noise analyses, spectral analysis
On-line display	Oyo GS 624-2

### Streamers

Type	Input/Output, MSX digital (Fluid and gel)
Length	6 x 3200 meter at 50 m separation by use of 2 leading winches 4 x 4800 m at 100 m separation ( Max 4 x 6400 m, 1 x 12000 m)
Max. outer separation	300 m
Available group interval	12.5/25 m
Section length	99.5 m
Group pr. Section	8
Hydrophone type	Input/Output
No. of hydrophone/group	14 hydrophones (2.5 m ) tapered away, centre weighted. 29 % overlap, total group length 17.55 m
Streamer diameter	63.5 mm
Group sensitivity	14 V/bar
Fault locator	Input/Output
Depth Controller	Digicourse System 3. DMU
Depth Control / Compass	Digicourse DigiBIRD 5011
Compasses	ION Model 5011 compass Bird
Streamer control	ION Model 5011 compass Bird
Acoustics	Sonardyne SIPS 2
Cable oil super clean	3000 ltr's.
Cable oil clean	3000 ltr's.
Cable oil dirty	7000 ltr's.

### Energy Source

Type of guns	Sodera G-gun
Size of guns	20, 40, 70, 100, 150 and 250 cu. Inch
Max. volume	2 x 2620 cu. inch
Maximum out @ 6 m 0-128 Hz	2 x > 80 barm. P/B 15 : 1 For 3D Survey 1 x >120 barm. P/B 20 : 1 For 2D Survey
Number of sub arrays	2 strings per array
Configuration	Dual source
Tow width	Adjustable 25 to 75 m
Firing control / QC	Seamap GunLink 2000
Depth transducers	3 per string
Tow system	Baro flexible gun floats
Offset	Typically 100 to 150 m. 100 (60) m can be achieved
Compressor	3 x LMF : 997 SCFM @ 3000 psi 1046 SCFM @ 2500 psi 1100 SCFM @ 2000 psi
Compressor capacity	2991 SCFM @ 3000 psi 3138 SCFM @ 2500 psi 3300 SCFM @ 2000 psi
Air pressure	2000-3000 psi

### Navigation Equipment

## Communication

GMDDS	A1, A2 and A3
Fixed satellite line	Telenor Sealink Lite, NorSat. Phone, modem and fax
Inmarsat	Sailor fleet broadband 250 voice / fax / 284 kbps 2 x Inmarsat C, type H2095B
GSM	X 1
M/F and H/F	Furuno FS-1562
VHF stationary	2 x Furuno FM-8500 1 x SRA ME61
VHF PORTABLE	3 x McMurdo GMDSS + 1 x Jotron
UHF portable	4+4 Motorola GP 300
Watch keeper	Furuno MF DSC-6A
Internal communication	Stationary all rooms
Telephone number	GSM Bridge Inmarsat B Bridge Inmarsat B FGAS (Phone room) Inmarsat B spare Inmarsat B 9.6 kbps data Inmarsat B 64 kbps H.P data Inmarsat C bridge Norsat bridge Norsat party chief Norsat captain Norsat client office Norsat instrument room Norsat processing room Norsat gun shack
Fax number	Inmarsat B Norsat party chief Norsat client office
Internet access via Norsat	10 networked PC's including Client cabin, Party Chief

On-line navigation system	Spectra, Concept Systems Ltd.
Primary navigation	Starfix HP DGPS, Fugro
Demodulator	Starfix 3000LR
GPS receiver	Ashtech Z-Eurocard
Secondary navigation	Starfix. XP DGPS. Fugro
Demodulator	Starfix 3000LR
GPS receiver	Trimble MS750 dual frequency
Tailbuoy tracking	Kongsberg Seatex Seatrack 220 RGPS
Gun array tracking	Kongsberg Seatex Seatrack 320 RGPS
Acoustic	SIPS2, Sonardyne
Dynamic sound velocity	SIPS2 XSRV/SV, Sonadyne
Gyro	1 x Anschutz STD 4 1 x Anschutz STD 20 IXSEA Octans III
Motion sensor	IXSEA Octnas III
Echosounder	Simrad EA600
Echosounder transducer	210 kHz and 33 kHz (3000 m range)
SVP probe	Valeport 650 SVP ver.2.02
Streamer mounted speed log	Skipper DL850 WSP log
Streamer mounted Velocity meter	Sonardyne SIPS2 xSRV/SV
Streamer positioning	Digicourse DigiBIRD 5011 Compass Bird Sonardyne SIPS2 acoustics
Navigation processing	Concept Systems Sprint Concept Systems NRT
Binning	Concept Systems Reflex

## Onboard Processing

Hardware	2x HP DL 850 GS Linux Servers 4 Dell Dual Monitor Linux Work Stations Total disk space 25 TB OYO 36" Thermal plotter
Software	Fugro Uniseis
Capabilities	Full 3D QC processing Real Time 2D QC Full fold fast track processing
Tape drives	IBM Magstar 3590 E / 3592
Plotter	OYO 36" thermal plotter

**Note 1 : Gravity and magnetic survey Equipments will provided when required**

**Note 2 : All Specifications Subject to Change Without Notice**

**For Detail Specification Please Refer to website : [www.hindoffshore.com](http://www.hindoffshore.com)**