

REFLECT SCORPIO



***Reflect on Your
Seismic Needs***



Reflect

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REFLECT SCORPIO

SEISMIC VESSEL SPECIFICATIONS

Owner of the vessel: Reflect Geophysical Pte Ltd
Flag: • Port of registry: Singapore / Singapore
Date build and rebuilt: 1982, Converted 1998
Call Sign: • Class: 9V5935 A1 (E) Seismic Research
AMS ACCU
IMO #: 8208385

ACCOMMODATION

Total number of berths: 78
Hospital: 1
Helideck: Bell 212

AIRGUNS

Manufacturer: Sercel
Type: G-Guns
Operating pressure: 2000 psi
Volume: 3090 cu. In. "flip Flop"

COMPRESSORS

Manufacturer: Frick screw with Ariel Reciprocating
Number: 5
Total air capacity: 1005 scfm

GUN SYNCHRONIZATION SYSTEM

Gun control syste: Bigshot
Manufacturer: Syntron
Source array positioning system: RGPS, Acoustics

STREAMER

Manufacturer: ION
Type: MSX solid Gel
Maximum number of streamers: 4 x 6,000m @ 100m separation or 1 x 12000m
Number of groups per section: 12
Active section length: 100m
Group spacing: 12.5m
Hydrophones type: Teledyne Preseis 2517 (water resistant)
Group sensitivity: 14 V / Bar @ 20 deg C

STREAMER CONTROL

Depth controllers: DigiCourse 5011E Compass /
Heading measurements: DigiCourse 5011E Compass Bird
Manufacturer: DigiCourse (ION)
Streamer separation: Barovane-BARO 48

RECORDING INSTRUMENTS

Manufacturer: ION
Type: MSX 24 bit Digital
Preamplifier gain: 12 db typical
Number of available channels: 960 – 1920 (pending sample rate)
Number of auxiliary channels: 16
Recording format: SEG D 8058 32 Bit
Sampling rate: 0.5, 1, 2, 4 ms
Recording media: LTO-3 Cartridge Tape
Data capture and QC: SEISDRIVE x / SeisNet software
Hard drive capacity: 400 Gb / External Hard Drives
Low cut filter: 2 Hz 6dB / Oct digital
High cut filter: 206 Nz / 264 db / Oct

ON-BOARD DISPLAYS

Single trace recorder: OYO Geospace
Type: GS 624-2

SAFETY

FRC: Magnum-750 equipped with SOLAS
Life rafts: 4 x 20, 4 x 25, 1 x 10 man
Survival suits: 74
Life Jackets: 126

FIRE FIGHTING AND TYPE

Engine room: CO2
Compressor room: CO2
Instrument room: CO2 + portable extinguishers
Streamer reels: Foam
Firemen outfit: 7
Breathing apparatus: 7
Fire pumps: 1 x engine room, 1 x emergency pump

DIMENSIONS

Length: 64.5m
Beam: 18.5m
Max draft: 5.183m
Gross tonnage: 3211
Maximum speed: 12 knots
Cruising speed: 10.0 knots
Fuel capacity: 1249m³
Endurance: unlimited – resupply at sea – or 50 days
Main engine: 4 x 1600 BHP Yanmar
Rudder: • Bow thruster: 1 x 420 BHP Yanmar

NAVIGATION AND COMMUNICATION

VHF radio (Fixed): 2 X DSC VHF Furuno FM-8000
VHF radio (Portable): 12 x Motorola GP300
Navtex: Lo-Kata
Inmarsat receiver: VSAT
Radar 1: Furuno FAR-2830S ARPA
Radar 2: Furuno FAR-2100
Radar 3: Furuno FAR 1525 ARPA
GPS: Furuno GP-90 & JRC JNAV 500
Autopilot: Sperry ADG3000
Gyro: Tokimer 5000
Weather fax: Furuno Fax 207.
Speed Log: Furuno Doppler Log DS-80

INTEGRATED NAVIGATION SYSTEM

Manufacturer: Concept Systems Ltd (ION)
Type: Orca
Software version: 10.9.01
Platform: Red Hat Linux
Binning system: Reflex 1.9.4
Post Processing software: Sprint

POSITIONING SYSTEMS

D.GPS

Manufacturer: C-Nav / Veripos
Type: C-Nav – 2050 System Æ w / C-Navigator
Receiver: C-Nav Dual Frequency Receiver

r.GPS

Manufacturer: Seamap
Type: Bouylink, GPS Seismic Tail Buoy Tracking

GYROCOMPASS

Manufacturer: Sperry Marine
Type: X MK1

ECHOSOUNDER

Manufacturer: Furuno
Type: FE600 & Furuno FCV 668
Frequency: 12 and 38 kHz

COMPASSES

Manufacturer: DigiCourse (ION)
Type: DigiCourse 5011E Compass Bird

ACOUSTICS

Manufacturer: DigiCourse (ION)
Type: DigiCourse CMX units (cable tx/rx)
DigiCourse 5011E Acoustics Bird (cable rx)
DigiCourse CMX units (source tx/rx)
Streamer Positioning: rGPS, compasses and acoustics
Source Positioning: rGPS and acoustics

ON-BOARD NAVIGATION DATA FINAL PROCESSING AND QC

Software description: Sprint 3D
Software version: 4.3.3
Final data products: UKOOA P1/90
Platform: Red Hat Linux

ONBOARD SEISMIC DATA PROCESSING & QC

Software: Globe Claritas
Platform: Linux
Capabilities: Full onboard processing