



# **TECHNICAL DATA SHEET**

# **CS RECORDER**

#### **OVERVIEW**

The CS Recorder is a high bollard pull, dynamically positioned vessel, specialising in telecoms submarine fibre optic cable installation. The vessel is equipped with a 60t A-frame system and a 60t tow winch. The two main cable tanks allow for the installation of up to 5,200t of submarine fibre optic cable. A further 1000t of submarine fibre optic cable may be carried in the two ancillary tanks. The vessel can provide installation of fibre optic cable to full ocean depth. Simultaneous lay & burial up to 3 metres can be provided in suitable seabed conditions (when in active mode) over the ploughed section of the route utilising Global Marine's plough and trenching ROV systems.

#### CONSTRUCTION CLASSIFICATION

| nany |
|------|
|      |
|      |
|      |

| 150.50m                           |   |
|-----------------------------------|---|
| 84.952m                           |   |
| 20.00m                            |   |
| 8.50m                             |   |
| 9.10 m                            |   |
| 6,292t                            |   |
| FR 10 to FR. 31<br>FR 31 to FR 92 | 10t/m²<br>5t/m²   |
|                                   | 84.952m<br>20.00m<br>8.50m<br>9.10 m<br>6,292t<br>FR 10 to FR. 31 |

| Fuel oil capacity              | 95% max capacity) MGO (total<br>2,424.5m³)<br>*Endurance - 60 days |
|--------------------------------|--|
| Bollard pull                   | 110t (continuous)  |
| Typical economic transit speed | 11 knots   |

#### **CABLE TANKS**

| Main cable tanks (Qty)             | 2                 |
|------------------------------------|-------------------|
| Main tank internal diameter        | 16.50m            |
| Main tank outer cone diameter      | 3.0m              |
| Main tank height                   | 9.39m             |
| Maximum load per cable tank        | 2,600t @ 1.9 t/m² |
| Ancillary tanks (Qty)              | 2                 |
| Ancillary tank internal diameter   | 9.00m             |
| Ancillary tank outer cone diameter | 3.00m             |
| Ancillary height                   | 7.59m             |

| Maximum load per | 521t @ 1.9 t/m² |
|------------------|-----------------|
| cable tank       |                 |

### **ACCOMMODATION**

| Maximum POB       | 68                             |
|-------------------|--------------------------------|
| Cabins            | 18 single and 30 double        |
| Hospital          | 2 berths                       |
| Office/Workspaces | Client office                  |
| Recreation        | Mess, gymnasium, TV lounge x 2 |

## **CABLE WORKING GEAR**

| Drum engine (DE)          | FRASER HYDRAULIC POWER<br>R23213A - 4m drum engine |
|---------------------------|--|
| Draw off hold back (DOHB) | FRASER HYDRAULIC POWER<br>R23213B - 4 pair DOHB    |
| Linear cable engine (LCE) | FRASER HYDRAULIC POWER -<br>R23214A 20 pair LCE    |

# CONTROL & NAVIGATION SYSTEM (INCL DP)

| Radars                       | FURUNO FAR 2117/37  |
|------------------------------|---|
| Gyro's                       | 3 x Sperry Marine NAVIGAT 200                                     |
| ECDIS                        | 3 x solid state 24" panel PC preloaded with VMFT ECDIS-E software |
| DP system                    | Kongsberg Simrad K-POS DP-21                                      |
| HiPAP/PR system              | Kongsberg Simrad 31 X series                                      |
| Echo sounders                | ELAC EA 640 and ES5100  |
| Taut wire                    | Lite taut wire Mk 12  |
| Motion reference unit        | MRU - 2 and MRU – 5   |
| FUGRO Diff'l signal receiver | 2X CNAV3050, 1xMx500  |

### **PROPULSION SYSTEM**

| Main engine | 2 x MAN 8 cylinder L32/40 MCR<br>3.840kW @ 750rpm     |
|-------------|---|
| Main gear   | Driving 2 x reduction gears with PTO<br>RENK HNSL-800 |

| Propeller           | 2 x 4 blade 3.0m dia MAN Alpha CPP                              |
|---------------------|---|
| Auxiliary engines   | 2 x Caterpillar 3508 DI-TA/1 750kW @ 1,800rpm                   |
| Emergency generator | 1 x Caterpillar 3306 DI-T 183kW @<br>1,800rpm                   |
| Generator Plants    | 2 x ABB shaft generators ea 3,750kVA / 3,000kW, 450 Volt / 60Hz |

#### **MANOEUVRING SYSTEMS**

| Bow thruster    | 1 x Lips (Watsila) tunnel CPP, type<br>CT250-DP 1,200kW @ 190rpm max<br>thrust about 200kN                              |
|-----------------|---|
| Bow thruster    | 1 x Lips (Wartsila) retractable azimuth<br>CPP, type CS200-244/MNR rating,<br>1000kW @ 330rpm max thrust about<br>195kN |
| Stern thrusters | 2 x Lips (Wartsila) tunnel CPP, type CT<br>225-DP each 1,200kW @270rpm max<br>thrust about 190kN                        |
| Steering system | 2 x becker rudders type 2R-ZE/ZE-11/<br>D45   |

### **DECK MACHINERY**

MF/HF radio station with charger

| Tugger winches<br>(upper deck) | 1 x 10t Mooring winch<br>1 x 5t Aft port<br>1 x 5t Fwd stbd    |
|--------------------------------|--|
| Towing winches                 | 60t towing winch traction winch 2.5t towing winch storage drum |
| Repeater hoists                | 2t Fwd repeater hoist beam<br>2t Aft repeater hoist beam       |

## **COMMUNICATION EQUIPMENT**

| INMARSAT C C/RadioTelex communication system |
|--|
| RT 4822 VHF – radio telephone with DSC       |
| RT 4800 VHF basic radio telephone            |
| 2 x Satellite operating EPIRB                |
| 1 x Navtex receiver NCR-333                  |
| 1 x Tron air portable transceiver            |
| 3 x Tron VHF GMDSS for VHF for rescue boat   |

| 2 x Tron SART 9 GHz radar transponder |  |
|---------------------------------------|--|
| Sailor 5900 KU Band VSAT              |  |
| Sailor Fleet Broadband                |  |
| Iridium Pilot                         |  |

# LSA EQUIPMENT

| Rescue boats               | One starboard rescue boat for 6 persons with diesel outboard motor |
|----------------------------|--|
| Life saving total capacity | 68   |
| Liferafts                  | 10   |
| Liferaft capacities        | 4 x 25, 4 x 20, 2 x 12 = 204                                       |
| Lifebuoys                  | 8  |
| Lifejackets                | 86   |
| SART                       | 2  |
| VHF handhelds              | 3  |
| Minimum safe manning       | 13   |

### **CRANEAGE**

3 x 5t non telescopic deck cranes type OMCK1610

| Location | The aft port crane lifting capacity for internal shipboard handling up to sea 5: 2.0t @ 22m 5.0t @ 11m           |
|----------|--|
| Location | The starboard crane lifting capacity for internal shipboard handling up to sea state 5: 2.5t @ 20m 5.0t @ 11m    |
| Location | The port forward crane lifting capacity for internal shipboard handling up to sea state 5: 2.5t @ 20m 5.0t @ 11m |

## **MAIN A-FRAME**

| Maker       | Hydralift  |
|-------------|--|
| Location    | Positioned aft at FR-7, with a lifting capacity of 60t for internal shipboard handling and 50t for offshore handling |
| Static load | Static load test to 66t  |



The information contained in this datasheet is for guidance purposes only and may be subject to change. @ GMG 2019

### **GENERAL ARRANGEMENT**



