



## R/V Sarmiento de Gamboa

[http://www.utm.csic.es/sarmiento\\_doc.asp](http://www.utm.csic.es/sarmiento_doc.asp)

|  |   |
|--|---|
| <b>Infrastructure name</b>   | <b>MULTICHANNEL SEISMIC SYSTEM</b>  |
| <b>Ship Manager</b>  | Arturo Castellón <a href="mailto:buques@utm.csic.es">buques@utm.csic.es</a>   |
| <b>Seismic Equipment Manager</b>   | Jose Luis ALONSO <a href="mailto:jalonso@utm.csic.es">jalonso@utm.csic.es</a>   |
| <b>Power</b>   |   |
| Frequency  | 50hz/60 hz  |
| Voltage  | 220 VAC - 400 VAC - 600 VAC   |
| Other power requirements   | Workshop 3 Phase Supply - 220 VAC and 400VAC 32A. LMF compressors 600 VAC.  |
| <b>Hydraulic</b>   |   |
| Pressure   | 210 BAR   |
| Flow rate  | TBC   |
| <b>Compressed air requirements</b>   | N/A   |
| High air compressor  | 2 x LMF® 25/138-207E  |
| Input pressure   | 1,013 bar - 14,65 psi   |
| Outpur pressure  | 140 bar - 2000 psi up to 207 - 3000 psi   |
| Air volume   | 25 m³/min - 1100 cfm  |
| R.P.M.   | Controlled by frequency variator  |
| Cooling sea water  | 87 m³/h – by compressor.  |
| <b>Vessel GPS Feed or other requirements</b>                                   | GPS (GGA and ZDA messages)+ Gyro + Nadir Depth desired input data from vessel equipment<br>20 squared meters laboratory to install acquisition room |
| <b>Source definition</b>   |   |
| Source structure   | 40 feet container opened frame structure. Designed and performed by UTM.  |
| Airguns Types  | BOLT 1500LL & 1900LL - ION Sleeve Guns - SERCEL GGUN-II   |
| Bolt 1500LL: number x chamber volumes  | 2 x 1000 cu.in. 2 x 500 cu.in. 1 x 330 cu.in. 1 x 265 cu.in. 1 x 255 cu.in.   |
| Bolt 1900LL: number x chamber volumes  | 1 x 140 cu.in. 1 x 95 cu.in. 1 x 85 cu.in. 2 x 55 cu.in. 2 x 40 cu.in.  |
| Sleeve number x chamber volumes  | 4 x 40 cu.in.   |
| GGUN-II number x chamber volumes   | 4 x 520 cu.in. 4 x 380 cu.in. 4 x 250 cu.in. 8 x 150 cu.in.   |
| <b>Streamer</b>  |   |
| Multichannel streamer  | Sentinel Sercel® up to 480 channels, 6 kilometers active sections length. Solid state streamer.   |
| Streamer winch   | Ibercisa® Hydraulic winch   |
| Fairlead   | ODIM 700/53 -550-64   |
| <b>Acquisition System</b>  |   |
| Data acquisition   | SEAL 408XL up to 2000 channels  |
| Positioning system   | Navipac by EIVA   |
| Birds/Levellers  | SERCEL Nautilus Acoustic Birds  |
| Compass & Retrievers   | OYO SRD-500S Retrievers Compass   |
| Tailbuoy   | SEAMAP RGPS Tailbuoy & Buoylink   |
| <b>Number of containers/Items, Footprint Area required</b>                     |   |
| LMF compressors  | 2 x 20' extrawidth and highcube containers mechanical parts + 2 x 10' extrawidth container electronic devices                                       |
| Source structure   | 40' container opened frame structure. Designed and performed by UTM.  |
| Streamer Winches   | 2 x 20' footprint NO standard Containers  |
| Acquisition Lab  | 10' Standard container  |
| Workshop   | 20' Standard container  |
| <b>Deck securing arrangements</b>  |   |
| Deck requirements  | Containers twist locked into standard iso 20', stern hydraulic Aframe with snatch center system to control fairlead height                          |
| <b>Transportation requirements (total weight and number of loads)</b>          |   |
| LMF compressors  | 20' extrawidth and highcube containers = 25 tones each. 10' extrawidth container electronic devices = 9 Tones each.                                 |
| Source structure   | 40' container full equipped opened frame structure = 20 tones.  |
| Streamer Winches   | 20' footprint with up to 3000 active streamer sections = 28 Tones each  |
| ACquisition Lab  | 10' Standard container = 3 Tones.   |
| Workshop   | 20' Standard container = 6 Tones  |
| <b>Mobilisation Details</b>  |   |
| Typical Mobilisation duration  | 5 days mobilisation and configuration   |
| Typical Mobilisation cost  |   |
| Typical Demobilisation duration  | 3 days  |
| Typical Demobilisation cost  |   |
| <b>Technicians</b>   |   |
| Number and type of technicians required to operate system in various scenarios | 24 hour operations: minimum 5 technicians comprising: 4 Seismic Observers, 1 chief mechanic engineer, 3 mechanic engineers                          |

