

SM1 DX300 Saturation Diving System



DESCRIPTION

| | |
|------------------------|------------------------------------------------------------------------------------------------------------------------|
| Year Built | : 2009 |
| Manufacturer | : Divex Asia Pacific |
| Classification Society | : Lloyds Register |
| Compliance Standards | : IMCA D018 & D024 Rev.1 |
| Design Standard | : Lloyds Rules & Regulations for the Construction & Classification of Submersibles & Underwater Systems, December 1989 |
| Capacity | : 12 man |
| Depth Rating | : 300 msw |
| Design Pressure | : 30 bar |
| Design Temperature | : -18 to +66 deg C |

DIVE CONTROL

Housed within a purpose Built 7m x 3m x 3m insulated with air conditioned container comprising of;

- Dive Gas Supply Panel.
- Diver Gas Reclaim control panel.
- Analox G22 O2 and G30 CO2 monitoring systems. Bell Control Systems.
- Bell hot water monitoring system.
- Bell and Diver Video & unscrambler communications systems. OTS Through Water Emergency communications systems.
- Bell and Diver audio/ video recording suite. Fixed and Portable Breathing Apparatus.
- Equipped with Emergency Lights, Smoke/ Heat Detectors & Portable Fire Extinguishers. Safe-Ox oxygen monitoring system with audio visual alarm.
- 3 KVA UPS Power Supply Units.

LIFE SUPPORT CONTROL

- Located in a partitioned section within common container as Dive Control and comprising of;
- Gas Distribution Systems. Chamber control systems.
- Chamber depth and atmosphere parameters monitoring systems. Chamber video and unscrambler communications systems.
- Fixed and Portable Breathing Apparatus.
- Equipped with Emergency Lights, Smoke/ Heat Detectors & Portable Fire Extinguishers.
- 3 KVA UPS Power Supply Units.

LIFE SUPPORT MACHINERY

- Electrical switchboard, transformers and power change over unit.
- 4 x Environmental Control Units Model CMU-2. 2 x Divex Divers Hot Water Units Model WHE-3.
 - 2 x Divex Potable Water Pump Units Model PWS-01.
 - Gasmizer Reclaim System with 6 x Haskel AGD-4 gas Booster Pumps.
 - Haskel AGD-30 Gas Transfer Pump.
 - Equipped with Emergency Lights, Smoke/ Heat Detectors & Portable Fire Extinguishers.
 - Safe Ox ambient oxygen monitoring system with audio visual alarm

3 MAN DIVING BELL

- Bell internal volume: 5m³
- 3 Diver 'MARA' Bell Gas Management Panel 2 Diver Gasmizer Bell Reclaim System
- 2 x Bell CO2 Scrubber Model DH-21S Bell/ Diver Communications System.
- OTS Through Water Emergency communications. Onboard Emergency Gas Cylinders.
- Bell Emergency Power Battery. Internal & External lights.

SURFACE COMPRESSION CHAMBERS

- DDC 1 - 6 man Twin Lock Living Chamber (EL Volume: 20.0 m3, ML Volume: 20.0 m3)
- DDC 2 - 3 man Living Chamber (Volume: 16.0m3)
- DDC 3 - 3 man Twin Lock Living Chamber (EL Volume: 8.3 m , ML Volume: 12.0 m)
- Medical Locks and Bell clamp with mechanical interlock system.
- Chamber internal outfitted with BIBS, HCU, scrubbers and lighting.
- Supplied with PPO2 meters and lung scrubbers.

HYPERBARIC RESCUE CHAMBER

- Dedicated HRC hydraulic A-frame deployment and recovery system. HRC internal volume: 16m3
- Gas Distribution Control Panel. Onboard Emergency Gas Cylinders. HRC Emergency Power Battery.
- Chamber internal outfitted with BIBS, HCU, scrubbers and lighting.
- Supplied with PPO2 meters, EPIRB, strobe lights, survival suits, lung scrubbers and food ration.

LAUNCH & RECOVERY SYSTEM

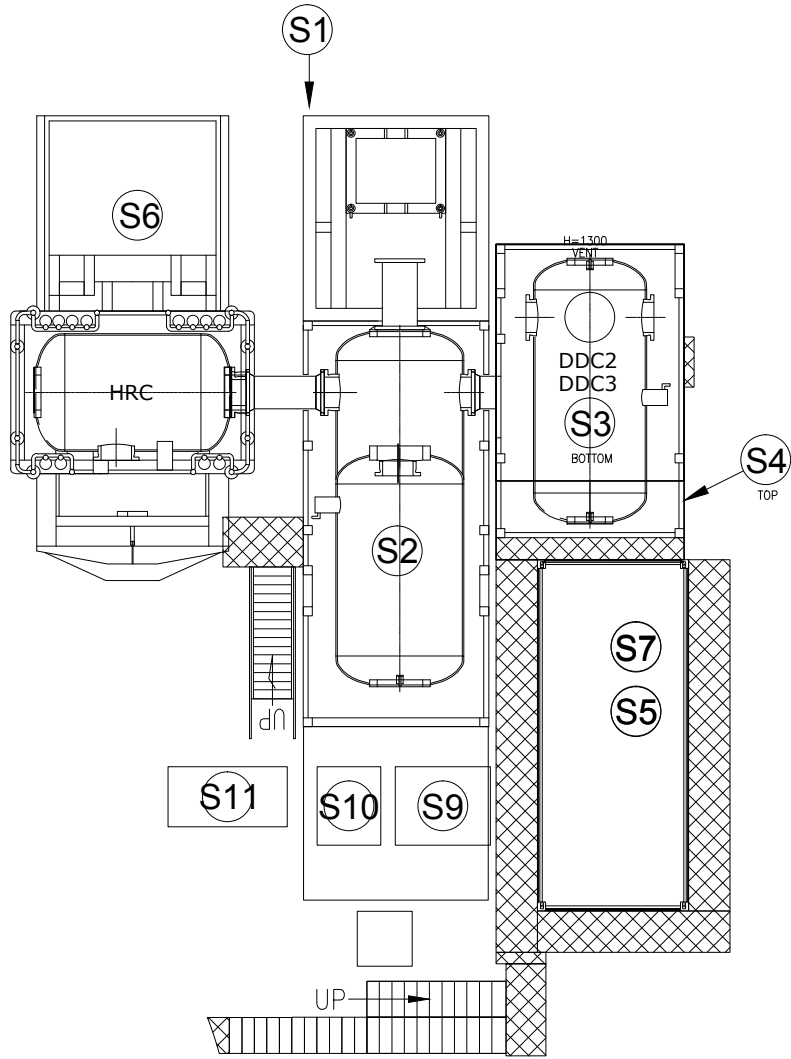
- Hydraulic A-frame configuration.
- 12T Man Riding Hydraulic Main Winch with 250m non-rotating wire.
- 7.5T Double Reeved Man Riding Hydraulic Clump Weight Winch with 450m non-rotating wire.
- 366m Cortland Fibron sheated Umbilical with dedicated hydraulic constant tension winch. Line out meters at LARS operator and Dive Control Panel.

OTHER EQUIPMENT

- HES Fly-Away Package.

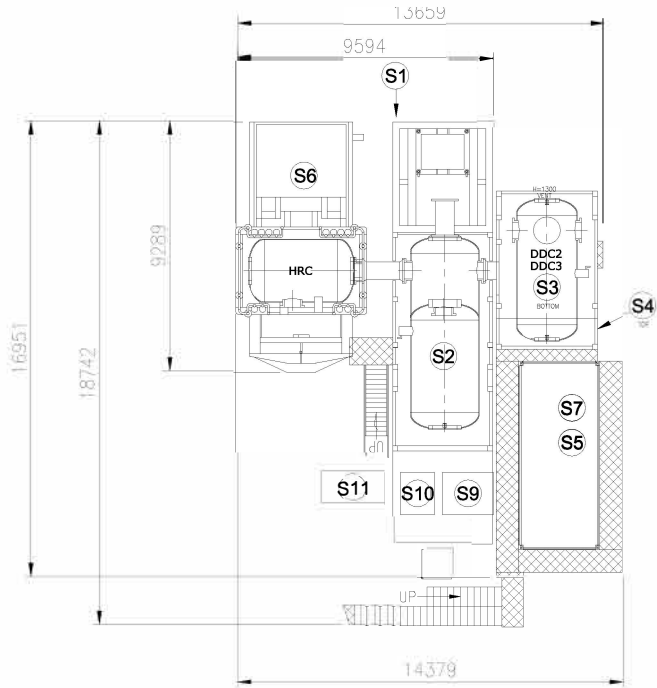
POWER & SERVICES REQUIREMENT

- Portable Water : 26 L/Min Sea Water : 196 L/Min LP Air : 420CFM @ 7Bar
- Electric Supply Main : 440v/3ph/60hz/720amps Electric Supply Standby : 440v/3ph/60hz/720amps



| SAT SPREAD (DIVEX) | | | | |
|----------------------|------------------------------|-------------------------|---------|----------|
| ITEM | DESCRIPTION | DIMENSION | WEIGHT | QUANTITY |
| S1 | SDC (BELL) | 3.7(L)x3.3(W)x3.8(H) | 10.52 T | 1 |
| S2 | DDC-1 - BOTTOM | 8.7(L)x3.7(W)x3.6(H) | 27 T | 1 |
| S3 | DDC-2 - BOTTOM | 5.2(L)x3.7(W)x3.6(H) | 24 T | 1 |
| S4 | DDC-3 - TOP | 6.4(L)x3.7(W)x3.6(H) | 22 T | 1 |
| S5 | SAT/DIVE CONTROL VAN - TOP | 7.0(L)x3.0(W)x3.0(H) | 8.9 T | 1 |
| S6 | HRC | 4.9(L)x3.3(W)x3.5(H) | 16.8 T | 1 |
| S7 | MACHINERY VAN - BOTTOM | 7.0(L)x3.0(W)x3.0(H) | 14.2 T | 2 |
| S9 | MAIN HYDRAULIC POWER UNIT | 1.9(L)x1.57(W)x2.4(H) | 3.9 T | 1 |
| S10 | STANDBY HYDRAULIC POWER UNIT | 1.275(L)x1.57(W)x2.4(H) | 2.5 T | 1 |
| S11 | DIESEL HYDRAULIC POWER UNIT | 2.21(L)x1.2(W)x2.3(H) | 2.8 T | 1 |

SM1 DX300 SATURATION DIVING SYSTEM



| SAT SPREAD (DIVEX) | | | | |
|----------------------|------------------------------|---------------------------|---------|----------|
| ITEM | DESCRIPTION | DIMENSION | WEIGHT | QUANTITY |
| S1 | SDC (BELL) | 3.7(L)x3.3(W)x3.8(H) | 10.52 T | 1 |
| S2 | DDC-1 - BOTTOM | 8.7(L)x3.7(W)x3.6(H) | 27 T | 1 |
| S3 | DDC-2 - BOTTOM | 5.2(L)x3.7(W)x3.6(H) | 24 T | 1 |
| S4 | DDC-3 - TOP | 6.4(L)x3.7(W)x3.6(H) | 22 T | 1 |
| S5 | SAT/DIVE CONTROL VAN - TOP | 7.0(L)x3.0(W)x3.0(H) | 8.9 T | 1 |
| S6 | HRC | 4.8(L)x3.3(W)x3.5(H) | 16.8 T | 1 |
| S7 | MACHINERY VAN - BOTTOM | 7.0(L)x3.0(W)x3.0(H) | 14.2 T | 2 |
| S8 | TECH STORE - BOTTOM | 3.44(L)x2.425(W)x2.133(H) | 10 T | 1 |
| S9 | MAIN HYDRAULIC POWER UNIT | 1.9(L)x1.57(W)x2.4(H) | 3.9 T | 1 |
| S10 | STANDBY HYDRAULIC POWER UNIT | 1.275(L)x1.57(W)x2.4(H) | 2.5 T | 1 |
| S11 | DIESEL HYDRAULIC POWER UNIT | 2.21(L)x1.2(W)x2.3(H) | 2.8 T | 1 |

SM1 DX 3000 SATURATION DIVING SYSTEM

| | | |
|------|-------------|-------|
| DATE | SCALE | TITLE |
| | 1:50 | |
| DATE | PAPER SIZE | REV. |
| | | |
| DATE | DRAWING NO. | |
| | TBA | |