



Modular 200msw/12 man

Saturation Diving System(SAT-06)



Designed and built by Hallin Marine, the 12-man Saturation Diving Systems are ABS certified and operated in accordance with International Maritime Contractors Association guidelines and codes of practice for offshore diving operations.

The compact system consists of dive and saturation control, diver's hot water unit, diver gas reclaim, ECU, potable water unit, 9-man deck decompression chamber, 12-man hyperbaric rescue chamber and a 3-man diving bell.

SHEPL has completed several 12-man systems using helium oxygen mixtures that allow longer duration in-water working time and at greater depths than are achievable using air diving techniques.



Specifications

MAIN PARTICULARS

| | |
|-------------------------|------------------|
| Builder | Hallin Marine |
| Classification standard | A1 Diving System |
| Design standard | IMCA D018/ D024 |
| Depth rating | 21 bar 200 msw |

DIVE AND SATURATION CONTROL UNIT

Dive / Bell control panels comprising:
Diver gas reclaim control panel
Bell services controls:
Electrics, communications and analyzers, hot water temp monitoring, carbon dioxide and oxygen analysis of divers gases
Through water emergency communications, diver colour hat camera and video recording system controls
Bell internal video monitoring and controls
Chamber life support control panels DDC, TUP, HRC comprising:
Unscrambler communications sets
Chamber depth and atmosphere monitoring and analysis
Chamber CCTV video monitoring and gas distribution panel

HYPERBARIC RESCUE CHAMBER 12-MAN

Onboard emergency gas and battery power for 72 hours
12-man HRC c/w 12 x full seat harness and approved safety helmets
1 x toilet, shower, wash basin
4 x HCU, 13 x BIBS complete with dump, 5 x carbon dioxide scrubbers, medical lock and communications transfer, 6 x bunk beds, 1 x heater
Lifting frame and rigging, towing bridle

LIFE SUPPORT MACHINERY UNIT

Electric main / Emergency distribution system
Dual diver hot water unit (100% redundancy)
Environmental control unit (100% redundancy)
Chamber portable water unit (hot/cold)
Divex air driven gas reclaim surface unit

DIVING BELL 3-MAN

3 x diver excursion umbilicals complete with reclaim hose
2 x diver helmet mounted colour cameras and lights
2 x bell carbon dioxide scrubber
2 x bell heater (hot water unit)
2 diver gas reclaim (DGRS) panel
Bell/diver communication systems
Onboard emergency gas cylinders and battery
Through water communications
Telescopic stand-off frame
Hydraulic bottom door system
Internal and external lights

TUP

4 x BIBS complete with dump
1 x toilet, shower, wash basin, 1 x HCU
Carbon dioxide scrubbers and communications

HRC EMERGENCY CONTROL UNIT

Chamber life support control panel
Unscrambler comms set
Chamber depth atmosphere
Monitoring and Analysis
Chamber CCTV video monitoring and gas distribution panel

CHAMBER VOLUMES

| | |
|----------|---------------------|
| Main DDC | 21.40m ³ |
| TUP | 6.0m ³ |
| HRC | 19.26m ³ |
| Bell | 5.00m ³ |

MAIN SKID AND DDC

'A' frame and bell trolley
9-man living chamber c/w 9 x bunk beds with mattresses
10 x BIBS, 4 x HCU, 6 x carbon dioxide scrubbers, medical lock and communication

WINCH SKID

Main bell winch (hydraulic 10mT man riding)
Guide wire winch (hydraulic 6mT double sheaved man riding)
Umbilical sheave (hydraulic)
Hydraulic power pack with 100% redundancy

OTHER EQUIPMENT

200m bell emergency umbilical
20ft ISO store / workshop container
260m bell umbilical with basket
3 x Jewel 601 reclaim hats
2 KMB x 18B bank mask
Deck electrical / gas leads
Spreader bar and lifting slings

POWER REQUIREMENTS

| | |
|---------------------|-----------------|
| Power requirement | 440Vac 50/60Hz |
| Emergency generator | 350 kVA |
| Compressed air | 400 cfm @90 psi |
| Seawater | 25 gpm @2-4 bar |
| Freshwater | 5 gpm @ 2-3 bar |

MAIN CHAMBER INCLUDING BELL AND SKID

| | |
|--------|---------|
| Length | 12800mm |
| Width | 3700mm |
| Height | 7000mm |
| Weight | 76000kg |

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