



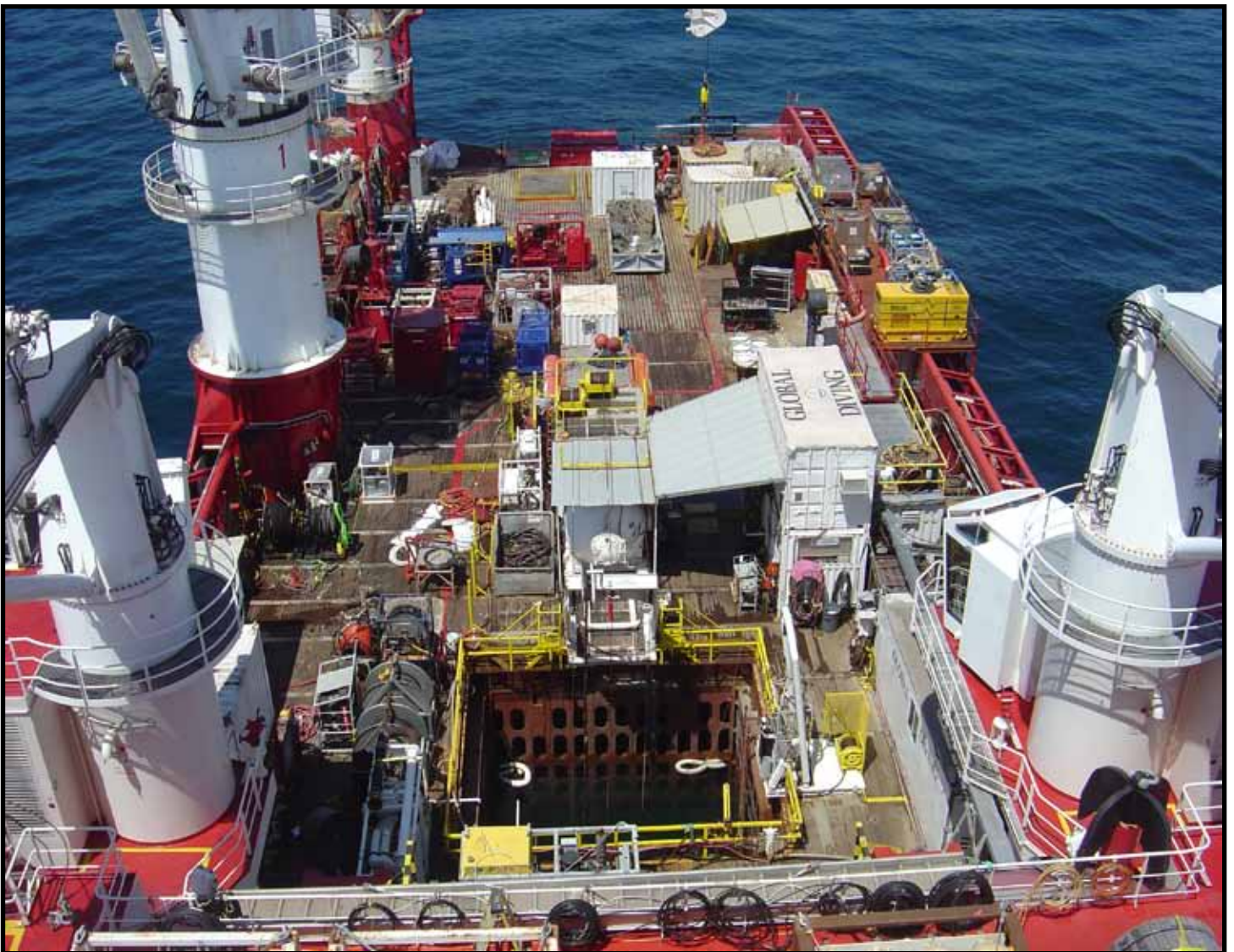
**GLOBAL**  
Diving & Salvage, Inc.

FOR MORE INFORMATION  
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## **SATURATION SYSTEM I**

IMCA COMPLIANT  
4 MAN - 600 fsw

Technical Specifications



**Global Diving & Salvage, Inc.**

# SATURATION SYSTEM I COMPONENTS

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Global Diving & Salvage's SAT I is a compact 4-man saturation diving system designed with a two man side mate - end launch bell. The system is certified to 600 fsw and is equipped with a 6-man Hyperbaric Rescue Chamber (HRC) and gas reclaim system for efficient operation. The IMCA compliant system is of a compact and modular design making it uniquely suited for transit to remote locations or installation in areas which are space constrained. Depending on operational and footprint requirements the system may be re-configured as a bell bounce system for surface gas diving.

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## Primary Living Chamber (6 Man/Double Lock)

### Main Lock

- Bunk beds w/ fire retardant mattresses
- Medical lock w/ pressure interlock
- Scott BIBs w/ overboard dumps (x 5)
- HCU with two carbon dioxide scrubbers
- Auxiliary carbon dioxide scrubbers (x 2)
- Lung powered scrubbers (x 5)
- Wired communications

### Transfer Lock

- Side hatch for transfer into the bell
- Shower, toilet, washbasin
- Scott BIBs w/ overboard dumps (x 2)
- HCU with two carbon dioxide scrubbers
- Auxiliary carbon dioxide scrubbers (x 2)
- Wired communications
- Sound powered phone

## Hyperbaric Rescue Chamber (6 Man Rescue)

- Launch system activated by crane or by floating off
- 72 hours autonomous support for 6 men
- HeO<sub>2</sub> & O<sub>2</sub> reserve cylinders
- Sound powered communications
- AODC emergency signage
- Battery power reserves
- EPIRB, strobe, radar reflector
- Tow bridle and lifting slings

### Living Compartment

- Medical lock w/ pressure interlock
- Bunk beds w/ fire retardant mattresses
- Jump seats & harnesses (x 6)
- O<sub>2</sub> make-up injector system
- Scott BIBs w/ overboard dumps (x 7)
- HCU with two carbon dioxide scrubbers
- Lung powered scrubbers (x 7)
- Wired communications

## Hyperbaric Rescue Chamber con't.

### Bathroom Facilities / Entrance Lock

- Shower, toilet, washbasin
- Jump seats & harnesses (x 2)
- HCU with carbon dioxide scrubber
- Auxiliary carbon dioxide scrubber
- Wired communications

## Dive Bell System (2 Man)

### Launch System

- Primary bell hydraulic winch
- Bell clump weight hydraulic winch
- Hydraulic powered umbilical sheave
- Bell umbilical (800ft) w/ basket
- Dual HPU (50HP each)

### Bell

- 12 hours autonomous support
- Transponder & re-location device
- Primary diver umbilical (165ft)
- Stand-by diver umbilical (175ft)
- Gas & O<sub>2</sub> reserve cylinders
- Divex gas reclaim
- Divex reclaim hats (x 2)
- Bell gas control panel
- O<sub>2</sub> make-up injector system
- Scott BIBs (x 2)
- Carbon dioxide scrubber
- Lung powered scrubbers (x 2)
- Thru-water communications
- Wired communications
- Sound powered phone
- Battery power reserves
- Bell heater
- KMB 18B band mask
- Helmet mounted color video and light

## Dive/Saturation Control Van

### Dive Control Station

- Bell gas control panel
- Divex reclaim booster panel
- O<sub>2</sub> analyzers (x 2) & CO<sub>2</sub> analyzer
- Diver communication panel
- Clear Comm communications
- Diver depth monitoring panels (x 2)
- 24 volt bell power systems (x 2)
- Video monitor systems (x 2)
- DVD & DVR video recording
- VHF & UHF Radios
- Loud hailer (150 watt)
- DP light system

### Saturation Control

- Gas distribution panel
- Chamber control panels (x 4)
- Treatment gas panel
- Analyzation panel
- O<sub>2</sub> analyzers (x 3) & CO<sub>2</sub> analyzers (x 3)
- Chamber communication systems (x 2)
- Chamber video monitoring system
- Electrical control switching panel
- 24 volt chamber power systems (x 2)

### Essential Power Distribution

- Primary: 200kw, 480v, 3 phase
- Back-up: 200kw, 480v, 3 phase

### Nonessential Power

- 100kw, 480v, 3 phase
- Supports:  
Tooling, welding, deck lighting

## HRC Intervention Van

- Gas & O<sub>2</sub> reserve cylinders
- Gas distribution system
- O<sub>2</sub> make-up system
- O<sub>2</sub> and CO<sub>2</sub> analyzation system
- Depth monitoring system
- Environmental system
- Emergency umbilical for HRC
- Soda Sorb capable for diver desat

## Environmental Control Van

- External environmental control units (x 2)
- Potable hot / cold water systems
- SAT tech workshop with spares locker

## Divers Reclaim Van

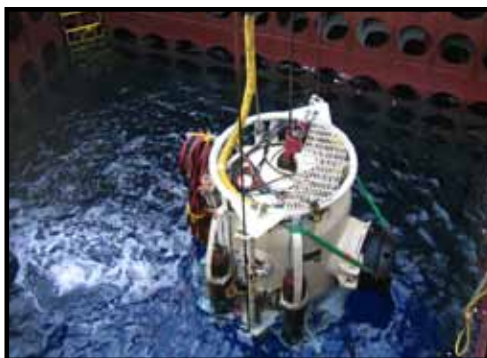
- Divex electric gasmizer reclaim system
- Haskell booster pumps (x 2)

## Supporting Equipment

- Dive Locker
- Spares Van
- Electric immersion hot water unit (90kva)
- Auxiliary diesel hot water unit
- Electric 5120 diving compressor
- Surface diving station
- LARS with dedicated HPU
- SL 37 surface diving hats (x 2)
- Deck leads for electrical and gas
- Rigging equipment

## System Requirements

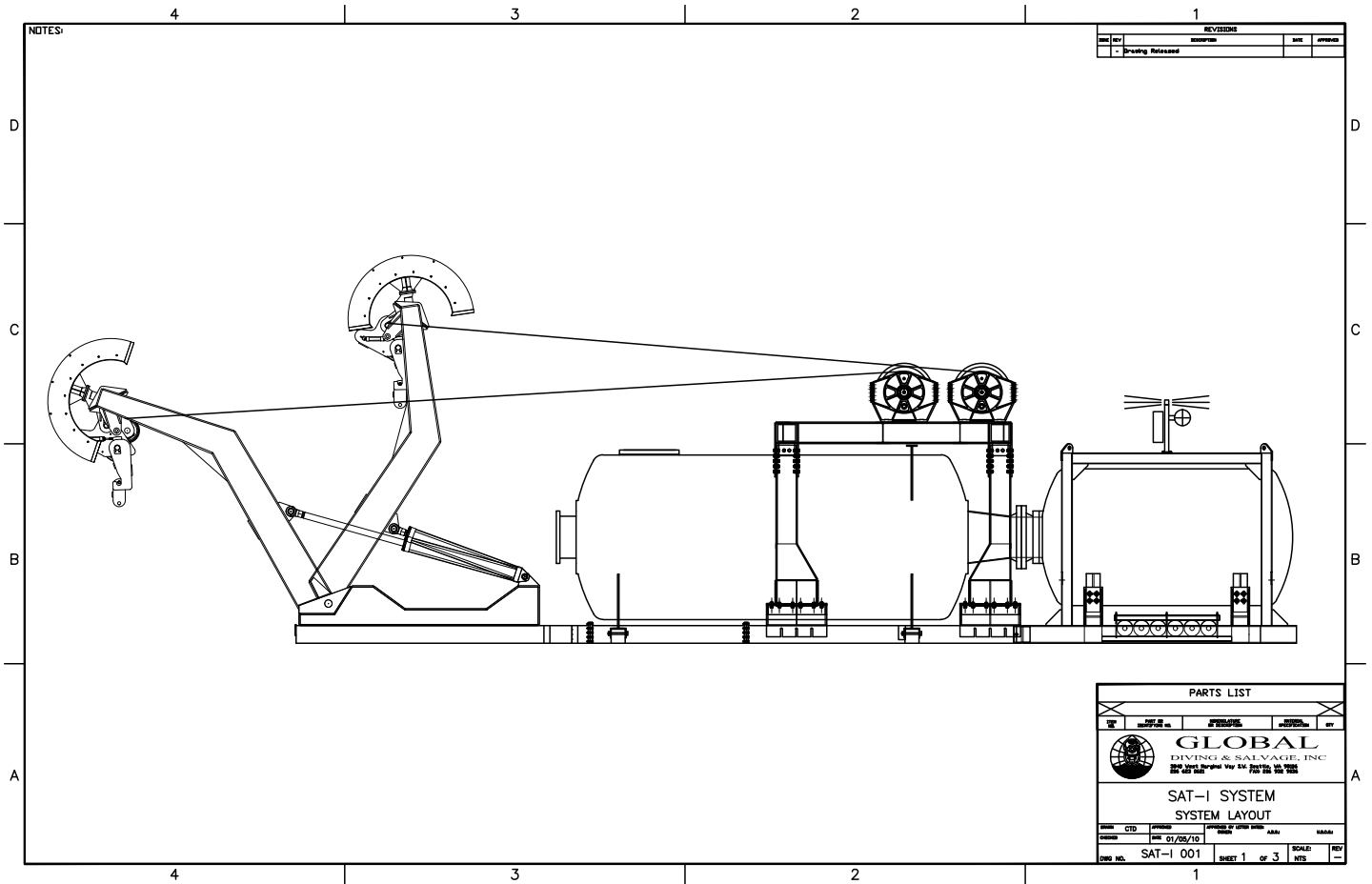
- Electric Power: 250kw, 480v, 60Hz
- Auxiliary Generator: 250kw
- Compressed Air: 400CFM, 90psi
- Seawater: 25GPM
- Freshwater: 3GPM



### SATURATION SYSTEM I DIMENSIONS

Component	Length	Width	Height	Weight
Primary Living Chamber	22 ft	8 ft	8 ft	52,000 lbs
Hyperbaric Rescue Chamber	16 ft	8 ft	8 ft	17,000 lbs
Dive Bell				6,000 lbs
LARS Winch & Platform	15 ft	12 ft	12 ft	20,400 lbs
Dive/Saturation Control Van	20 ft	8 ft	8 ft	10,400 lbs
Environmental Control Unit	20 ft	8 ft	8 ft	9,500 lbs
Reclaim Van	10 ft	8 ft	8 ft	5,000 lbs
HRC Intervention Van	10 ft	8 ft	8 ft	10,000 lbs
Saturation Diver Van	20 ft	8 ft	8 ft	9,500 lbs
Spares Van	20 ft	8 ft	8 ft	18,600 lbs
Deck Decompression Chamber	20 ft	10 ft	8 ft	46,600 lbs

\* These dimensions are guidelines for the key components of this system only.



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