SATURATION SYSTEM IV

TECHNICAL SPECIFICATIONS SIX PERSON, 1,000 FSW



COMPONENTS

Global's SAT IV is a six-person saturation diving system designed with a three-person top mate – side launch bell. This system features a modular design and flexible configuration options; minimizing the footprint of the required components makes it a versatile solution for areas with limited space. The system is certified to 1,000 fsw and is equipped with an eight-person self-launch Hyperbaric Rescue Chamber (HRC) for offshore applications, Bell Launch and Recovery System (LARS) with redundant recovery capabilities for safety, and a gas reclaim system for efficient operation.

PRIMARY LIVING CHAMBER (SIX PERSON, SINGLE LOCK)

Main Lock

- Bunk beds with fire retardant mattresses
- Medical lock with pressure interlock
- Scott BIBs with overboard dumps (x 7)
- HCU with two carbon dioxide scrubbers
- Auxiliary carbon dioxide scrubbers (x 2)
- Lung powered scrubbers (x 5)

Transfer Lock

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

HYPERBARIC RESCUE CHAMBER (EIGHT-PERSON RESCUE)

Features

- Automatic tilt over board launch system
- 72 hours autonomous support for 8 men
- HeO2 and O2 reserve cylinders
- Sound powered communications
- AODC emergency signage
- Battery power reserves
- EPIRB, strobe, radar reflector
- Tow bridle and lifting slings

Living Compartment

- Medical lock with pressure interlock
- Bunk beds with fire retardant mattresses
- Jump seats and harnesses (x 8)
- O2 make-up injector system
- Scott BIBs with overboard dumps (x 9)
- HCU with two carbon dioxide scrubbers
- Auxiliary carbon dioxide scrubbers (x 2)
- Lung powered scrubbers (x 9)

Bathroom Facilities/Entrance Lock

- Shower, toilet, washbasin
- HCU with carbon dioxide scrubber
- Auxiliary carbon dioxide scrubber
- Wired communications

DIVE BELL SYSTEM (THREE PERSON)

Launch System

- Primary bell hydraulic winch
- Bell clump weight hydraulic winch
- Hydraulic powered umbilical sheave
- Fibron bell umbilical (1,200 ft) with basket
- Primary HPU (150hp / 64gpm)
- Reserve HPU (150hp / 64gpm)

Bell

- 12 hours autonomous support
- Transponder and re-location device
- Primary diver umbilical (165 ft)
- Stand-by diver umbilical (175 ft)
- Gas and O2 reserve cylinders
- Divex gas reclaim
- Divex reclaim hats (x 2)
- Bell gas control panel
- O2 make-up injector system
- Scott BIBs (x 3)
- Carbon dioxide scrubber (x 2)
- Lung powered scrubbers (x 2)
- Thru-water communications
- Wired communications
- Sound powered phone
- Battery power reserves
- Bell heater
- Kirby Morgan KM18B band mask (x 2)
- Helmet mounted color video and light





DIVE/SATURATION CONTROL VAN

Dive Control Station

- Bell gas control panel
- Divex reclaim booster panel
- O2 analyzers (x 2) and CO2 analyzer
- Diver communication panel
- Clear Comm communications
- Diver depth monitoring panels (x 2)
- 24 volt bell power systems (x 2)
- Video monitor systems
- DVD and DVR video recording (x 3)
- VHF and UHF Radios
- Loud hailer (150 watt)
- DP Light system

Saturation Control Station

- Gas distribution panel
- Chamber control panels (x 4)
- Treatment gas panel
- Analyzation panel
- O2 analyzers (x 3) and CO2 analyzers (x 3)
- Chamber communication systems (x 2)
- Chamber video monitoring system
- Electrical control switching panel
- 24 volt chamber power systems (x 2)

ENVIRONMENTAL CONTROL VAN

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

HRC INTERVENTION VA

- Gas and O2 reserve cylinders
- Gas distribution system
- O2 make-up system
- O2 and CO2 analyzation system
- Depth monitoring system
- Environmental system
- Emergency umbilical for HRC
- Sodasorb capable for diver desat

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
- Optional SLS re-breather hats & backpacks

POWER DISTRIBUTION VAN

Essential Power

- Primary : 200kw, 480v, 3 phase
- Back-up : 200kw, 480v, 3 phase
- Supports : Dive/SAT Van, ECU Van, Main & back-up power for LARS

Nonessential Power

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

SYSTEM REQUIREMENTS

- Electric Power
- Auxiliary Generator
- Compressed Air
- Seawater
- Freshwater
- : 200kw : 400cfm, 90 psi

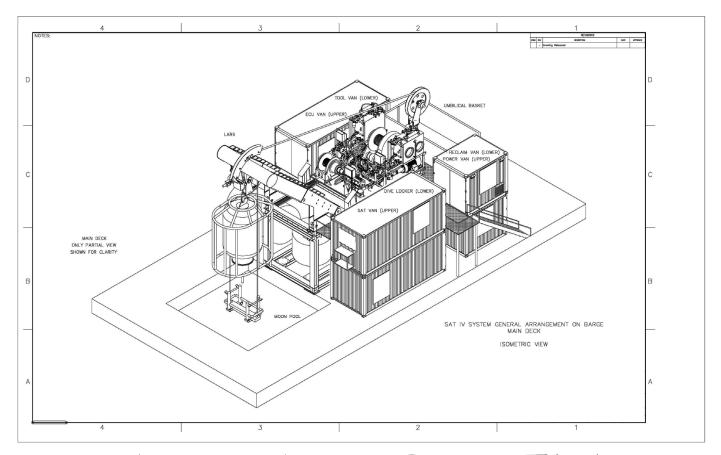
: 350kw, 480v, 60Hz

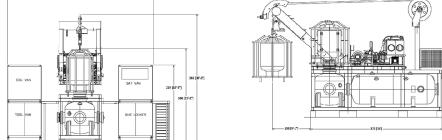
- :75gpm
- : 3gpm

SYSTEM DIMENSIONS

COMPONENT	LENGTH	WIDTH	НЕІБНТ	WEIGHT
Primary Living Chamber	22' 2"	10'	9'10"	43,800 lbs
Transfer Lock	8' 6"	10'	9'10"	21,900 lbs
Hyperbaric Rescue Chamber	18' 3"	9' 10"		19,540 lbs
Dive Bell System	9' 6"	6' 6"	11' 6"	18,848 lbs
LARS Winch and Platform	22'	10') (11')	59,000 lbs
Dive/Saturation Control Van	20'	8'	8'	12,500 lbs
Environmental Control Unit	20'	8'	8'	13,500 lbs
Diver Reclaim Van	10'	8'	8'	9,300 lbs
Power Distribution Van	10'	8'	8'	6,000 lbs
System Reclaim Van	20'	8'	8'	8,000 lbs
Tool/Spares Van	20'	8'	8'	15,000 lbs

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





CHAMPAGNE