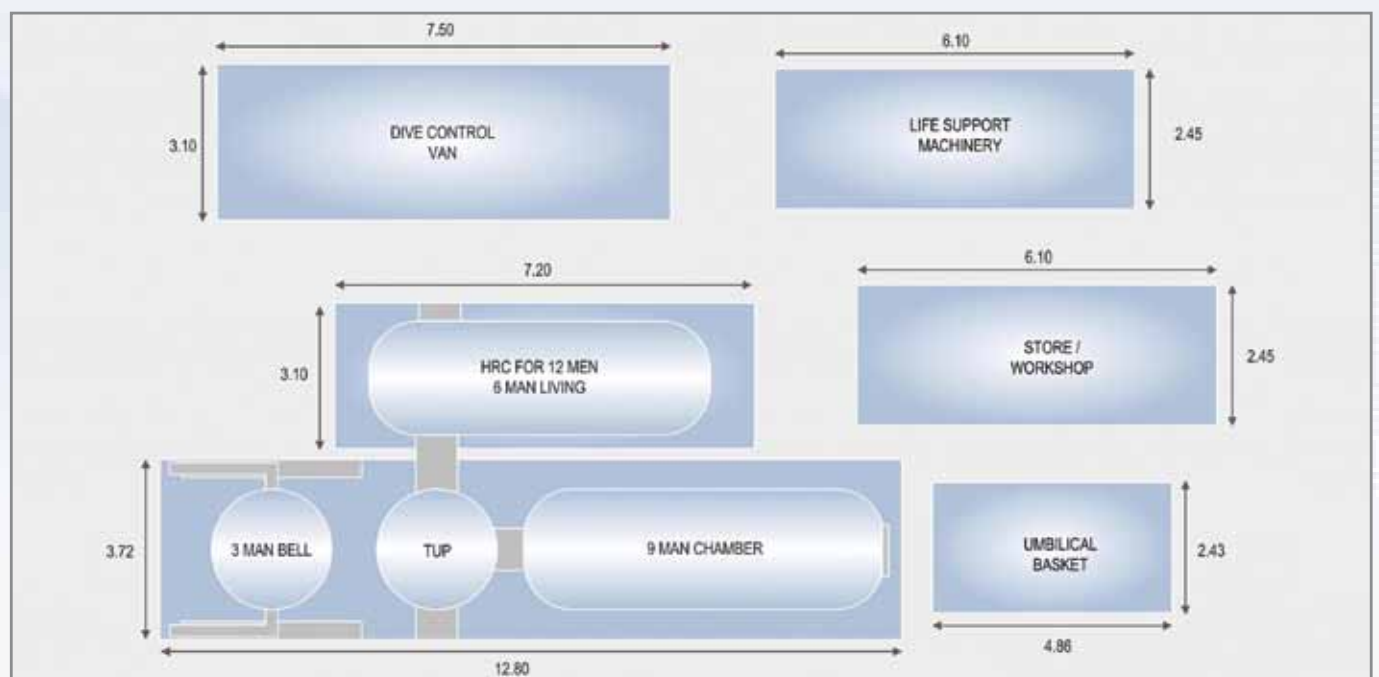


Modular Saturation Diving System

200 msw/12 man

Hallin Manufacturing Saturation Diving Systems are built to ABS Class rules and follow International Marine Contractors Association (IMCA) guidelines for offshore diving systems D018 and D024, to carry out saturation diving operations to 200m water depth. All Hallin Manufacturing saturation diving systems are designed to be fully portable and to take minimum deck space through the ability to stack containers if required. Industry standard internal and external fit out equipment is used in all system builds and a comprehensive stores and spares package can be provided. An umbilical winch is offered as an option to umbilical basket and powered sheave. Other options can be discussed.



Modular Saturation Diving System - 200 msw/12 man

MAIN PARTICULARS

Builder	Hallin Manufacturing
Classification standard	ABS 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 1, 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 hrs
 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, 6 x carbon dioxide scrubbers, medical lock and communications transfer, 6 x bunk beds
 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
 Aircon environment (optional)

DIVING BELL 3 MAN

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

HRC EMERGENCY CONTROL UNIT

Chamber life support control panel
 Unscrambler comms sets
 Chamber Depth Atmosphere
 Monitoring and Analysis
 Chamber CCTV video monitoring and gas distribution panel

CHAMBER VOLUMES

Main DDC	21.40m ³
TUP	5.80m ³
HRC	19.26m ³
Bell	5.00m ³

MAIN SKID

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

TUP

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

WINCH SKID

Main bell winch (hydraulic 12T man riding)
 Guide wire winch (hydraulic 8T double sheaved man riding)
 Recovery to bell catcher hooks
 Umbilical sheave (hydraulic)
 Hydraulic powerpack and tanks with 100% redundancy

OTHER EQUIPMENT

20 ft 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	440 50/60Hz
Emergency generator	250 kVA
Compressed air	400 cfm @90 psi
Seawater	25 gpm @2-4 bar
Freshwater	3 gpm @ 2-3 bar

MAIN CHAMBER INCLUDING BELL AND SKID

Length (m)	12.80
Width (m)	3.70
Height (m)	7.00
Weight (kgs)	72,000