



OWA 200SAT-1

Saturation Diving System



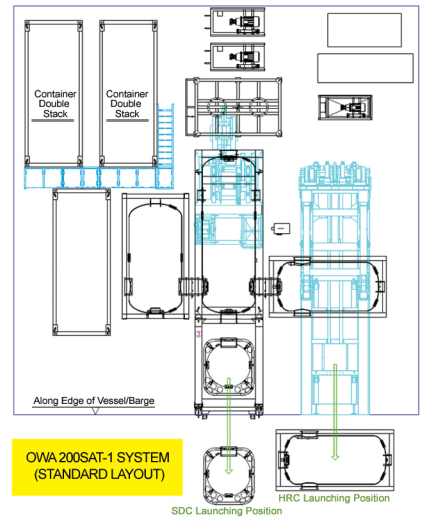
200SAT-1 is a twelve men portable saturation diving system with a modular and compact footprint for efficient mobilisation on variety of DP 2 vessels and anchored barges. The system is 200msw rated and the three men bell allows two divers to be working safely in the water. The system is Classed by Nippon Kaiji Kyokai (Class NK) and is IMCA D024 compliant. 200SAT-1 was commissioned in 2013 and has been utilised almost annually and maintained continuously by OWA's in-house diving technical team.



Bell Launching from side of DLB



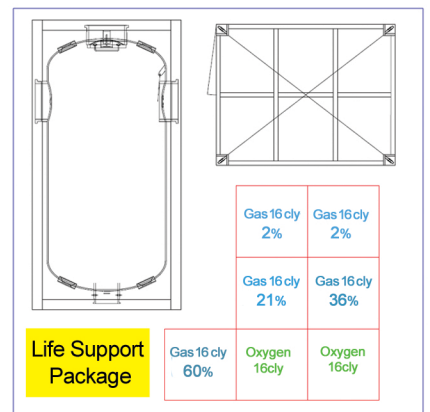
Bell Launching from Moonpool of DSV



Demonstration of HRC Launching



Life Support Package



Providing Cost Effective Solutions

Main Particulars	
Owner	Ocean Works Asia Inc.
System Commissioned	2013
Builder	Ocean Works Asia Inc.
Class Society	Nippon Kaiji Kyokai (Class NK)
Certification/Testing Standard	IMCA D 018 & D024

Living Chambers (LC-1: DDC-10)	
Chamber Volume	ML: 15.5m ³ , EL: 7.5m ³
Living Capacity	ML: 6 men living, EL: N/A
Pressure Rated	20kg/cm ²

Living Chambers (LC-2: HTRC-4)	
Chamber Volume	15.9m ³
Living Capacity	4men living
Pressure Rated	20kg/cm ²

Living Chambers (LC-3: DDC-7/Come Out Chamber)	
Chamber Volume	15.9m ³
Living Capacity	4men living
Pressure Rated	20kg/cm ²

Control Van	
Diver/Bell Control Panel	Chamber Control/Monitoring Panel
Diver Video Recording System	Uninterrupted Power Supply System

Reclaim System	
Type	Gas Service Gasmizer
Dive Control System	2 Diver Reclaim, Bell Scrubbing
Gas Transfer Pumps	6 x HASKEL Gas Booster Pumps

Diver Hot Water System	
Driven	Electric Heater
Supply	2 Divers and Heating SDC

System Required	
Electric Power - System	440V - AC, 60Hz/400A
Emergency Generator	440V - AC, 60Hz/350KVA
Compressed Air	7kg/cm ² /350cfm
Seawater (Cooling)	200L/min
Fresh Water	100L/man/day

Diving Bell (SDC-5)	
Chamber Volume	4.5m ³
Diver Lockout Capacity	2 Divers
Hat Mounted Camera System	2
Diving Helmet	SL17C Jewel Reclaim Hat
Mating to DDC	Side Mating
Pressure Rated	20kg/cm ²

Launching and Recovery System	
A-Frame	SWL 10.6 Ton
Main Winch (Wire Length: 300M)	SWL 9.0 Ton
Guide Weight Winch (Wire Length: 450M)	SWL 1.75 Ton (Double Sheave)
Valve Stand	For Launching and Recovery Control
Hydraulic Power Pack x 2	Primary and Secondary
Hydraulic Power Sheave	Recover Main Umbilical

Umbilicals Length	
Bell Main Umbilical	300M
Bell Spare Umbilical	300M
Lockout Diver - 1	50M (Option 80M)
Lockout Diver - 2	50M (Option 80M)
Bell Man	55M (Option 85M)

Life Support Machinery	
Hot Water Pot Unit	Air Driven
ECU Unit	4 x Control Master Unit
Scrubbers	Build in Chamber

Hyperbaric Evacuation System

HRC System (LC-2: HTRC-4)		HRC Launching System (HLS-1)	
Type	Float Away Chamber	Outreach	1.7M
Capacity	12 men Emergency	SWL	13.8 Ton
Survival Equipment (Battery Operated)	72 hours	Remote Release System	Manual Operation
Weight in Air (Incl 12 Divers)	13.5 Ton	Launching Speed	6M / Min
Towing Speed	4knot	Motor Spec	22KW

Life Support Package

10 Feet Container (Life Support Control)		Gas Package (*80M Working Depth)	
1 x Chamber Control Panel	1 x Secondary Cooler unit	He-O ² Quad (98%-2%)	2 x 16 Cylinders Rack
1 x Primary ECU Unit (Hot/Cold)	1 x Secondary Heater unit	He-O ² Quad (79%-21%)	1 x 16 Cylinders Rack
System Required		He-O ² Quad (64%-36%)	1 x 16 Cylinders Rack
Electric Power - 440V/50A	Sea Water - 50L/min	He-O ² Quad (40% - 60%)	1 x 16 Cylinders Rack
Generator - 440V/45KVA (Optional)	Fresh Water - 100L/man/day	Diving Oxygen	2 x 16 Cylinders Rack

System Dimensions

Description	Dimension (L x W x H)	Weight (Ton)	Description	Dimension (L x W x H)	Weight (Ton)
LC-1 (DDC-10)	7000 x 2850 x 3180	20.0	HRC launching System (HLS-1)	9900 x 2890 x 5560	30.0
LC-2 (HTRC-4)	5950 x 2600 x 2700	13.5	Control Van (CV)	6000 x 2400 x 2900	9.0
LC-3 (DDC-7)	5300 x 2800 x 3500	14.0	Maintenance Van	6500 x 2400 x 2700	9.0
Diving Bell (SDC-5)	2500 x 2200 x 2700	9.0	Life Support Van	6000 x 2400 x 2600	9.0
LARS (A-Frame)	4000 x 2850 x 5430	13.0	Reclaim/Hot Water Van	6600 x 2400 x 2700	9.0
Main Winch	2500 x 2850 x 1800	9.0	Power Station	6500 x 2400 x 2700	9.0
Guide Weight Winch /Valve Stand	2850 x 2000 x 2700	4.0	Back up Generator	TBA	TBA
Umbilical Power Sheave	2150 x 1200 x 2600	2.0	Divng Gases	TBA	TBA
Main Umbilical Basket	4100 x 2500 x 1900	4.0			
Emergency Umbilical Basket	4100 x 2500 x 1900	4.0	Life Support Package		
Hydraulic Power Pack - 1	2350 x 1200 x 2000	3.0	10 Feet Container	3100 x 2500 x 3200	6.0
Hydraulic Power Pack - 2	2350 x 1200 x 2000	3.0	Diving Gases	TBA	TBA
Base Skid for LC-1	11100 x 2850 x 300	3.0	Generator (Optional)	TBA	TBA