

DS.DB.001 Diving Equipment

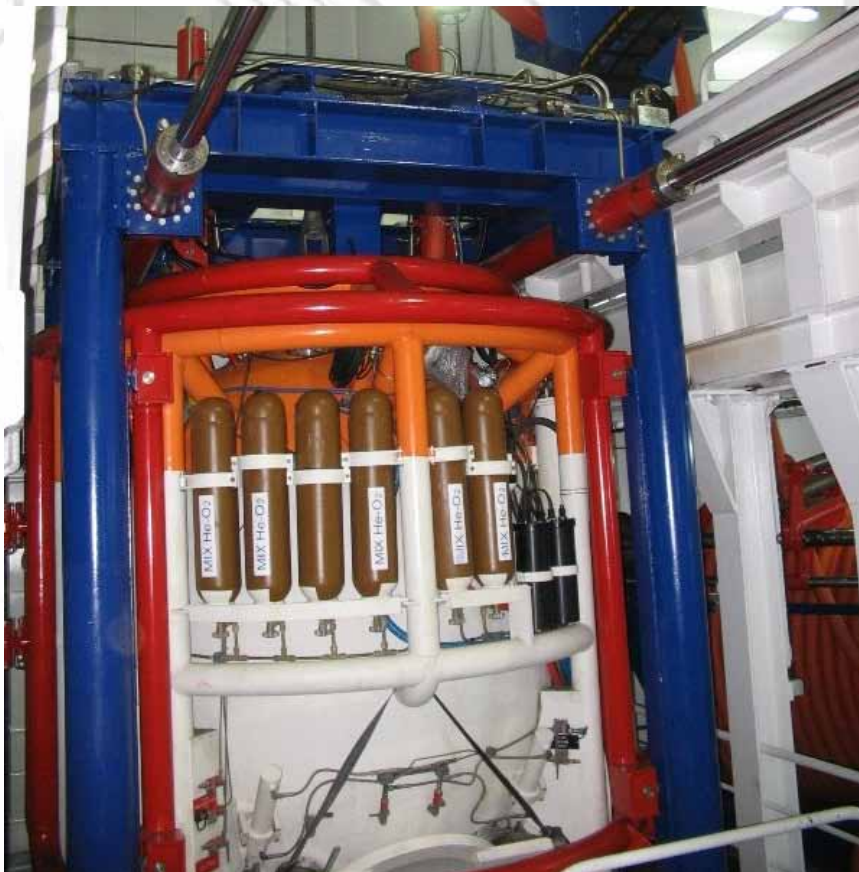
3-Man Diving Bell Mk1

Description

The Drass Diving Bell is a 3-man bottom mating bell. Total internal volume 5.4m³, design pressure 31.4 bar; man way internal diameter 800mm.

The Diving Bell is fitted with all the accessories and components to allow full operability.

The internal arrangement is designed by Drass to provide the best solution in terms of ergonomics and efficiency.



Picture 1. 3 Man Diving Bell

The main features are the following :

- Pressure rating : the bell is designed to operate to a depth up to 300 m.s.w. It can be used in saturation mode with an internal pressure equivalent to the working depth, or in observation mode with an internal pressure of 1 bar and a maximum working depth of 300 m.s.w.

- Main structural parts : The pressure vessel is made up of two hemispherical ends connected by a cylindrical shell as central body. All components are manufactured with high grade fine grain carbon steel.

The external protection frame is made of structural steel pipe to protect the PV against impact and allows insertion in the Bell Cursor (DS.HS.001) during the movement through the moon pool guides. The ring in the top part can be used as secondary main lifting point.

- Manhole : This is equipped with double acting single door with hydraulically operated locking device complete with safety interlocking mechanism, the door is capable of withstanding inner and outer pressure of 300 m.s.w.

- Diver umbilicals: on the seats for diver one and diver two 40m of standard diver umbilical can be stowed. Outside the bell on the external frame it is possible to stow up to 45m tender diver umbilical cable. An increase of up to 70m of diver umbilical is available as an option.

- Heat insulation : The bell is provided with an insulating cover on the outer surface to reduce heat loss when bell is deployed.

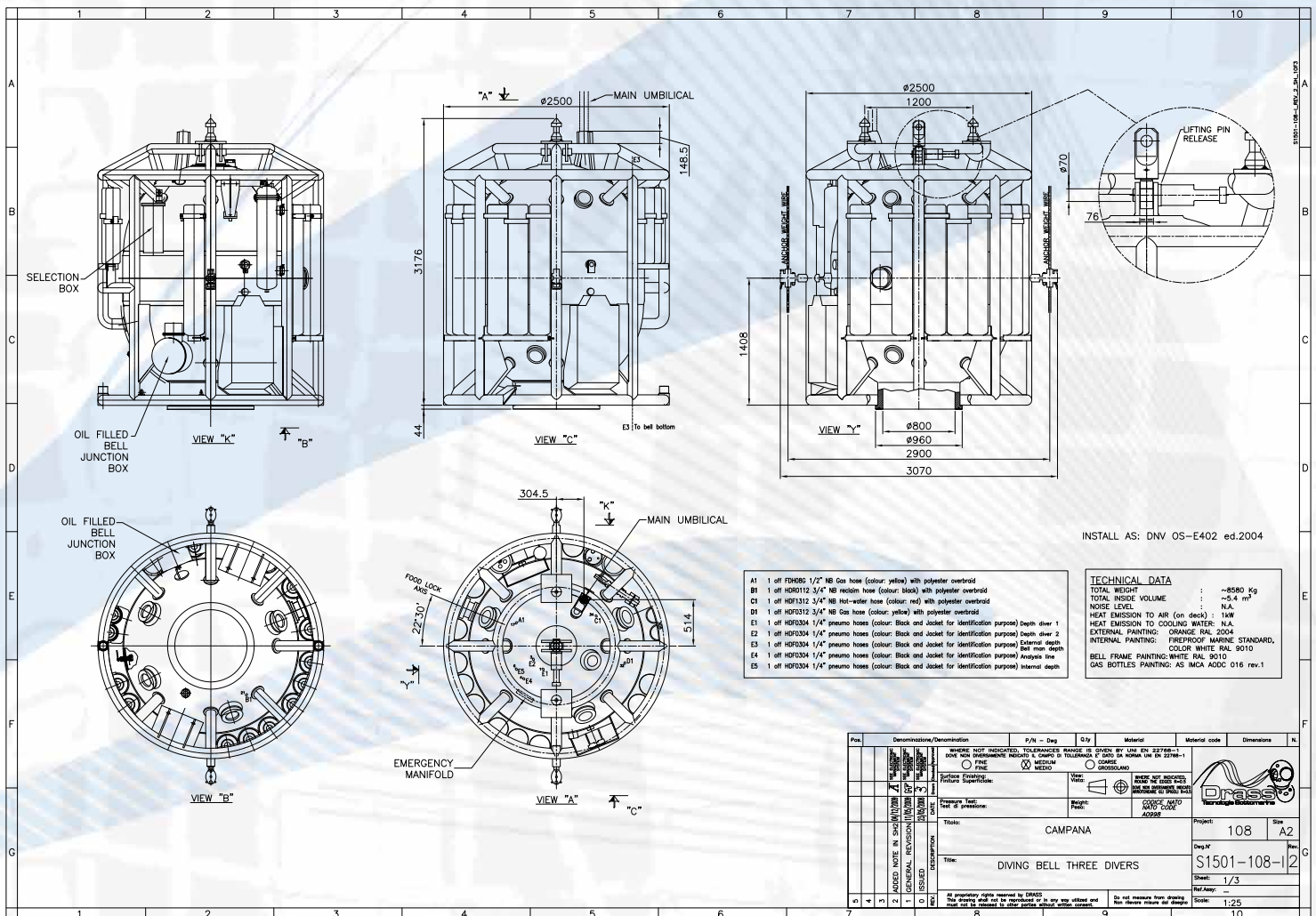
- Medical lock : The bell is equipped with a stainless steel food lock that may be used during emergency operation of the bell on the deck.

- Certification : The diving bell is designed and certified in accordance with Det Norske Veritas and IMCA Rules.

Main Dimensions:

Capacity	5.4 m ³
Design Pressure	31.4 bar
Hydrotest Pressure	44.9 bar
Operating Pressure	31.4 bar
Overall Weight with 3 men (in air)	8580 kg
Total Height	3220 mm
Inner Diameter	1900 mm
External Diameter (Outfitted)	2750mm
Drop Ballast	1500 kg
Positive Buoyancy without drop ballast	386 kg

3 Man Diving Bell Mk-1



Picture 2. General Layout.

Outer Equipment	
1	Protection Frame
2	Bottle Support
3	Gas Cylinder
4	Umbilical Guide
5	Lifting Pin Release
6	Junction Box
7	Selection Box
8	Battery Pack
9	Releasable Ballast
10	Guide Wire Device
11	O ₂ Cylinder
12	Trough Water Comms
13	Fixed Weight
14	Acrylic Window

Inner Equipment	
1	Deck Plate
2	Hot Water Manifold
3	Bell Gas Management Panel
4	No 3 Divers Seat
5	Manual Winch
6	Hand Pump
7	Temperature – Humidity Station
8	Loudspeaker
9	Communication Box
10	Hydrocarbon Analyser
11	No 2 CO2 Scrubber
12	No 1 Bell Heater
13	Light System
14	TV Camera
15	Dive Gas Reclaim Bell Equipment
16	Int. and Ext. Depth Gauges
17	Analyser System
18	Sound Powered Phone



Picture 3. Diving Bell

Drass reserves the right to modify/improve the present specification without notice prior to the order issue.



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