



Hyperbaric Rescue System

IMO regulations and main underwater and diving technical standards increased their focus in hyperbaric evacuation, so as to be able to evacuate divers under pressure, in the event of the ship having to be abandoned, as well as all other passengers. These methods are to comply with the same statutory and technical standards.

The HRC is a single lock hyperbaric rescue chamber. It is composed of a rescue lock that allows 12 + 1 admissible occupancy. The chamber is provided with up to 3 manhole connections and therefore can be installed with different configurations, depending on the system arrangement.



DS.HRS.001

FD30 - Diving Equipment

Main Features:

Pressure rating: the chamber is designed to operate with an internal pressure of maximum 31,4 bar equivalent to 300 msw.

Main structural parts: the pressure vessel is a cylindrical shell with two ellipsoidal ends. A protection frame surrounds PVHO preventing the damage during launch and recovery phase of the HRC. All components are manufactured with fine grained carbon steel.

Manholes: the chamber is provided with different external man-holes allowing connection to the system chamber complex:

- Up to 3 off man-hole ND 620
- 1 food-lock ND 300 on top for easy access during floating

Heat insulation: The HRC chamber is provided with an insulating cover on the outer surface and a protection cladding.

Medical lock: The chamber is equipped with a food lock sized to introduce soda reload for emergency CO2 scrubber:

On board fixed **fire fighting system** fully complies with severe DNV RP-E403.

An internal **control stand** assures the full control to an internal diver supervisor, giving all internal environmental parameters, gas storage and controls close at hand.

Certification: The HRC is designed and certified in accordance with Det Norske Veritas or ABS rules and IMCA, ADCI Guidance.

Internal arrangement is suitable for a pre-set height launch, using the dedicated Drass HRC Platform Launcher.

Seating arrangement gives the best protection to evacuees during launch and recovery. The unit has Single point of lifting.

DRASS put their **experience in underwater vehicles** so that all weights are carefully designed to obtain a specific reserve of buoyancy.

72 hours scrubbing filters pack, with preloaded sodalime canisters, to avoid direct contact with soda grains.

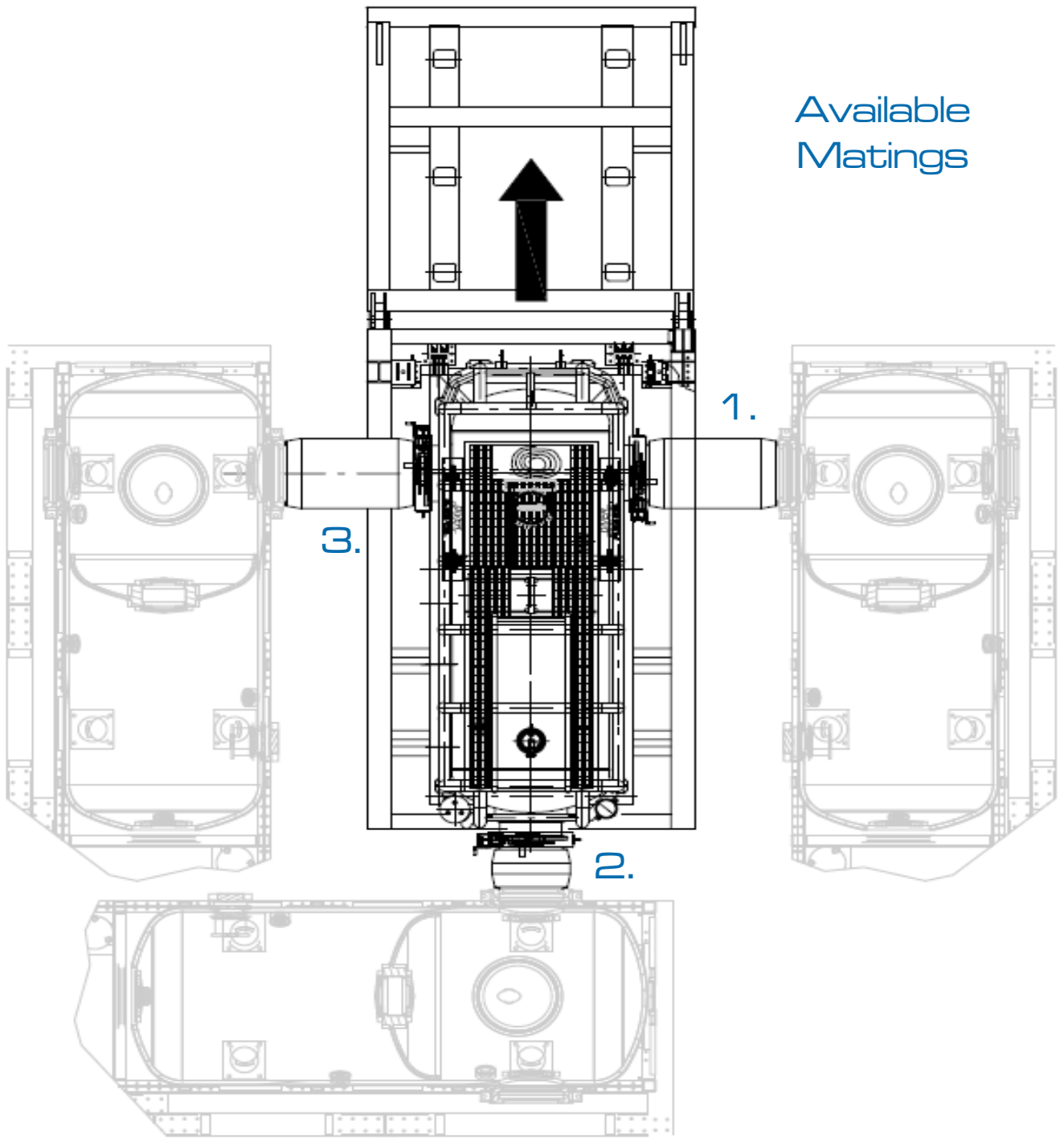
Protection from gas contamination due to sea sickness and isolation in bad weather conditions.

Available **reserve of drinking water** as per ABS rules.

Trunking Connection to the Saturation System available on demand.



HYPERBARIC RESCUE SYSTEM DS.HRS.001



RESCUE CHAMBER DIMENSIONS

External Total Length	mm	6420
External Total width	mm	2500
Internal Diameter	mm	1800
Chamber weight (including internal parts)	kg	16500

Pressure loads

Pressurization Fluid	Diving Gas Mix	
Design Pressure	bar	31.4
Hydraulic test pressure	bar	44.9
Maximun working pressure	bar	31.4

The following equipment is available as option with the chamber:

- Portable Life Support Unit **MS.HES.040**
Drass Portable Life Support Unit (PLSU) is designed and built for use in professional diving to support the saturation rescue habitat.



- Life support Package **MS.HES.030**

Containerized control room for saturation control of distressed Hyperbaric Evacuation Systems.



Main Installed Equipment	QTY
SPP	1
Communication Box	1
TV Camera	2
Analyser System: P,T,H,O2, CO2	1
Depth Gauges	2
Seats/safety belts	12+1
Bibs Connection	16
Breathing Mask	14
Internal Lights	6
Windows	2
Fire Fighting System	1
Hyperbaric Fire Extinguisher	2
Emergency Heating (upgrade available)	2+2
Emergency CO2 Scrubber (upgrade available)	2+2
Shower / washing hose	1
Toilet	1



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