



DS.HC.001

FD-30 Diving Equipment

## 6 - Man Decompression Chamber

### Description

The DDC is a double lock hyperbaric chamber: it is composed of main lock which allows six divers resting and an entry lock used as TUP (Transfer Under Pressure) that allows connection with other chambers and is fitted with sanitary facilities.



Picture 1. 6 Man Lock Decompression Chamber External

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

Main Features;

- Pressure rating : the chamber is designed to operate with an internal pressure of a maximum of 300 m.s.w.
- Main structural parts : The pressure vessel is a cylindrical shell with two ellipsoidal ends plus an intermediate dished end between the two locks. All components are manufactured with high grade fine grain carbon steel.
- Manholes :The chamber is provided with 5 external manholes allowing connection with the adjacent chamber; or a material/equipment lock :
  - 3 off ND 620 in entry lock
  - 1 off ND 620 in main lock
  - 1 off ND 800 in top part of entry lock which allows connection to bottom mating diving bell via a bell mate trunk.  
Top door is moved via an external hand pump operated hydraulic cylinder:  
Each manhole is equipped with autoclave type door which prevents the possibility of opening connections if the external pressure is lower than the internal pressure.
  - A further ND 620 manhole is placed on intermediate dished end fitted with two autoclave doors.  
This feature allows differential pressure between the two lock up to 300 m.s.w. to be maintained.  
One of the lateral manholes can be equipped with hydraulic closing mechanism to allow connection with the Escape trunk in order to close by chamber external action.
- Heat insulation : The chamber is provided with an insulating cover on the outer surface and stainless steel cladding.
- Medical lock : The chamber is equipped with a food lock sized to introduce a standard Drass soda canister for emergency CO2 scrubber system.

Certification : The hyperbaric chamber is designed and certified in accordance with Det Norske Veritas and IMCA Rules.

**CHAMBER DIMENSIONS**

EXTERNAL TOTAL LENGTH	mm	8620
EXTERNAL TOTAL WIDTH	mm	2604
EXTERNAL TOTAL HEIGHT (CHAMBER + BASE + EYEBOLT)	mm	2629
INTERNAL DIAMETER	mm	2200
CHAMBER WEIGHT (INCLUDING INTERNAL PARTS)	kg	~ 20000
<b>PRESSURE LOADS</b>		
PRESSURIZATION FLUID		Gas Mix
DESIGN PRESSURE	bar	31.4
HYDRAULIC TEST PRESSURE	bar	44.9
MAXIMUM WORKING PRESSURE	msw	300

# 6- Man Decompression Chamber



Picture2. 6 - Man Decompression Chamber Internal

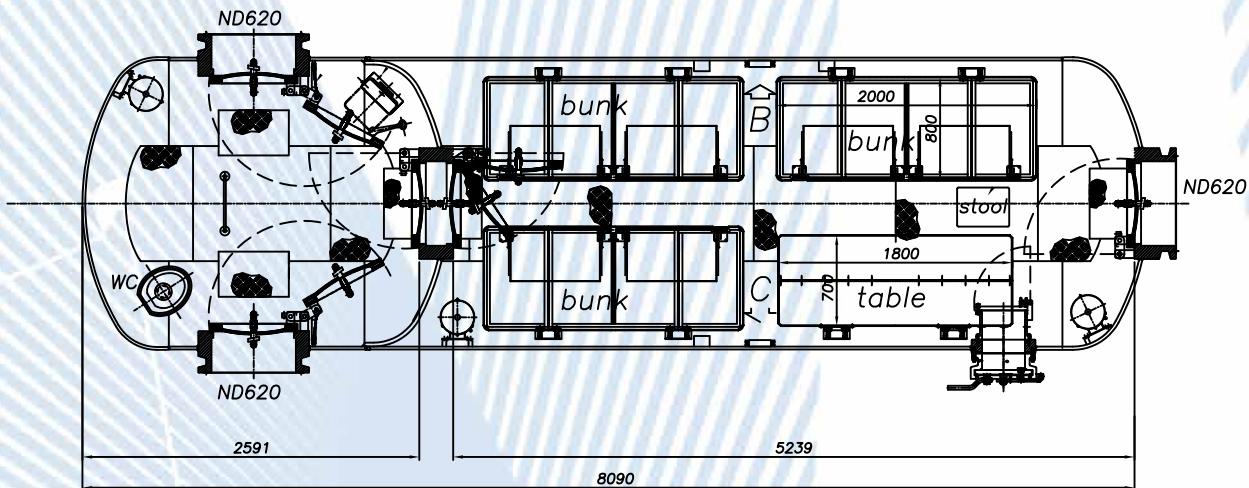
## MAIN INSTALLED EQUIPMENT

Phone	2
Communication Box	2
TV Camera	3
Analyser System: P, T, H, O <sub>2</sub> , CO <sub>2</sub>	2
Depth Gauges	4
Bunks	6
Bunks Lights	6
Bibs Manifolds	4
Breathing Mask	11
Table	1
Emergency Push Button	6
Internal Light	18
Window	5
Fire Fighting System	2
Emergency Heating	2
Emergency CO <sub>2</sub> Scrubber	3
Escape Trunk Door Hydarulic Ram	1
Bell Mate Trunk Hydraulic Ram	1
Shower	1
Basin	1
Toilet	1

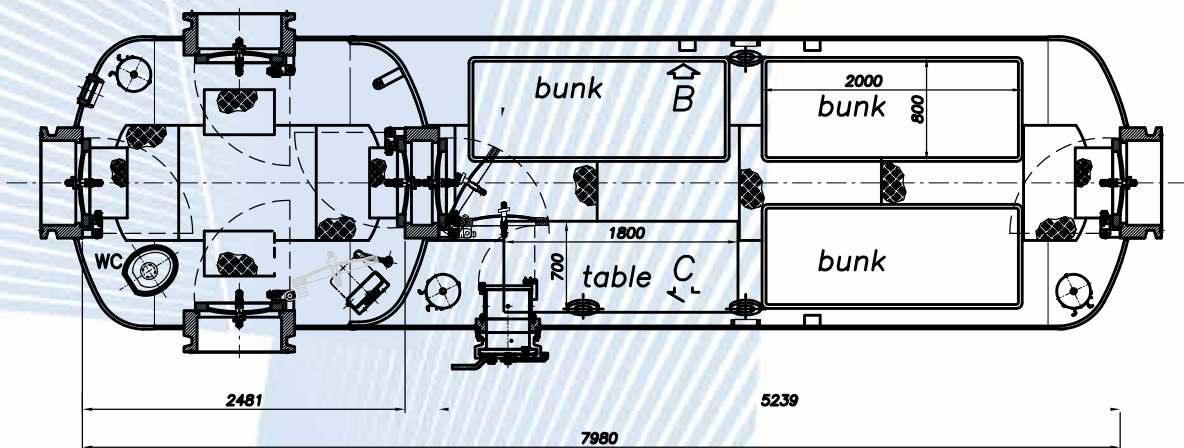
## The following equipment is available as option with the chamber:

- Life Support Unit as per DS.EC.003 (with Internal Boiler and Chiller)
- Life Support Unit as per DS.EC.001 (with External Boiler and Chiller)
- Saturation Control Console (DS.CP.001)
- External Fire Fighting System at DNV Rules 2004 (DS.HC.009)
- Material lock as per DS HC 006
- DMAC028

### Configuration A



### Configuration B



Two different arrangements are available for the 6-man chamber. The arrangements can be chosen in accordance with the diving system arrangement around the chambers.



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