



# Schematic of Saturation Diving (Saturation Diving System = SAT)

## What is Saturation Diving?

In diving operation, the deeper diver goes down, the more restrictions and risks arise such as shorter dive time, longer decompression time, mixed breathing gas required. Saturation Diving eliminates these restrictions for more effective and safe diving operation. During SAT operation, divers are pressurized to the working depth and maintained to live inside. Then come back to surface pressure after work completion.

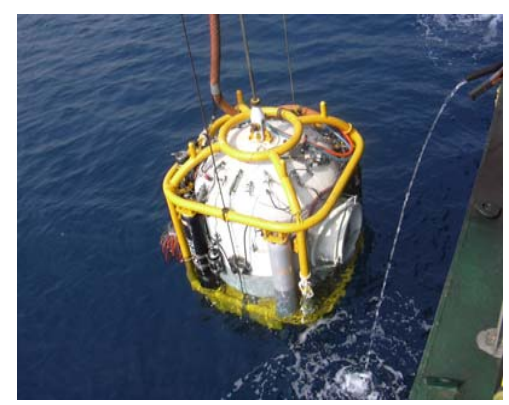
- Longer dive time is available at the deep diving compared to the normal surface decompression diving.
- Only one decompression sequence minimizes the risk of various decompression diseases.



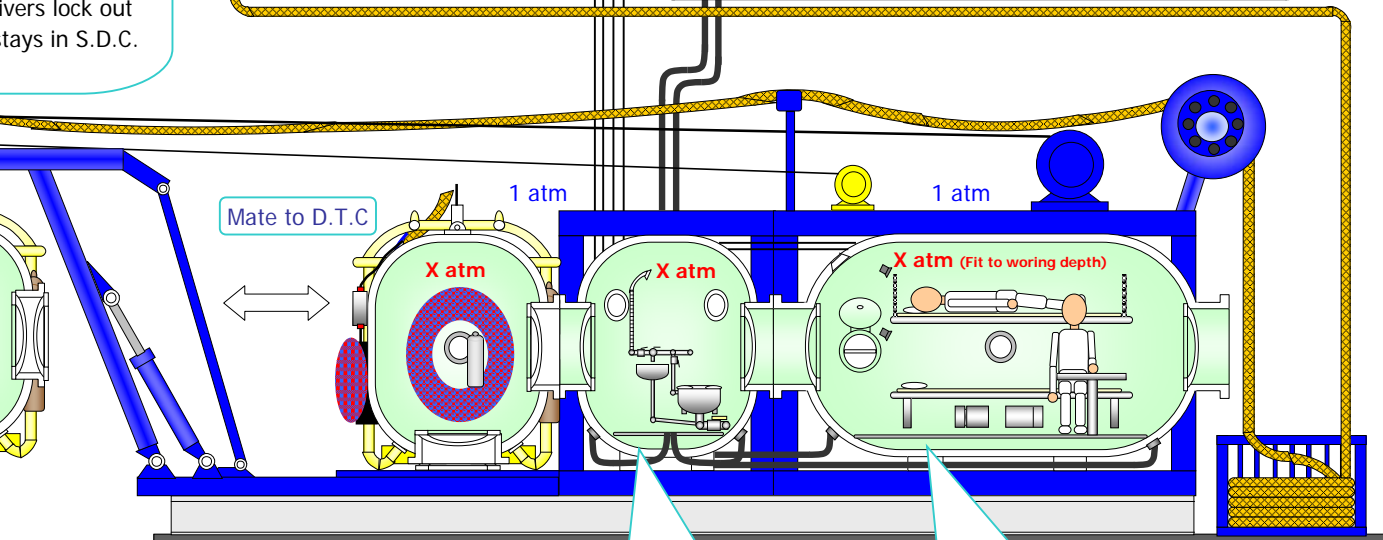
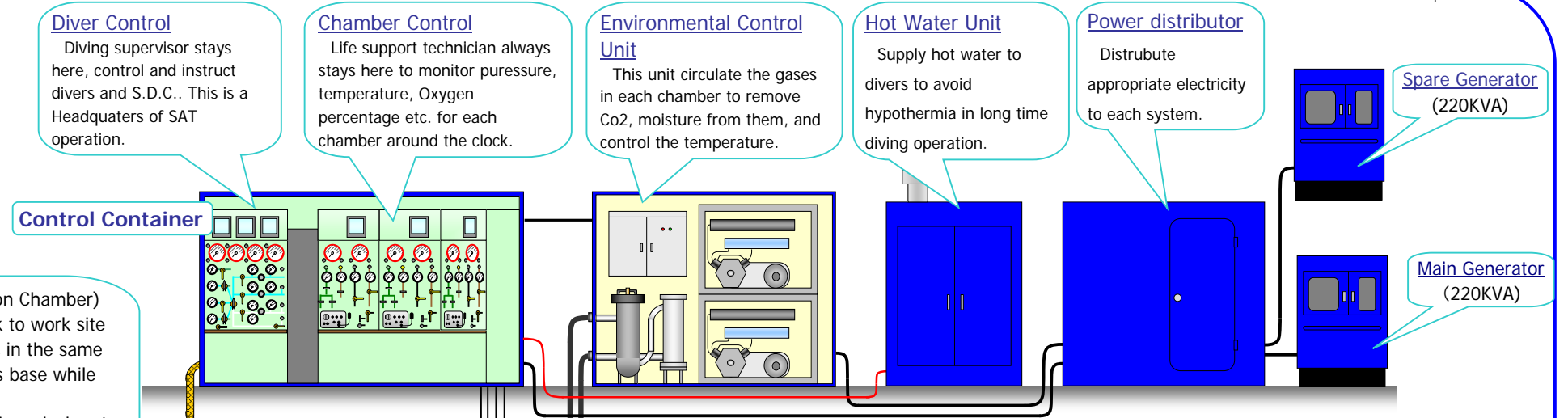
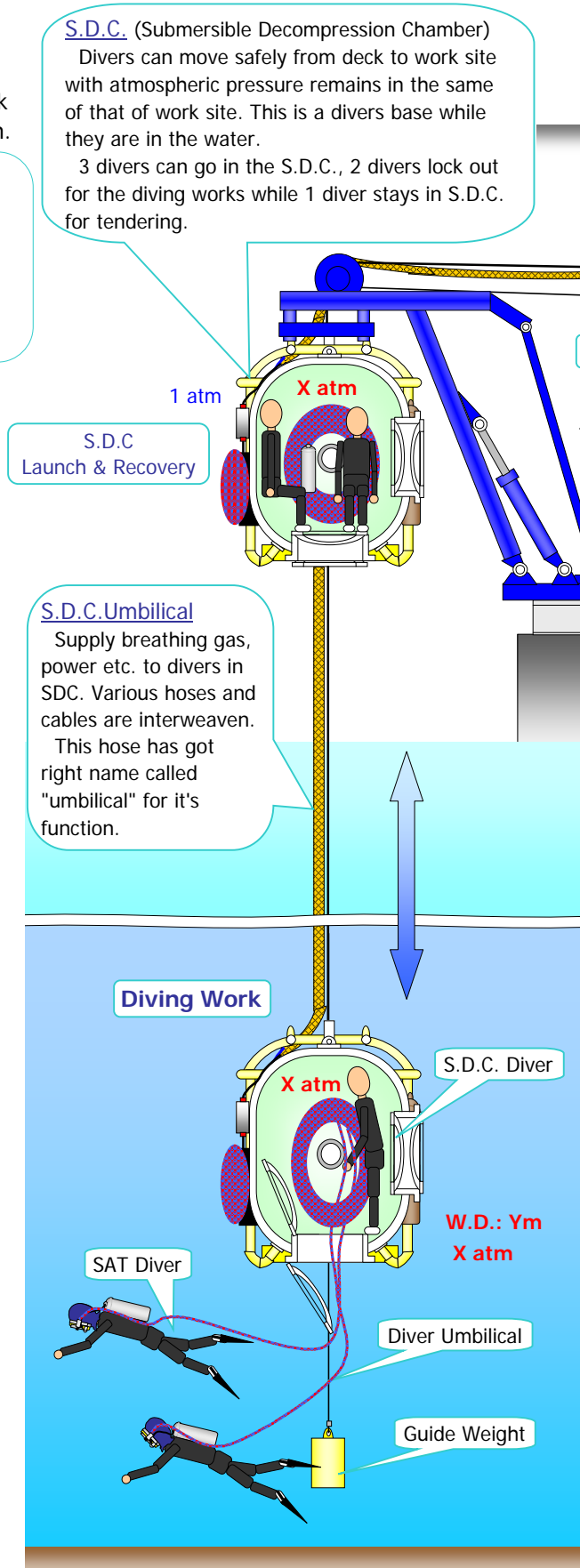
View of Saturation Diving System



S.D.C Launching



S.D.C in the water



D.T.C. external appearance



D.D.C. external appearance



**Gas Quads for diver breathing**  
Helium-Oxygen mixed gas is used for Saturation diving as negative effect to human body is much less than compressed air in high pressure atmosphere (more than 4 atm). The gases in these quads are supplied to divers & each chamber via control container.



**H.R.C. (Hyperbaric Rescue Chamber)**  
This chamber is connected to D.T.C., divers proceed to here in case of emergency for hyperbaric evacuation from site. This chamber is also pressurized to the same pressure with working depth.



**SAT Diver**  
SAT divers are choosen considering past experiences and familiarity to the works to be carried out by him.

**\*COLUMN**

Q.) How they eat in chamber?

A.) D.D.C. is attached with small isolable chamber called "Medical Lock". Laundries and provisions are taken in/out through this hatch. Provisions are given to divers by following the pictures on the right.

