Introduction:
√ The AMPHORA rebreather is based on the current FROGS combat swimmer breathing apparatus
√ The AMPHORA can be used as a combat swimmers apparatus or as a shallow water Mine Counter Measure (MCM) rig
√ The AMPHORA is also designed for use on the SDV

General concept:
The simple operation of the gas switch allows the user to switch gas during the dive between breathing pure oxygen in closed circuit or nitrox in semi-closed circuit

Operating principle
The AMPHORA is a closed circuit apparatus in the oxygen dive configuration and is a Constant Mass Flow Injection apparatus (CMI) in the mixed gas dive configuration

Description:
√ The AMPHORA is based on the combat swimmer FROGS apparatus
√ The AMPHORA is made up of two components:
× The chest-mounted unit includes the breathing apparatus with a 2.1L oxygen cylinder
× The 2L mixture cylinder is fitted either on the diver’s leg or on the diver’s back using the FROGS harness
× Another option: 1.5L mixture cylinder fitted on the cover

Specifications:
√ Dimensions: 415mm (height) x 285mm (width) x 370mm (length)
√ Nominal duration: - Oxygen: A 2.1L cyl. provides a dive duration of 240 minutes at 7 meters
√ Mixture: A 2L cyl. with a 60%O2-40%N2 gives a dive duration of 60 minutes
√ Cartridge capacity: 2.5 kg of absorbent
√ Weight (charged): Approx. 14.5 Kgs for the front unit & 5 Kgs for the 2L Mix cylinder and Mix Reg.
√ Buoyancy: Approx. 500g negative
Technical data:
The Amphora is a Constant Mass Flow Injection apparatus (CMI). The CMI gas is injected directly in the inhalation hose. The CO2 charged gas is exhaled from an overpressure relief valve, located at the top of the apparatus. The cracking effort of this overpressure valve can be adjusted by rotating the cap of the valve. This operation provides the diver to have the best breathing effort in the breathing loop, whatever his position in water is. Depending on the calibrated nozzles and Nitrox chosen, the maximum operating depth and maximum allowable workload will change.

Quick connector:
It has the ability to easily connect/disconnect the mix gas cylinder under pressure. It as the ability to connect the AMPHORA directly with the reserve on-board an SDV.