

Stealth SC

Semi closed circuit mixed gas underwater breathing apparatus



Stealth SC

INTRODUCTION

Stealth SC (Semi Closed) is a product of the highly successful and operationally proven range of Stealth Underwater Breathing Apparatus (UBA).

PRINCIPLE OF OPERATION

Stealth SC is a back worn semi closed circuit UBA that is designed for a range of operations including:

- 1 Mine Countermeasures (MCM) Explosive Ordnance Disposal (EOD) to a maximum depth of 60m using trimix or heliox gases.
- 2 MCM EOD operations to a maximum depth of 54m using nitrox gases.
- 3 Special Operations to a maximum depth of 6msw (dependant upon local oxygen exposure regulations).

Gas is stored in a back mounted twin 2 litre cylinder assembly, which is monitored by a pressure gauge and is supplied to the breathing circuit via an adjustable constant mass flow.

The primary breathing system can be supported by a supplementary 3 litre cylinder for deeper diving or dives requiring a higher flow rate. A further 3 litre cylinder can provide an independent on-board bailout facility. The gas manifold within the set allows for all cylinders to supply bailout gas providing an extra level of safety for the diver.

(CMF) METERING VALVE

Additionally, gas is also supplied to a demand valve that automatically provides counterlung volume during descent, whilst serving as a manual gas addition (bypass) valve.

KEY FEATURES



Max Depth
60msw



Duration
4 hours



Weight
15kg



Non-magnetic

PERFORMANCE

Stealth SC is the ideal cost effective apparatus for a range of specialist diving operations where simplicity, ease of use and ruggedness are a necessity. Should an extended endurance be required, the twin cylinder assembly may be charged to 300bar. This extended endurance is matched by the carbon dioxide (CO₂) scrubber canister, which is based on the field proven Stealth UBA.





EXTERNAL BREATHING SYSTEM

The External Breathing System (XBS) has been designed for use with Stealth SC to provide an alternative source of breathing gas in event of an emergency situation during decompression diving operations or a supply of oxygen for in-water oxygen decompression stops. The XBS is used in a similar manner as a “lazy shot” and provides a diver station during decompression.

Should the diver require the use of the XBS, he connects into the system using the integrated quick connection hose and rotates the Stealth SC full face Dual Mode Mask (DMM) or Dual Mode Bite Mouthpiece change over valve to the open circuit position, or alternatively uses the XBS emergency demand valve.

FEATURES

- 60m using trimix or heliox gases
- 54m using standard NATO nitrox gases
- 6msw on 100% O₂ with short duration excursions to 15msw (dependent on local oxygen exposure regulations)
- Breathing performance to UK HSE/EN standards
- Operating temperature -20°C to 49°C
- Sea temperature operation -1°C to 37°C
- Fresh water temperature operation 1°C to 37°C
- Non-magnetic to NATO STANAG 2897 A/AEODP-7
- Low acoustic
- Integrated Oxygen Partial Pressure (PO₂) monitor and decompression computer
- Scrubber Capacity 3.5kgs (Molecular Products Sofnolime 797 Grade)
- Working Pressure 300bar

CONSTRUCTION

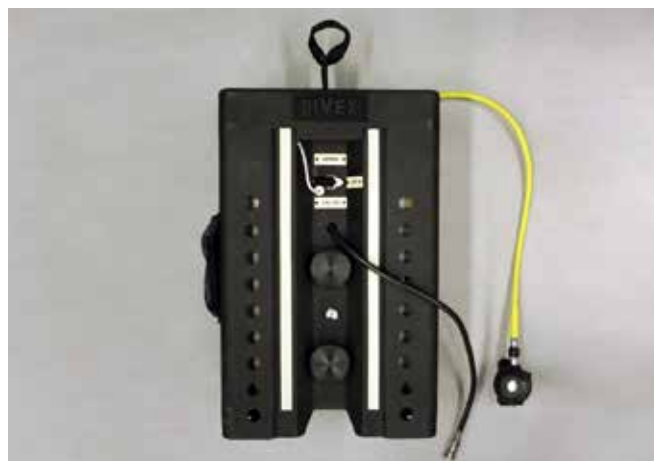
The XBS is housed in a lightweight moulded plastic case containing two lightweight 9 litre 200bar composite low magnetic cylinders. Each cylinder has an independent shut off valve, contents gauge, first stage reducer and safety relief valve. Both first stage reducers supply medium-pressure gas to a switch over block enabling the diver to switch between cylinders.

APPLICATION

The XBS is available for use with different combinations of gases to suit the dive profile.

Due to its low magnetic design the XBS may be in place in the vicinity of the diver during MCM EOD operations.

Weight and dimensions	Stealth SC
Height	500mm
Width	365mm
Depth	150mm
Weight	15kg



CONFIGURATION OPTIONS

Stealth SC is modular underwater life support system that can be tailored to suit mission requirements by using a combination of the following accessories:

- Buoyancy compensation device with integral weight pockets
- Bite mouthpiece and half mask
- Open circuit bailout options for both bite mouth piece and Dual Mode Mask
- Optional separate low magnetic External Breathing System (XBS)
- Full Face Dual Mode Mask, permitting breathing from closed and open circuit gas supplies such as XBS or Special Operations Manned Wet Submersible Built In Breathing System (BIBS)



INTEGRATED LOGISTICS SUPPORT



Documentation



Training



Equipment safety



Spares and repairs

As a result of the sustained engagement with militaries worldwide, JFD has identified the most effective and sustainable in-service support model which has evolved over many years. This service is managed and delivered by a dedicated defence Integrated Logistics Support (ILS) department, comprised of subject matter experts, and can be fully adapted to individual requirements.

The ILS department has project managers, technical authors, training officers, commodities management and engineering support.

To meet the additional challenges of supporting more complex equipment types, JFD has embedded first line maintenance facilities within defence establishments, with the primary objective of providing immediate technical support to the equipment.

JFD offers through life support for all equipment up to, and including, full safety case management and associated activities.

JFD is currently under contract with a selection of navies with a full MCM ILS capability by offering exceptionally high rates of equipment availability of purchased kit; 24 hours a day, 365 days of the year.

