



# Atmosphere Sampler & DSVDS



## Introduction

Atmosphere Sampler and Distressed Submarine Ventilation & Decompression System (DSVDS) are both important components of a comprehensive intervention spread.

Where an intervention vessel is able to reach a DISSUB in advance of a rescue vessel, these two pieces of equipment may be utilised to prepare the submarine for rescue and to augment the onboard life support for as long as it is required.

Both interface with the DISSUB's High Salvage Point (HSP) or nation-specific ventilation interface.

JFD's Atmosphere Sampler is a simple, reliable, and compact intervention tool for sampling the atmosphere and pressure parameters within a Distressed Submarine (DISSUB). It is used prior to mating with a rescue vehicle, or attempting salvage, in situations where communications cannot be established with the DISSUB and the atmosphere cannot be verified.

JFD's DSVDS provides breathable air from the surface to the DISSUB to maintain safe O<sub>2</sub> and CO<sub>2</sub> levels, flush contaminated atmosphere, or to manage internal pressure.

By monitoring, controlling and maintaining a DISSUB's atmosphere parameters using these systems, prior to rescue, the likelihood of a safe and successful rescue is significantly increased.



JFD's Atmosphere Sampling System operating with NSRS IROV



JFD's UK-type High Salvage Point adapter kit

## Atmosphere Sampler

The air quality of a DISSUB may be noxious and communication with the crew may not be possible. In this situation, prior to mating with a rescue vehicle or attempting salvage, a sample of the internal atmosphere may be taken via the DISSUB's High Salvage Point and used to inform Command decision making.

- Lightweight universal mounting for many ROVs.
- Simple in operation.
- Connects to a DISSUB's High Salvage Point or ventilation connection.
- Flushes pipework system prior to collection of sample.
- Maintains a safe pressure boundary upon completion.
- Retains ability to connect further equipment without compromising hull integrity.

## DSVDS

JFD's DSVDS system can be used to perform the following tasks:

- Stabilise conditions on the DISSUB prior to rescue.
- Begin decompression within DISSUB.
- Control and reduce DISSUB internal pressure to enable escape.
- Provide additional air to evacuate water prior to salvage or recovery.

## Key Particulars

- Fully containerised and optimised for deployment by land, air and sea.
- Designed for rapid deployment to Vessels of Opportunity.
- Suited to use with DP2 capable vessels, or in three or four-point mooring configurations.
- Operable in conditions upto Sea State 5.

## Interface Packs

JFD can provide interface adapter kits for STANAG 1450 compliant and nation-specific ventilation connections or High Salvage Points enabling the equipment described above to be used with submarines from most nations. For maximum compatibility, JFD can provide a set of adapters in a single self-contained Peli case for ease of transportation.

JFD is the sole-supplier of UK-type HSP connectors which have the advantage of being operable by ROV.