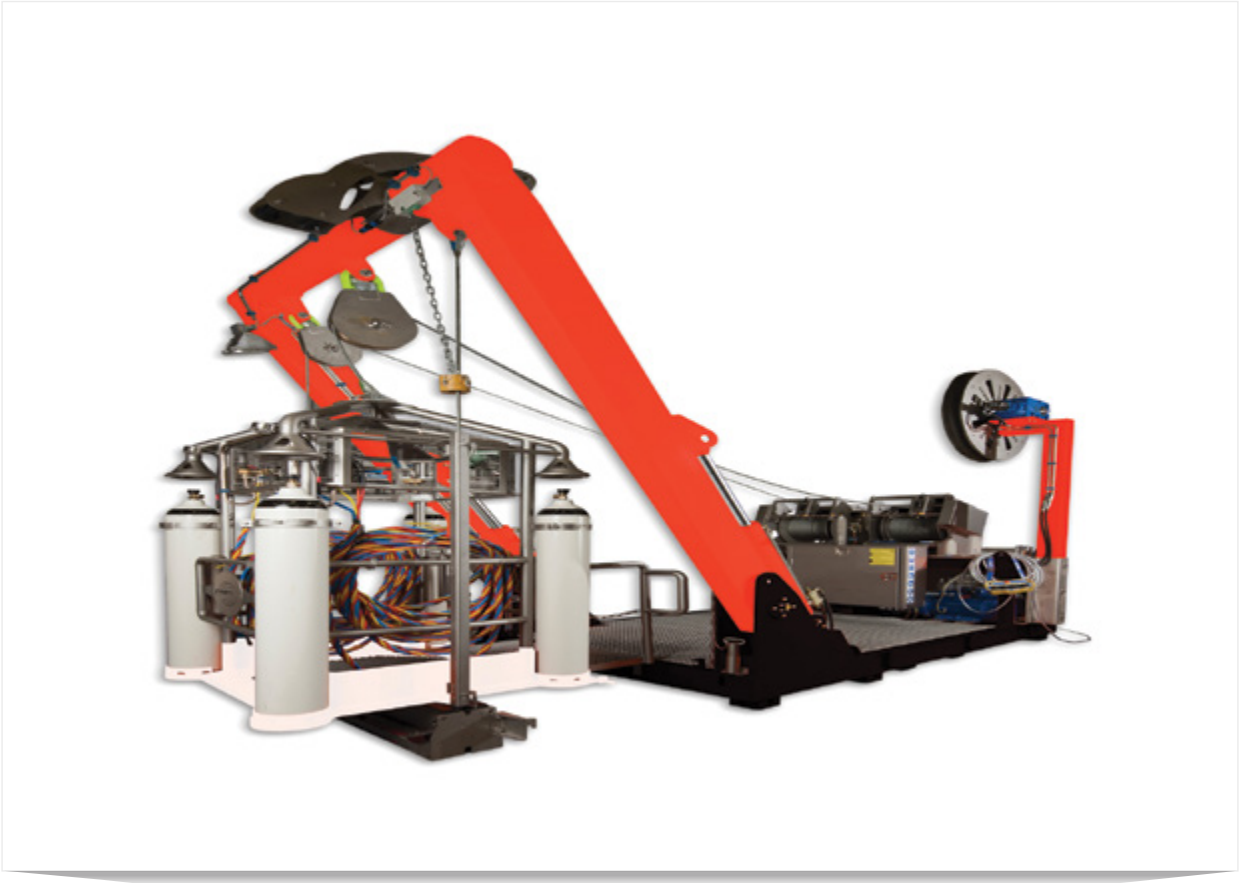
MIXED GAS DIVING SYSTEM

Mixed-gas diving is conducted with helium-oxygen mixtures supplied from the surface by a flexible hose. Surface-supplied mixed-gas diving is particularly suited for operations beyond the depth limits of air diving, yet short of the depths and times requiring the use of a deep diving system. Surface-supplied mixed-gas diving is also useful in the deep air diving range when freedom from nitrogen narcosis is required.



MAIN COMPONENTS

- Skid Base and A - Frame handling system.
- Winches and Hydraulic Power pack.
- Open bottom diving Wet bell with Acrylic hexagonal dome with onboard life support gas and communication systems.
- Fixed wet bell hydraulic control on the skid, portable electrical main switchboard and alarm panel. The system requires only main and standby electrical power and external gas supply to be fully operational.

SPECIFICATIONS

Design standard: Lloyds Rules

SAFE WORKING LOAD

- **Wet bell:** 1600 kg
- **Bell winch:** 1800 kg
- **Guide wire system:** 2200 kg

Fail safe brake rating:

- **Bell winch:** 2100 kg
- **Guide wire system winch:** 2750 kg

MAIN POWER SUPPLY

Requirement: 15 kW 380 V 50 Hz or 440 V 60 Hz 3-phases

STANDBY POWER SUPPLY

Requirement: 11 kW 380 V 50 Hz or 440 V 60 Hz 3-phases

LAUNCH & RECOVERY PHYSICAL DATA

Length: 4000 mm
Width: 2300mm
Height: 3200mm
Weight: 8 tons

WET BELL SKID & A - FRAME

Skid - Rugged steel base framework with stiffening gussets and sacrificial deck fastening positions. The working area is decked with galvanized steel grating to ensure non slip safe operation and to reduce water entrapment.

A - Frame – A rugged A-frame is provided to launch the wet bell over the ships side. The A-frame is designed to be rigid in operation and handle the required design loading as specified in Lloyd's requirements for offshore structures. As an additional safety feature for man riding purposes the A-frame is provided with safety stops to prevent failure in the rams or hydraulics occur.

MAIN WIRE LIFT SYSTEM

The wet bell is lifted to and from the working depth using the main wire winch as the primary means. The winch is routed through the A-frame using standard sheave assemblies and is directly connected to the wet bell using a wire socket with castle nut and pin.

The Offshore man rider winch specifications are as follows:

Minimum lift capability : 1.9 Ton
Maximum lifting speed : Up to 20m per minute
Maximum drum wire capacity : 100m of 14mm (4 layers)
Wire length supplied : 100 m
Drive system : Direct hydraulic

GUIDE WIRE SYSTEM

The guide wire system provides a means of guiding the bell to the sea bed and maintaining the bell in a set orientation and perpendicular position to the vessel. This reduces the effect of strong currents and vessel movements. The guide wire system also serves the purpose of providing a secondary means of recovery and is the reason for the guide wire winch being rated for man rider purposes.

The guide wire winch specifications are as follows:

Minimum lift capability : 1.4 Ton
Maximum lifting speed : Up to 36m per minute
Maximum drum wire capacity : 200m of 12mm (5 layers)
Wire length supplied : 200m
Drive system : Direct hydraulic