

MIXED GAS DIVING SYSTEM

Built by Sysnergy innovations in the UAE our Dive system has 3 x Mix gas lines, independent HP supply lines, 1 x independent HP supply lines regulated to lp on the panel for supply downstream to the diver, and also a common LP line (regulated at source) for all three divers. The panel is for mix gas but can also be used for air diving when required. The diver monitors are installed at a 45 deg angle at the bottom end of the panel, so that the supervisor is viewing the diver images at a downward angle, eliminating neck strain, even when sitting down compliance with IMCA regulations



MAIN COMPONENTS

- ▲ DDC (Deck Decompression Chamber) and 3 divers Mix Gas Panel in 20' DNV 2.7-1 Offshore Container (Class certified lifting sling supplied with DNV container)
- ▲ 2 x Diving Launch & Recovery Systems (LARS) c/w diving basket, 2 Breathing Air HP cylinders (50L 200Bar) with 1st stage regulator, 2nd stage, LP hose and 2m long pneumo hose for diver 1 & 2
- ▲ 20' DNV offshore container (2 x Bauer 320E Electric HP Compressor, 1 Hydraulic power pack, 28x50L 200Bar HP BA cylinders, 12x50L 200Bar HP Medical Oxygen Rack and storage shelves, workbench with vice and electrical connections for operation of tools
- ▲ 3 x 150m Floating Umbilical
- ▲ 2 x Kirby Morgan 37B Helmet
- ▲ 1 x Kirby Morgan 18B Band Mask
- ▲ 3 X diver vision underwater surface control units for video/light (individual for each diver)
- ▲ 2 x AMRON Three diver air radios (2830A-11) with AC/DC power supply option (Primary and secondary backup radio) and switch over panel provided for the radios
- ▲ Complete set of high-pressure hoses (for connection from machinery van to DDC and diver panel)
- ▲ Hydraulic Hose Reel c/w hydraulic umbilical, 1/2" flow hose, 3/4" reverse hose, with quick disconnect fittings, total length 150m

SPECIFICATIONS

DDC SPECIFICATIONS – TWIN LOCK

Internal Dia:	1500mm (60")
Depth Rating:	100 meters seawater

SYSTEM POWER REQUIREMENTS

Power Supply:	415/400 V, 3 Phase, 50/60Hz, 110 KW
Power supply for the container:	220 V, single phase, 50/60 Hz, 32 A

EMERGENCY POWER REQUIREMENTS

Power Supply:	415/400 V, 3 Phase, 50/60 Hz, 60 KW
Power supply for the container:	220 V, single phase, 50/60 Hz, 32 A

MACHINERY CONTAINER

Length:	6058 mm
Width:	2438mm
Height:	2591mm

DDC CONTAINER

Length:	6058 mm
Width:	2438mm
Height:	2591mm

LAUNCH & RECOVERY SYSTEM(LARS)

Length:	3140 mm
Width:	2000 mm
Height:	3300 mm (2020mm Transport mode)
Weight:	4000 kg

Rugged 1 ton rated A-frame for lifting the basket and guide-weight

Hydraulic rams with stainless steel shafts for luffing the A-frame

DIVING BASKET

Dimensions:	1200 L X 1200 W X 2385 H
Pay load – 400 kg, Total Gross Mass - 1000 kg	

MAIN WINCH

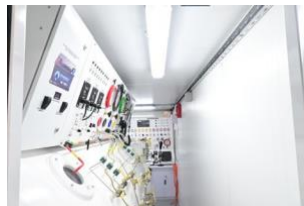
Maximum lift capability:	1.0 Ton
Maximum lifting speed:	up to 34m/minute
Wire rope diameter:	13mm Wire
length:	90m

GUIDE WEIGHT WINCH

Maximum lift capability:	0.65 Ton (650 kg)
Maximum lifting speed:	up to 18m/minute
Wire rope diameter:	13mm
Wire length:	160m

DDC with 3 Diver Mix Gas Panel in 20FT Container:

- **Diving Decompression Chamber** with three divers mix gas panel installed in a **20FT DNV Offshore Container**
- **Three Diver Mix GAS Panel with 6 monitors:** D1/D2/D3, ROV, Navigation and CCTV monitors
- **Tescom Regulator** for each diver's gas supply
- **Each Diver has 5** incoming supply, 1 x HP air supply, 1 x LP air supply and 3 x Mix gas supply respectively
- All **Pneumo Gauges** and **Air Flow Lines** color-coded per diver
- All **Pressure Gauges** and **Valves Handles** color-coded per diver
- **Synergy Diver Vision System** with video/light control per diver, individual surface control units, and monitors
- **Oxygen Analyzers** on downstream line for each diver
- **Chamber Control Panel** including O2/CO2 analyzers and ambient atmosphere O2 analyzer
- **12V Battery** provided for the chamber with charger as secondary source of power for DDC internal
- **Chamber Operator Breathing Air Full-Face Mask** with comms provided
- **Main Lock CCTV Monitor** along with recording facility & 1TB complaint
- **Pressure Relief Valves** for safety on each lock and depth gauges
- **High-Pressure Hose Connections** for individual diver lines
- **Penetration Plates** for safety and easy connection
- **IMCA D018 & D037** compliance innovations



20FT Machinery DNV Offshore Container:

- **50L x 12 Oxygen Cylinder Quad** recessed in the container
- **50L x 28 BA Cylinder Quad** inside the container
- **1 x Hydraulic Power Pack - Electric**
- **2 x Mariner 320-E 380V Compressor**
- **Air Management Panel** for Air Quad
- **BA Cylinder Quad** bifurcation as follow 50 x 12 for DDC supply, 50 x 16 for Dive control supply
- **Manual changeover** has primary & secondary input supply
- **CO2 Fire extinguisher**
- **Penetration Plates** for safety and easy connection
- **IMCA D018 & D023** compliance



Single Basket LARS (For 2 Divers)

- **Base skid** with galvanized steel grated flooring for water drainage
- **A frame**, launched and recovered via two hydraulic rams
- **Dive basket** – 2 diver – stainless steel 316
- **Breathing air cylinders** (50 ltr, 200 bar) with 1st stage regulator and whip (one for each diver)
- **Electric hydraulic power pack** with twin motors and pumps
- **Oil reservoir** (200 ltr capacity) (Single tank split 100mtrs per pump via a partition)
- **Clump weight**, 300 kg
- **Winches for man riding** certified by manufacturer and test witnessed by DNV GL Certified wire ropes for winches
- **IMCA D023 & D018** compliant certification
- **FMEA** for Lars
- **DNV** testing witness certification for Lars





