Compact Semi Submersible

Greater Versatility Maximum Capability

Compact Semi Submersible as an alternative to large multi-service vessels and traditional semi-submersibles, whilst focusing on safe handling of deck loads.

is a multi-purpose offshore support vessel with the technology and a weather tolerance that significantly exceeds that of similar length units.

Reliability Through Tried And Tested Technology

Built as a vessel under ABS Rules, the is equipped with DP3 dynamic positioning and is one of a few intervention vessels to be able to meet the requirements of a mobile offshore drilling unit.

is the first vessel of its class with tried and tested technology from providers such as MacGregor (Lifting systems), Rolls Royce (Engines), Kongsberg (DP) and ABB (Power Management) incorporated in its design and fit out.

KEY FEATURES:

CAPABILITY
- Compact DP3 MODU
- Accommodation up to 152 persons

HIGH SPECIFICATIONS
- Rolls Royce Bergen C25:33 diesel engines
- Kongsberg Dynamic positioning with dual redundant K-Pos DP-22 System
- Macgregor 150mT AHC Subsea Crane and 160mT Module Handling System with up to 3000 meter working depth
- ABB Integration of the power management systems
- 120mT SWL recessed skids pallet system

ECONOMIC OPERATION
- Innovative compact design reduce build cost

EXCELLENT SEAKEEPING
- Innovative twin hull design for improved stability
- Enhanced roll and motion characteristics

CLASSIFICATION

- American Bureau of Shipping (ABS), +A1, Column Stabilized Drilling Unit, +AMS (E), DPS-3, UWILD, Helidk
- Full redundant DP system with separate engine rooms in each hull

MULTI-PURPOSE, MULTI-SERVICE CAPABILITY FOR SUBSEA SERVICES AND SUPPORT

- Subsea construction support
- Inspection, repair and maintenance (IRM)
- Subsea, umbilicals, risers and flowlines (SURF)
- Open water Light (Cat A) well intervention (wireline and slickline)
- Installation and recovering of subsea trees and modules
- Topside construction support

(Class : ABS, +A1, Column Stabilized Drilling unit, +AMS(E), DPS-3, UWILD, Helidk)

- 85m hull length with 32m beam
- Twin hull design with large zone 1 rated working deck space at 1300m² with deck loaded at 1500mT
- 70m clear fore/aft run on starboard side
- Accommodation up to 152 persons

MacGregor Offshore Crane

- Active heave compensation, auto-tension and auxiliary winch with intuitive control system
- 150mT SWL AHC Knuckleboom with 3000m working depth

Deck-skid System

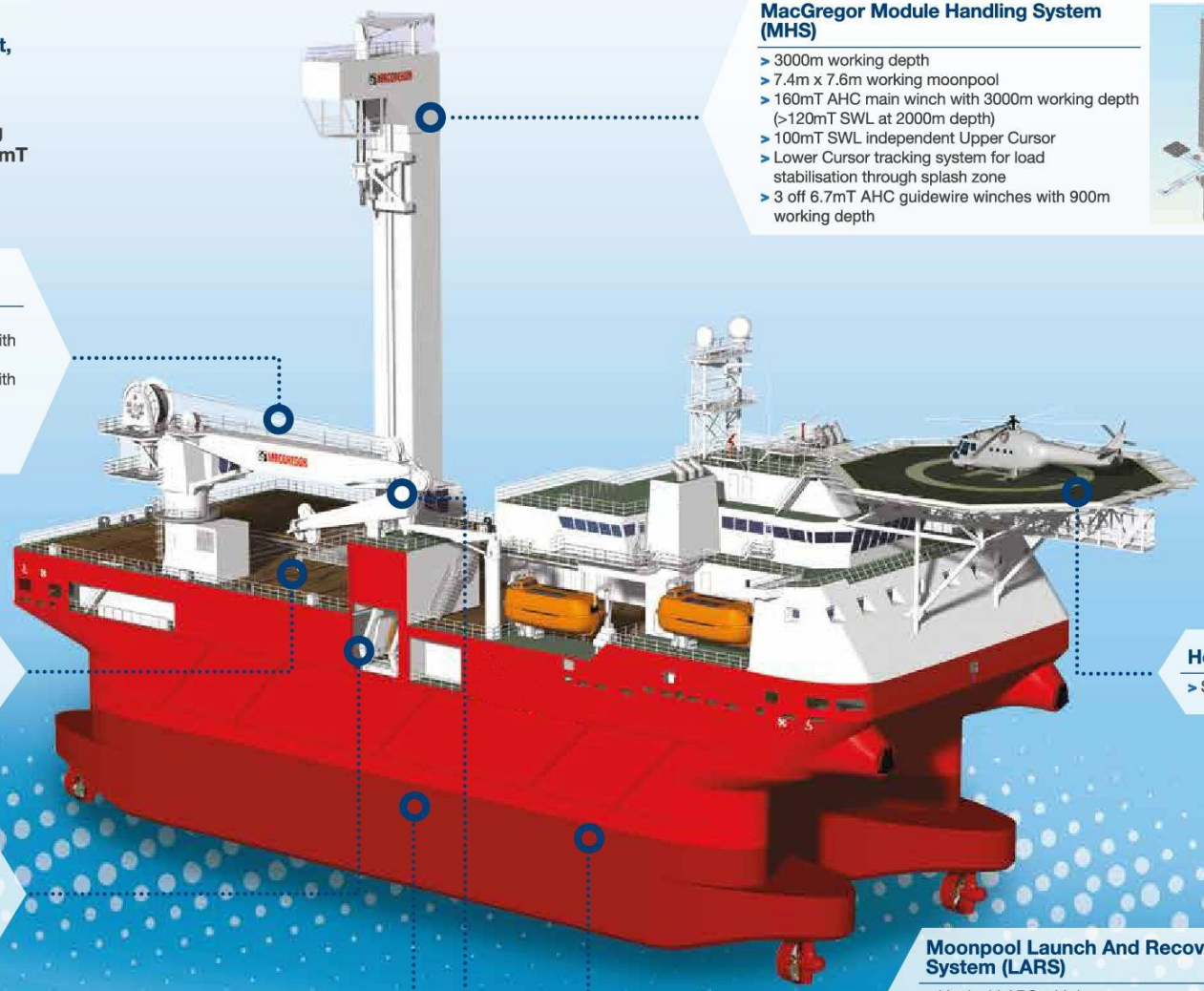
- Hydraulically driven tractor units enable safe movement on deck of loads up to 120mT across open deck
- Recessed trackway system with independent 120mT SWL pallets
- Reduces the need for deck crane operations at sea

Deck/skid mounted overside LARS

- Overside LARS is a flexible and compact modular A-frame based system for precise ROV control during launch and recovery
- Articulated and fully damped snubber provides increased security and full rotation of the load
- Sea State 6 operation window

Built-in Deep-water construction class ROVs - Quantum XP 200hp (2 units)

- Up to 3000m working depth
- Configured to carry 400kg payload
- Installed with latest ROV technological advancement, dynamic positioning and advanced diagnostics



MacGregor Module Handling System (MHS)

- 3000m working depth
- 7.4m x 7.6m working moonpool
- 160mT AHC main winch with 3000m working depth (>120mT SWL at 2000m depth)
- 100mT SWL independent Upper Cursor
- Lower Cursor tracking system for load stabilisation through splash zone
- 3 off 6.7mT AHC guidewire winches with 900m working depth

Helideck

- Suitable for Sikorsky S92

Moonpool Launch And Recovery System (LARS)

- Vertical LARS with heave compensated umbilical winch and safe-seal moonpool door
- Launched through centreline working moon pool of 4.8m x 5.3m
- Sea state 6 operation window

Moonpool Door Systems

- Multiple door design specifically adapted for the CSS Derwent and her MHS
- Integrated deck skid, vertical rail and cursor
- Failsafe locks ensure equipment and personnel safety
- 120mT SWL when closed
- Built-in pallet trackway and bush system
- Built in guide for subsea operations with closed hatch

Capabilities

is a new class of multi-service vessel built with a starboard side working philosophy for deep water subsea operations and work across a spectrum of duties. These include construction support, IRM and light/medium well intervention.

Inspection, Repair and Maintenance

comes with two dedicated deep water construction class ROV units, at 200hp each, with up to 3,000 metres working depth. These handle effectively even in high current conditions and are designed to undertake the most demanding IRM and survey tasks. The vessel's twin hulls provide exceptionally stable sea-keeping characteristics. Its huge deck space of 1,300 metres² and 120mT SWL skidding system ensures good project load handling capacity.

IRM services include :

- Platform and pipeline inspection
- Well-head and subsea tree installation, repairs and abandonments

Construction Support

With a 150 metric tonne active-heave-compensated offshore crane and a working depth of 3,000 metres, dedicated main working deck moonpool, the vessel is fully prepared for subsea construction operations such as installation of manifolds, flowlines, umbilicals and subsea structures including tie-in and hook-up to fixed and floating facilities.

Well Intervention

is designed to interface with the industry's subsea intervention and capping solutions. With its guided module handling system and built in recessed deck skidding system, the vessel has the flexibility to deploy emergency subsea equipment for deepwater capping or as required to manage the risk aspects of deeper water discoveries. The vessel can handle intervention systems weighing up to 160 metric tonnes with project specific interfaces to the MHS and the cursor deployment guide supported by 3 off 1000m deployment guidewires. Tidal and current movement in the watercolumn is managed through the dedicated built in deepwater Acoustic Current doppler profiler.

A complete programme of intervention and maintenance services include :

- Engineering and project management
- Decommissioning and wreck removal
- Well intervention and abandonment

Specifications

PRINCIPAL CHARACTERISTICS

Length	85.00m
Beam	32.00m
Lightship draft	4.80m
Operation draft	8.20m
Heavy Lift draft	14.60m
Class	ABS
Notation	+A1 Column Stabilized Drilling Unit +AMS (E) DPS-3 UWILD Helidk
Flag	Marshall Islands

PERFORMANCE

Speed	10.5 Knots @8.20m draft calm seas
Type of fuel	Marine diesel oil

DECK EQUIPMENT

Deck Crane (1)	1 x 150mT SWL Active Heave Compensated Knuckleboom subsea crane (3000m working depth)
Deck Crane (2)	1 x 5mT @ 10m electro-hydraulic subsea deployment (300m working depth) and cargo crane
Module Handling System	1 x 160mT SWL Active Heave Compensated main winch (3000m working depth)
Deck Skid System	With 3 Tractors and 4 Pallets (120mT SWL)
Guide Wires (SWL)	6.85mT
Guide Wires (Diameter)	19mm
Guide Wires (Length)	1000m
Helideck	D=22m, t=9.3t, Sikorsky S92

PROPULSION

Main generator engine	6 x 2884kW total output 17,304kW (23,205HP)
Azimuth Thrusters	4 x 3000kW; 1800KN thrust
Emergency generator	1 x 900kW, 1800rpm

DP3 DYNAMIC POSITIONING SYSTEM

Kongsberg Marine DPS-3 K-POS DP-22
2 x Independent DGPS
2 x Hipap-531 Hydro Acoustic Position Reference System
1 x Radius System
1 x Taut Wire System (500m depth)
3 x Anemometers
3 x Motions Sensors
3 x Gyro Compass
Independent Joystick System

CARGO CAPACITIES

Deadweight	3200mT @ 8.2m draft
Deck Cargo	1500mT @10T/m²
Cargo deck free area	1300m² (Zone 1 rated)
Fuel oil	1772m³
Fresh water	495m³
Ballast water	7742m³
Bulk cement	168m³
Lube Oil	45m³
Sewage Holding	22.7m³
Work Moonpools	7.4m x 7.6m
Rov Moonpool	4.8m x 5.3m

DIVING AND ROV SYSTEMS

2 x 3000m Quantum XP 200hp Heavy Class Construction ROVs
1 ROV A-Frame LARS @SWL 15mT
1 x Moonpool ROV LARS @SWL 15mT
Modular saturation diving system (optional)

ACCOMODATION AND RECREATIONAL FACILITIES

16 x 1 berth cabins
52 x 2 berth cabins
08 x 4 berth cabins
Hospital with 4 berths
Heli reception / waiting room
Subsea operation project workshop
Well intervention control room
ROV control room (2 independent operating stations)
Project office
Heavy duty compactor and incinerator
Multiple workshops
Conference room
Client cabins with seperate office space
Mess Room with seatings for 80
Survey Room with access to Fwd & Aft Bridge
Gym
Changing rooms
Lounge and cinema rooms

RADIO AND NAVIGATION EQUIPMENT

Autopilot	1 x Furuno Navitron
Repeater Compass	1 x TSS or equivalent
Radar - X-Band S-Band	2 x Furuno, JRC
GMDSS area 3 with 2 Inmarsat "C"	1 x Furuno, JRC
Speedlog	1 x Furuno, JRC, Veripos
EPRIB	1 x Mcmurdo. JRC
SART	2 x Mcmurdo, JRC
Portable VHF	3 x Mcmurdo, JRC
Sound Power Telephone	1 lot x Vingtor, JRC
Telephone system and	1 lot x Vingtor, JRC
Acoustic Doppler Current Profile (ADCP)	38 kHz @1000m water depth (Teledyne)
PA/talk back system	
Voyage data recorder	

SAFETY EQUIPMENT

Lifeboats	4 x 80 man enclosed lifeboats
Rescue boat	1 x rescue boat
Life rafts	6 x SOLAS 25 man life rafts / 2 x SOLAS 6 man life rafts
Helideck Fire Fighting Foam System	Deck Integrated Fire Fighting System (DIFFS)

MISC

Anchor Windlass	2 x electro-hydraulic
Gypsies	62mm (dia) chains rated pull 18mT @ 10m/min
Anchors	3 x 4840kg high holding power type (1 spare)
Chains	62mm (dia) Grade U3 (each side)
Mooring system	62mm (dia) chains rated pull 20mT @ 23m/min
Marine sanitation device	Capacity min for 152 men
Incinerator	1 x TeamTec G5500CS
Searchlights	2 x 1000W and helideck 1 x 1000W
Watermaker	2 x 38m³/day