

HEA

Eco 1



HEA ENERGY

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Eco 1

A next generation offshore construction vessel, purpose-built in 2026 to support a wide range of offshore operations with efficiency and versatility. Designed to accommodate up to 100 personnel, it features a hybrid Integrated Electric Propulsion System (IEPS), advanced battery storage, and DPS-2 dynamic positioning. With a high-capacity main crane, spacious open deck, and full compliance with modern safety and class standards, HEA Eco 1 delivers reliable performance while aligning with the latest sustainability and operational excellence requirements.

General Information

| | |
|-------------------------------|--|
| Type: | Offshore Construction Vessel (OCV) |
| Design: | FOCAL 551WD 70M OCV |
| Built: | 2026 |
| Builder: | Fujian Mawei Shipbuilding, China |
| Class & Notations: | ABS A1, A, Offshore Support Vessel (FFV 1, SPS), AMS, DPS-2, BWT, CRC(SC), ESS-Li BATTERY, HYBRID [LEE, PMT], IP, MLC-ACCOM, RW, UWILD |
| Flag: | Panama |
| IMO: | 1078468 |

Principle Dimensions

| | |
|----------------------------|-------------|
| Length overall LOA: | 69.8m |
| Hull length: | 69.3m |
| Hull breadth: | 17.6m |
| Total beam (BOA): | 17.6m |
| Hull depth: | 6.0m |
| Draft: | 3.5m - 4.5m |
| Deadweight: | 2100t |
| Deck load capacity: | 7.5 t/m2 |
| Main deck area: | 520 m2 |

Generators and Machinery

| | |
|-----------------------------|---|
| Main generator: | 4 x Cummins CCFJ1350-Z- WMTCM 1350kW @ 1800 rpm |
| Emergency generator: | 1 x Cummins CCFJ250-Y- WMTCM 250 kW @ 1800 rpm |
| Battery: | 3 x 172.2 KWh (500 KWh), LFP Battery system with BMS, 690V |
| Water maker: | 2 x 15 m3/day |
| STP: | 100 POB |

Propulsion

| | |
|-----------------------|---|
| AFT thrusters: | 2 x TLAT2000WM Azimuth, 1470 KW @ 1020 rpm |
| FWD thrusters: | 2 x Bow (TLTT165-CP), 700 KW @ 1180 rpm |
| Service speed: | 12 knots |

Tank Capacity

| | |
|-----------------------|---------|
| Fuel oil: | 653 m3 |
| Fresh water: | 958 m3 |
| Ballast water: | 1500 m3 |
| Endurance: | 60 Days |

Cranes

Main crane

| | |
|-------------------------------|--|
| Maker/ Model: | TSC Group PTC3150 |
| Type: | Telescopic boom crane at SB |
| Boom length: | 36m |
| Capacities: | 70t @ 6.5m-8.5m, 20t @ 20m Aux 10t @ 7m-30m, 6t @ 36m |
| Hooks above main deck: | Main hook: 24m Aux hook: 41.5m |

Auxiliary crane

| | |
|----------------------|----------------------------------|
| Maker/ Model: | Jiangsu Sanke Offshore YQ3/13.5 |
| Type: | Pedestal hydraulic crane at Port |
| Capacity: | 3 ton @ 3.3-13.5 m |

Safety Systems

| | |
|-----------------------|-------------------------|
| Lifeboats: | 2 x 50 POB |
| Life rafts: | 4 x 25 Men |
| FIFI system | |
| Fire pumps: | 2 x 1,830 m3/hr @ 117 m |
| Fire monitors: | 2 x 1,200 m3/h (1 foam) |

Operation Conditions

| Criteria | Wind | Hs | Current |
|-------------------------|--------|------|----------|
| DP (best case): | 32 m/s | 2.5m | 1.5 m/s |
| DP (worst case): | 20 m/s | 2.5m | 1.37 m/s |

Control Systems

| | |
|------------------------------|--|
| DP system: | Kongsberg K-POS 21 |
| DP reference systems: | -Taut Wire System MK 16B -RADIUS 2000 Dual -HiPAP 352P |

Navigation and communication systems, according to IMO requirements.

Accommodation and Facilities

| Configuration: | Current |
|----------------------|-----------|
| 1 Man cabins: | 12 Cabins |
| 2 Men cabins: | 20 Cabins |
| 4 Men cabins: | 12 Cabins |
| Total POB: | 100 POB |

Facilities

Galley, mess room, client offices, meeting room, recreation rooms, gymnasium, changing rooms, coffee rooms, sick bay, Helli reception/ departure facilities, laundry, stores, workshops, Starlink VSAT and DP-PRS