

HEA

Eco 20

A next generation offshore construction vessel, purpose-built in 2027 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 20 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:	2027
Builder:	Honghua Offshore Oil & Gas Equipment (Jiangsu) Co., Ltd
Class & Notations:	ABS A1, CE, 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:	1127805

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
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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
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, Heli reception/ departure facilities, laundry, stores, workshops, Starlink VSAT and DP-PRS