

DATE : 25 November 2014 VESSEL: 227m OFFSHORE CONSTRUCTION VESSEL (OCV) CLASSIFICATION SOCIETY: ABS CLASS NOTATION: +1 A1 E, OFFSHORE SUPPORT VESSEL SPS, MLC-ACCOM, HAB++ (WB), HELIDK , CPS, HDC OWNER: TBD FLAG : TBD BUILDER: FUJIAN MAWEI SHIPBUILDING LTD			
SR. NO.	MAIN MACHINERY & EQUIPMENT	UNITS	MAKE
1	AZIMUTH THRUSTERS		
	3x3MW AZIMUTH, AFT	3	Wartsila/RRM
	3X3.5MW RETRACTABLE AZIMUTH, FORWARD	3	Wartsila/RRM
2	MAIN GENERATOR ENGINE(6.6KV/3Ph/60Hz), IMO TIER II & TIER III (WITH NOX REDUCER)	6	Wartsila/MAK/RRM
3	ESSENTIAL SERVICES GENERATORS (SPE) 600kWe 440V/3Ph/60Hz) RADIATOR COOLED, DUAL START	1	Wartsila / Cat / MTU (RRM) or Agreed Equivalent
4	EMERGENCY GENERATOR (SHIP) 550 kWe 440V/3Ph/60Hz), RADIATOR COOLED, BATT START	1	Wartsila / Cat / MTU (RRM) or Agreed Equivalent
5	SHIP & SPE 6.6KV/690V/440V/230V SWITCH BOARDS, DB, TRANSFORMERS	SHIPSET	Wartsila/ABB
6	THRUSTER VSD & TRANSFORMER PACKAGE	6	Wartsila/ABB
7	UPS (SPE) 160KVA, 400V/230V, 30MINS	1	Wartsila/ABB
8	UPS (SHIP) 400V/230V AND 24V, 30 mins	1	Wartsila/ABB
9	DPS-2 (INCL GYRO-COMPASS, RADARS, ETC.), PMS, VMS & CONSOLES	SHIPSET	Kongsberg/Converteam
10	WINCH/WINDLASS, MOORING WINCHES, CAPSTAN, HPU & FAIRLEADS	SHIPSET	Promoter /461WMMP

11	BALLAST WATER TREATMENT PLANT 1,000M3/HR	2	Techcross/Panasia
12	FO PURIFIERS (SELF-CLEANING) FOR MGO/MDO ONLY, 2 IN EACH ER, CAPACITY AS PER ENGINE MANUFACTURER FOR 100% REDUNDANCY	4	Alfalaval/Westfalia
13	LO PURIFIERS, 2 IN EACH ER, CAPACITY AS PER ENGINE MANUFACTURER WITH 100% REDUNDANCY	4	Alfalaval/Westfalia
14	LO PURIFIERS FOR SPE, 1,400L/HR APPROX	3	Alfalaval/Westfalia
15	HARMONIC FILTERS	2	Wartsila/ABB
16	90 MEN SEWAGE TREATMENT PLANT	2	IL Seung/Jowa /Hamworthy
16a	VACUUM TOILETS	SHIPSET	Jets or equivalent
17	OILY WATER SEPARATOR FOR SPE 5M3/H @100kPag	1	RWO/Jowa/Oceanclean
18	SPE OWS FILTER BASKETS	3	Shipyards Fabrication
19	OILY WATER SEPARATOR FOR SHIP, 1M3/HR 15PPM	1	RWO/Jowa/Oceanclean
20	RO FRESHWATER MAKER 75T/DAY	2	Peter/Searecovery/Compass
21	HYD. ACTUATED VALVES & HPU, LEVEL GAUGES, ETC	SHIPSET	Cramer/S-two/Xtronica
22	FO & FW LEVEL GAUGES & ALARM	SHIPSET	Cramer/S-two/Xtronica
23	PASSIVE STABILISING TANK/ANTI-HEELING STABILIZER	SHIPSET	Hoppe/Cramer
24	AIR CONDITIONING SYSTEM	SHIPSET	Viking /HH or Equivalent
25	AXIAL FLOW FANS (ENGINE ROOMS)	4	Nyborg/Zitron

26	AXIAL FLOW FANS (FWD THRUSTER COMPTMT)	1	Nyborg/Zitron
27	AXIAL FLOW FANS (AFT AZIMUTH COMPTMTS)	2	Nyborg/Zitron
28	EXHAUST FANS (GALLEY)	1	Nyborg/Zitron
29	AXIAL SUPPLY FAN (GALLEY)	1	Nyborg/Zitron
30	EXHAUST FANS (TOILETS, HOSPITAL, LAUNDRY & CHANGING RM)	SHIPSET	Nyborg/Zitron
31	AXIAL EXHAUST FAN (INERGEN ROOM)	1	Nyborg/Zitron
32	AXIAL FLOW FANS (MIDSHIP WORKSHOP, PUMP ROOM, TRANSFORMER ROOM & AUX M/C SPACES)	1 EACH	Nyborg/Zitron
33	AXIAL FLOW FANS (AFT WORKSHOP, TRANSFORMER, STORE)	1 EACH	Nyborg/Zitron
34	EXHAUST FANS (CARGO HOLDS)	4	Nyborg/Zitron
35	FO TRANSFER PUMP, HORIZ GEAR, 15M3/HR @30M HD	2	Desmi/Azcue
36	CARGO OIL PUMP, GEAR, 100M3/HR @75M HD	1	Desmi/Azcue
37	FLOW METER W/ PRINTER FOR CARGO OIL PUMP	1	Nitto/Oval
38	FW CARGO PUMP, VERT CENTRI, 100M3/HR @ 75M HD	2	Desmi/Azcue
39	BILGE & FIRE PUMP, VERT OR HORIZ, (DUAL DUTY 260M3/HR @ 35M (BILGE) & 140M3/HR @ 125M (FIRE))	4	Desmi/Azcue
40	DEDICATED BALLAST PUMP, VERT CENTRI, 1,500M3/HR @ 35M HD	3	Desmi/Azcue
41	DEDICATED CARGO HOLD BILGE SLURRY PUMP 125M3/H @ 35M HD	2	Desmi/Azcue

42	FW CIRCULATING PUMP, 12M3/HR @65M HD	3	Desmi/Azcue
43	CALORIFIER FOR 90 MEN	2	Nantong Shentong/Nanji
44	LO TRANSFER PUMP, HORIZ GEAR, 5M3/HR @25M HD	1	Desmi/Azcue
45	SLUDGE TRANSFER/DIRTY OIL PUMP, 15M3/HR 45M HD	1	Desmi/Azcue
46	SEWAGE PUMP, CENTRI, 30M3/HR @ 60M HD	1	Desmi/Azcue
47	2 COOLING PUMPS FOR AIR CON & REFRIGERATING PLANT WITH 100% REDUNDACY	2	Desmi/Azcue
48	SW COOLING PUMPS FOR 6 MAIN GENERATORS	8	Desmi/Azcue
49	HT FW COOLING PUMPS FOR 6 MAIN GENERATORS	12	Desmi/Azcue
50	LT FW COOLING PUMPS FOR 6 MAIN GENERATORS	12	Desmi/Azcue
51	SW COOLING PUMP FOR EACH (THRUTER + VSD + TRANSFORMER + L.O. UNIT)	6	Desmi/Azcue
52	FW COOLING PUMP FOR EACH (THRUTER + VSD + TRANSFORMER + L.O. UNIT)	6	Desmi/Azcue
53	HEAT EXCHANGER FOR COOLING SYSTEM FOR EACH (THRUTER + VSD + TRANSFORMER - L.O. UNIT)	6	DHP/Transter/Sperre
54	ENGINE STARTING AIR COMPRESSOR UNITS (EACH UNIT CONSISTING OF 2 COMPRESSORS MEETING CLASS REQUIREMENTS)	2 UNITS	NK/JP Sauer/Sperre/Atlas
55	STARTING AIR BOTTLES	4	Nantong Shentong/Nanji
56	SHIP SERVICE AIR COMPRESSOR 200NM3/HR @7 BAR	1	NK/JP Sauer/Sperre/ATLAS
57	SERVICE AIR BOTTLES	2	Nantong Shengtong/Nanji

58	SPE AIR COMPRESSORS 52Nm ³ /MIN @7.5 BAR (W/ VSD MOTOR)	3	NK/JP Sauer/Sperre/ATLAS
59	SPE GS PUMP, 500M ³ /HR @ 55M HD	4	Desmi/Azcue
60	SPE RALS SW MAKE-UP PUMP, 264M ³ /HR @ 70M HD	2	Desmi/Azcue
61	WASTE CONVERTERS	2	MAC / Ompico
62	GARBAGE DISPOSAL INCINERATOR 135 KG/HR	1	Teamtec or equivalent
63	TELEPHONE, INTERCOM & PUBLIC ADDRESS EQUIPMENT	SHIPSET	Phonetec/Vingtor
64	ELECTRIC & SIGNAL CABLES	SHIPSET	Yuanyang/Changzhou/Shandong Zhongchuan
65	FIXED WATER BASED FIRE EXTINGUISHING SYSTEM	SHIPSET	Fain/Safetec
66	INERGEN FIRE SUPPRESSION SYSTEM	SHIPSET	Consilium/Tyco
67	HELIDECK SAFETY SYSTEM	SHIPSET	Fain/Safetec
68	LIFT	1	Hyundai/Kone
69	YOKOHAMA FENDERS	4	Qingdao Xincheng or equivalent
70	LIFE SAVING APPLIANCES (TOTALLY ENCLOSED LIFEBOATS WITH DAVITS+ RESCUE BOATS WITH A - FRAME DAVIT) AS PER SPECIFICATION SECTION 6.1	SHIPSET	Wolong/Norsafe/Beihai
70a	LIFERAFTS WITH MES (TBC)	SHIPSET	Viking or equivalent
71	GALLEY & LAUNDRY EQPT	SHIPSET	Wesco or Equivalent
72	ACCOMMODATION PARTITIONS / INSULATION/ OUTFITTINGS	SHIPSET	TBA
73	REFRIGERATION SYSTEM AS PER SPECIFICATION SECTION 5.22	SHIPSET	Viking/HH or Equivalent
74	AIRCONDITIONING & VENTILATION SYSTEM AS PER SPECIFICATION SECTION 5.23	SHIPSET	Viking/HH or Equivalent

75	TANK GAUGING SYSTEM AS PER SPECIFICATION SECTION 5.24	SHIPSET	Cramer/S-two/Xtronica
76	CARGO HOLD WATER LEVEL MONITORING SYSTEM AS PER SPECIFICATION SECTION 5.25	SHIPSET	Cramer/S-two/Xtronica
77	CARGO HANDLING SYSTEM AS PER SPECIFICATION SECTION 4.16	SHIPSET	Bedeschi / Cargotec
78	100T CRANE AS PER SPECIFICATION SECTION 4.15.2	1	TTS/Liebherr/Cargotec/Huisman
79	200T AHC CRANE AS PER SPECIFICATION SECTION 4.15.2	1	TTS/Liebherr/Cargotec/Huisman
80	10T @ 20M /20 t @ 10 M KNUCKLEBOOM MARINE CRANES	2	West Marine/Rainbow/461 WMMP
81	LIME SYSTEM AS PER SPECIFICATION SECTION 5.28	SHIPSET	Van Aalst, Unislip, Carlsen Or Agreed Equivalent
82	Paint	SHIPSET	Jotun/IP
83	Helideck	1	MP/Marine Aluminium/Helidex Offshore
84	WT Sliding Door	SHIPSET	IMS/Winel/Jiangyin Huangshan
85	Breath Air Compressor	SHIPSET	Bauer/MSA or Equivalent
86	External Lighting fixture	SHIPSET	Shengang or equivalent
87	VFD Cable	SHIPSET	Nexan or Equivalent
88	Internal Lighting fixture	SHIPSET	Shengang/Hai Xing
89	CCTV	SHIPSET	Bosch/Samsung or Equivalent
90	Fire alarm & Detection System	SHIPSET	Consilium, Wilhelmsen or Equivalent
91	Helideck Monitoring system	SHIPSET	SMC/Observator or Equivalent
92	CO2	SHIPSET	Fain/Safetec

NOTE:

THE PARAMETER/QUANTITY OF EQUIPMENT IN THE LIST ARE FOR REFERENCE ONLY AND SUBJECT TO THE SPECIFICATION REQUIREMENTS.

THE MAKER/VENDOR SELECTION FOR THIS PROJECT SHALL FOLLOW THE STANDARD OF CSS SERIES, THE MAKER/VENDOR FOR CSS SERIES SHALL BE PREFERENTIAL CONSIDERED IF THEIR PRICE ARE KEPT IN REASONABLE LEVEL.

