

## 60M Multi-Purpose Offshore Support Vessel Maker List

Date 2012/10/20

### A. Propulsion

ITEM	DESCRIPTION	MAKER / MODEL	SPECIFICATION	LOCATION	REMARK
1	MAIN ENGINE	Niigata/6MG28AHX	2 X 3000 BHP @ 800 RPM	ER	
2	CPP	Berg Propulsion/BCP 760	2 SETS		
3	GEAR BOX	Berg Packaged	2 SETS	ER	
4	Shaft Generator	Standford China/ 2*PM734C2	2 X 1000KW	ER	
5	ENGINE CONTROL PANEL	Main Engine Maker Supply	1 SHIPSET		
6	GENSET	Caterpillar/C 18	3 X 450Kw 415V/50Hz	ER	
7	EMERGENCY GENERATOR	CUMMINS USA/UK/ 6CT8.3-D(M)	90KW@1500RPM 415V/50Hz	EGR	
8	BOW THRUSTER	KAWASAKI China License	2 X 10 tonnes, driven by electric motor complete with controllable pitch propeller	BTC	
9	Stern Thruster	KAWASAKI China License	1 X 10 tonnes, driven by electric motor complete with controllable pitch propeller		
10	STEERING GEAR	JASTRAM/CANADA	4TM AT 35 Degree, 415/3/50 VAC-hydraulic	SGC	
11	Dynamic Positioning System (DPS)	Kongsberg/Norway	As Per DP2 requirement		
12	RUDDER STOCK BEARING	CHINA MAKER	2 SETS		
13	RUDDER STOCK SEAL	CHINA MAKER	2 SETS	SGC	
14	AIR COMPRESSOR	SPERRE/Norway/	2-Stage, 2-cylinder, capacity: 34m <sup>3</sup> /h, 1450rpm, 7.6kw	ER	
15	ELE.DREIVEN AGITATOR	ALLWEILER AS/NORWAY	75kw/1450rpm, 3*415v 50HZ		
16	FRESH WATER GENERATOR	SOUTHCHEM/SINGAPORE	CAPACITY 5TON/DAY		

### B. Pump set

ITEM	DESCRIPTION	MAKER / MODEL	SPECIFICATION	LOCATION	REMARK
1	OILY WATER SEPERATOR	Taiko/China	capacity of 1.0 m <sup>3</sup> /hr with oil content less than 15 ppm MEET MARPOL REQUIREMENT	ER	
2	BILGE PUMP	DESMI	SELF PRIMING CENTRIFUGAL PUMP; 45 m <sup>3</sup> /h at 50M head	ER	
3	BALLAST PUMP	DESMI	SELF PRIMING CENTRIFUGAL PUMP; 75 m <sup>3</sup> /h at 50M head	ER	
4	GENERAL SERVICE & FIRE PUMP	DESMI	SELF PRIMING CENTRIFUGAL PUMP WITH ELECTRIC MOTOR 75 M <sup>3</sup> /hr at 50M head	ER	
5	EMER FIRE PUMP	DESMI	SELF PRIMING CENTRIFUGAL PUMP WITH ELECTRIC MOTOR 35 m <sup>3</sup> /hr at 50M head	BTC	
6	F.O. TRANSFER PUMP	DESMI	Two (2) horizontal gear pump; capcity 24.97 M <sup>3</sup> /hr at 2.0 Bar; 3 phase, 50 Hz, 415 volts motor	ER	
7	F.O. CARGO PUMP	DESMI	Two (2) VERTICAL SCREW PUMP WITH ELECTRIC MOTOR C/W FLOW METER 113 M <sup>3</sup> /hr at 7.5 Bar	ER	
8	F.W. PUMP @ Drill W. PUMP	DESMI	Two (2) SELF PRIMING CENTRIFUGAL PUMP 100M <sup>3</sup> /hr at 75M head	ER	
9	S.W. PUMP	DESMI	SELF PRIMING CENTRIFUGAL PUMP WITH ELECTRIC MOTOR 4 M <sup>3</sup> /hr at 35M head	ER	
10	F.W. STANDBY PUMP	DESMI	SELF PRIMING CENTRIFUGAL PUMP WITH ELECTRIC MOTOR 3KW/1430RPM.	ER	
11	HOT WATER CALORIFIER	CHINA MAKER	SIZE TO SUIT	ER	
12	HOT WATER CIRCULATION PUMP	CHINA MAKER	SIZE TO SUIT	ER	
13	F.W. CARGO PUMP	DESMI	SELF PRIMING VERTICAL SCREW PUMP WITH ELECTRIC MOTOR C/W FLOW METER 100m <sup>3</sup> /h@ at head 75	ER	
14	AIR COND COOLING PUMP	DESMI	SELF PRIMING CENTRIFUGAL PUMP WITH ELECTRIC MOTOR	ER	
15	FREEZER / CHILLER PLANT COOLING PUMP	DESMI	SELF PRIMING CENTRIFUGAL PUMP WITH ELECTRIC MOTOR	ER	

16	AHT WINCH POWER PACK COOLING PUMP	DESMI	SELF PRIMING CENTRIFUGAL PUMP WITH ELECTRIC MOTOR 25M3/hr at 20M head	ER	
17	SHARK JAWS / TOW PIN POWER PACK COOLING PUMP	DESMI	SELF PRIMING CENTRIFUGAL PUMP WITH ELECTRIC MOTOR	ER	
18	CEMENT COMPRESSOR COOLING PUMP	DESMI	2 units SELF PRIMING CENTRIFUGAL PUMP WITH ELECTRIC MOTOR 15m3/hr @ at 3.0 Bar	ER	
19	DIRTY OIL TRANSFER PUMP	DESMI	One (1) sludge oil pump of 5.21M3/hr 3 Bar	ER	
20	MUD PUMP FOR LIQUID MUD	DESMI	2 UNITS HORIZONTAL NON - SELF PRIMING CENTRIFUGAL PUMP WITH TWO SPEED ELECTRIC MOTOR 70m3/hr @ minimum 75m head pressure.	ER	
21	CEMENT PUMPING CONTROL SYSTEM	Van Aalst, Netherlands	DISCHARGE CAPACITY IS TO BE 40 TON / HOUR OF CEMENT THROUGH 60M VERTICAL AND 120 M HORIZONTAL 5-INCH DIAMETER PIPE BY THE OPERATION OF ONE COMPRESSOR		
22	CEMENT COMPRESSOR	Van Aalst, Netherlands	13.0M3/MIN @ 80 PSI WORKING PRESSURE, SEA WATER COOLED	ER	
23	REFRIGERATION AIR DRYER	Van Aalst, Netherlands	AIR COOLED TYPE, CAPACITY: 13M3/MIN	ER	
24	SEWAGE TREATMENT PLANT	Jiangsu Nanji	SUITABLE FOR 50 MEN AND MEET MARPOL REQUIREMENT	ER	
25	F.O. PURIFIER	Alfa Laval	MANUAL CLEANING TYPE WITH SUITABLE CAPACITY capacity:1600L/H AT SEPARATION TEMP 40°C	ER	
26	F.O. FLOW METER	CHINA MAKER	SIZE TO SUIT WITH LOCAL READ OUT AND CALIBRATION CERT	ER	
27	MAIN ENGINE F.O. FLOW METER	CHINA MAKER	SIZE TO SUIT WITH LOCAL READ OUT AND CALIBRATION CERT	ER	
28	F.W. FLOW METER	CHINA MAKER	SIZE TO SUIT WITH LOCAL READ OUT AND CALIBRATION CERT	ER	
29	SERVICE AIR COMPRESSOR	Nanjing Compressor	Fill-up capacity:56m3/h, 0.8Mpa,6.8KW(Shaft power)	ER	
30	S./F. WATER HYDROPHORE	DESMI	300L TANK,PUMP 4M3/H @35M		
31	BILGE EJECTOR PUMP	DESMI	One (1) pump of 5.0M3/hr at 22M head		
32	HYDROCYCLONES NOZZLE	MUD PUMP SUPPLIER	STAINLESS STEEL HYDROCYCLONES NOZZLE FOR AGITATION OF MUD IN MUD TANK, QUANTITY TO BE RECOMMENDED BY MUD PUMP SUPPLIER		

### C. Deck Machinery

ITEM	DESCRIPTION	MAKER / MODEL	SPECIFICATION	LOCATION	REMARK
1	ANCHOR WINDLASS / BOW WINCH	MACGREGOR(Plimsoll)	10T*0-12m/min for 40mm dia.U2 chain	FD	
2	TUGGER WINCH	MACGREGOR(Plimsoll)	Rated Pull(1ST LAYER):10 TON	MD	
3	CAPSTAN	MACGREGOR(Plimsoll)	5 TON LINE PULL @ 0-15M/MIN	MD	
4	SHARK JAWS / TOW PIN	MACGREGOR(Plimsoll)	HYDRAULIC OPERATE 200 TON SWL SHARK JAWS / TOWING PIN CONTROL AT LOCAL AND REMOTE IN WHEELHOUSE	MD	
5	ANCHOR HANDLING / TOWING WINCH	MACGREGOR(Plimsoll)	ELECTRO HYDRAULIC WATERFALL TYPE DOUBLE DRUM ANCHOR HANDLING / TOWING WINCH WITH 150 TON LINE PULL AND 220 TON BREAK HOLDING AT FIRST LAYER, CONTROL AT LOCAL AND REMOTE IN WHEELHOUSE	MD	
6	DECK CRANE	Jiangsu Haitai	3T @ 12M	MD	
7	WOOD SHEATHING	HARD WOOD	T=75mm	MD	
8	ANCHOR	CHINA MAKER	Approx. 1440 kg	MD	
9	ANCHOR CHAIN	CHINA	As per Specification	MD	

### D. External Fire Fighting System

ITEM	DESCRIPTION	MAKER / MODEL	SPECIFICATION	LOCATION	REMARK
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1	FIRE MONITOR	FFS NORWAY	AS PER FI-FI 1 REQUIREMENT 120m from bow/50m at 70m distance; Capacity:water/foam:1200/300 M3/h; Capacity:water:1200 M3/h	MI	
2	EXTERNAL FIRE PUMP	FFS NORWAY Model:SFP250*350XP	AS PER FI-FI 1 REQUIREMENT Horizontal Centrifugal,1685m3/h S.W. at 120mlc for 1800rpm;	ER	
3	STEP UP GEARBOX	FFS NORWAY	AS PER FI-FI 1 REQUIREMENT	ER	
4	WATER CURTAIN SYSTEM	FFS NORWAY	AS PER FI-FI 1 REQUIREMENT		
5	DECK DELIVERY HEAD	FFS NORWAY	TWO NOS OF 4-WAYS DECK DELIVERY HYDRANT	MD	
6	DISPERSANT SPRAY BOOM	FFS NORWAY	ONE SET DISPERSANT SPRAY BOOM SYSTEM WITH 1 PCS AROUND THE PUMP, P1-25 OF CAPACITY 4M3/H @ 40 MLC C/W METERING VALVE FOR PROPORTIONING 1-6%	MD	

### E. Eletrical

ITEM	DESCRIPTION	MAKER / MODEL	SPECIFICATION	LOCATION	REMARK
1	MSB AND ESB AND D/B 415V - 230V VOLTAGE	Henan Guangcai	AS PER CLASS APPROVAL	ECR	
2	TRANSFORMER	Taizhou Haichuan	According to calculation	ER / EGR	
3	AUTOMATIC BATTERY CHARGER	CHINA MAKER	24V / 50A	WH	
4	GENERAL ALARM PANEL	CHINA MAKER		ECR / WH	
5	ENGINE TELEGRAPH	CHINA MAKER	LIGHT & SOUND TYPE 24V DC	ER/WH	
6	SHAFT TACHOMETER	CHINA MAKER		WH	
7	AIR HORN	Taizhou Yuanyang	Model:WKD-2		
8	ELECTRIC CABLE	CHINA MAKER	MARINE TYPE AS PER CLASS REQUIREMENT		
9	LIGHTS	CHINA MAKER			
10	REEFER SOCKET		8 X 415V, 3-ph		

### F. Navigation & Communication Equipment

ITEM	DESCRIPTION	MAKER / MODEL	SPECIFICATION	LOCATION	REMARK
1	GMDSS CONSOLE	FURUNO PACKAGE	As per Specification	WH	
2	IMMARSAT C	FURUNO JAPAN	FELCOM-15*2	WH	
3	ECHO SOUNDER	FURUNO JAPAN	FE-700	WH	
4	SECONDARY RADAR	FURUNO JAPAN	FAR-2137S	WH	
5	PRIMARY RADAR	FURUNO JAPAN	FAR-2117	WH	
6	GYRO COMPASS	Anschuetz	STD-22	WH	
7	MAGNETIC COMPASS	FURUNO PACKAGE	MK-2000	WH	
8	Electronic Charts to IMO approved type	FURUNO PACKAGE	As per Specification	WH	
9	NAVTEX RECEIVER	FURUNO JAPAN	NX-700A	WH	
10	GPS	FURUNO JAPAN	DGP-150 MD-550	WH	
11	ANENOMETER	FURUNO PACKAGE	As per Specification	WH	
12	AUTO PILOT	Anschuetz	BST-3060	WH	
13	AIS	FURUNO	FA-150	WH	
14	MULTI CHANNEL VHF GMDSS SURVIVAL RADIO	FURUNO PACKAGE	FM-8800S	WH	
15	EPIRB	ACR	RLB-38	MI	
16	SART	ACR	PATHFINDER 3	WH	
17	BNWAS	FURUNO	BW-508	WH	
18	FACSIMILE RECEIVER	FURUNO	FAX-408	WH	
19	TWO-WAY-VHF	ACR	SR-102		
20	SPEED LOG	FURUNO JAPAN	DS-80	WH	
21	PUBLIC ADDRESS	Jiaxing Kexun	As per Specification	WH	
22	SOUND POWER PHONE	Jiaxing Kexun	As per Specification	WH	
23	SEARCH LIGHT	CHINA MAKER	3*2000W	WH	
24	Flood Light	CHINA MAKER	1000W		
25	NAVIGATION LIGHT	CHINA MAKER			
26	AUTO TELEPHONE	CHINA MAKER			
27	Clear View Screen	CHINA MAKER			
28	Wipers	CHINA MAKER		WH	

### G. Safety Equipment

ITEM	DESCRIPTION	MAKER / MODEL	SPECIFICATION	LOCATION	REMARK
1	FIX CO2	Wuhan Xiandai Changjiang			
2	LIFE RAFT	CHINA MAKER	To comply with regulation	FD	
3	LIFE BUOY	CHINA MAKER	To comply with regulation		
4	LIFE JACKET	CHINA MAKER	To comply with regulation		
5	RESCUE BOAT & DAVIT	CHINA MAKER	To comply with regulation	FD	
6	MOB LIGHT SMOKE SIGNAL	CHINA MAKER	To comply with regulation	WH	
7	PARACHUTE ROCKET	CHINA MAKER	To comply with regulation	WH	
8	EMERGENCY ESCAPE BREATHING APPARATUS	CHINA MAKER	To comply with regulation		
9	FIRST AID KIT	CHINA MAKER	To comply with regulation		

10	AUTOMATIC FIRE DETECTION AND ALARM SYSTEM	CHINA MAKER			
11	FIRE EXTINGUISHER	CHINA MAKER			
12	FIRE HOSE	CHINA MAKER			

#### H. Domestic Equipment

ITEM	DESCRIPTION	MAKER / MODEL	SPECIFICATION	LOCATION	REMARK
1	PAINT	IP, JUTON			
2	CENTRALISED AIR CONDITION	YONGSHENG	Heat and cold	MD	
3	AHU FOR ECR ROOM	YONGSHENG		ECR	
4	SPLIT AIR CONDITION FOR WHEELHOUSE	CHINA	AS PER THE SPECIFICATION	WH	
5	FRIDGE / FREEZER	CHINA		GALLEY/ MESS	
6	FRIDGE / FREEZER	CHINA		OFF MESS	
7	ER AXIAL FAN	CHINA		FD	
8	TOILET EXHAUST FAN	CHINA		FD/MD	
9	WALK IN FREEZER / CHILLER ROOM	CHINA		BMD	

#### I. Others

ITEM	DESCRIPTION	MAKER / MODEL	SPECIFICATION	LOCATION	REMARK
1	Steel Plate	China			
2	Piping	China	GB Standard		
3	Piping Accessory (flanges and valves)	China	JIS Standard		