


World Best STX
 김지항-전장기본2P

207144
 SWARNA KRISHNA
 IMO NUMBER
 9414838

(15) SHEETS WITH COVER

stx	MODEL NO.	60KPC01(S-1291/93/94/95/96/97)			
	TYPE	60,470 DWT CRUDE/PRODUCT OIL TANKER			
MANAGER : 	TITLE POWER ANALYSIS TABLE				
CHECKED : <u>S. H. CHOI</u> Ji-Hang Kim (김지항)					
DRAWN :					
TEL. NO.	055) 548 - 3260				
DEPT	ELECTRIC DESIGN 2 TEAM	SCALE	DATE	DWG. NO.	REV. NO.
		NONE	2008. 12. 22	T8060000	0
STX Offshore & Shipbuilding Co., Ltd.					E29

STXSE-C302(200201)

FORM2

FORM NAME : STXSE-302

PLAN HISTORY

DATE	REV.	PAGE	DESCRIPTION	DWN.	CHKD.	MGR.
2008.12.22	A		* DESIGN BY POWER SYSTEM DESIGN PART * SUBMITTED TO OWNER & CLASS FOR APPROVAL			
2009.09.24	B		* DESIGN BY POWER SYSTEM DESIGN PART * SUBMITTED TO OWNER			
2010.01.04	D		* ISSUED FOR WORKING			

World Best STX

전장설계2-통력설계2P-207144

SUMMARY OF ELECTRIC LOAD

MODEL NO. 60KPC01(S-1291/93/94/95/96/97)

NO	NAME OF CONSUMER GROUP	AT SEA						MANEUVERING			AT CARGO HANDLING			AT HARBOR			
		NORMAL SEA GOING		CARGO HEATING		TANK CLEAN		CL	IL	CL	IL	CL	IL	CL	IL	CL	IL
		CL	IL	CL	IL	CL	IL										
1	MAIN ENGINE AUXILIARIES	71.0	0.0	71.0	0.0	71.0	0.0	168.2	0.0	10.1	0.9	10.1	0.9	10.1	0.9	10.1	0.9
2	ENGINE ROOM AUXILIARIES	175.1	126.3	315.1	126.3	315.1	126.3	128.8	174.4	302.4	110.3	302.4	110.3	163.0	114.4	163.0	114.4
3	BOILER PLANT	3.4	0.0	90.7	0.3	90.7	0.3	90.7	0.3	0.0	52.8	0.0	52.8	0.0	90.7	0.3	90.7
4	CARGO HANDLING SYSTEM	11.2	0.0	901.9	0.0	323.1	0.0	0.0	0.0	1461.9	0.0	1461.9	0.0	11.2	0.0	11.2	0.0
5	DECK MACHINERY	29.0	0.0	29.0	0.0	29.0	0.0	29.0	362.4	0.0	48.5	0.0	48.5	0.0	29.0	0.0	29.0
6	AIR COND. / REF. PROV. PLANT	98.2	0.0	98.2	0.0	98.2	0.0	98.2	0.0	98.2	0.0	98.2	0.0	118.4	0.0	118.4	0.0
7	VENT. FANS	56.8	0.0	56.8	0.0	56.8	0.0	56.8	0.0	31.5	0.0	31.5	0.0	31.5	0.0	31.5	0.0
8	GALLEY & LAUNDRY EQUIPMENT	0.0	113.1	0.0	113.1	0.0	113.1	0.0	113.1	0.0	113.1	0.0	113.1	0.0	0.0	113.1	0.0
9	LIGHTING, NAV. & COMM.	101.8	0.0	101.8	0.0	101.8	0.0	101.8	0.0	101.8	0.0	101.8	0.0	101.8	0.0	101.8	0.0
10	MISCELLANEOUS	0.7	0.0	0.0	0.0	0.7	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.7	0.0
	TOTAL OF LOAD	547.3	239.4	1664.5	239.7	1086.4	239.7	674.4	650.2	2006.1	325.6	2006.1	325.6	527.6	491.8	527.6	491.8

TOTAL LOAD OF CONTINUOUS LOAD(KW)	547.3	1664.5	1086.4	674.4	2006.1	527.6
TOTAL LOAD OF INTERMITTENT LOAD(KW)	239.4	239.7	239.7	650.2	325.6	491.8
DIVERSITY FACTOR (%)	33	33	33	33	33	33
ACTUAL LOAD OF INTERMITTENT LOAD(KW)	79.0	79.1	79.1	214.6	107.5	162.3
TOTAL LOAD(KW)	626.3	1743.6	1165.5	888.9	2113.6	689.9
CAPACITY OF GENERATOR (KW)	1250.0	1250.0	1250.0	1250.0	1250.0	1250.0
NUMBER OF WORKING GENERATOR	1	2	2	1	2	1
GENERATOR LOAD FACTOR(%)	50.1	69.7	46.6	71.1	84.5	55.2

* GENERATOR

MAIN GENERATOR (NO.1, NO.2,NO.3)	CAPACITY	NO. OF SET	VOLTAGE	PHASE	FREQUENCY
	1250 KW	3	AC 450V	3 PH	60 HZ

SUMMARY OF ELECTRIC LOAD (AFTER PREF. TRIP)

MODEL NO. 60KPC01(S-1291/93/94/95/96/97)

NO	NAME OF CONSUMER GROUP	AT SEA						TANK CLEAN		MANEUVERING		AT CARGO HANDLING		AT HARBOR	
		NORMAL SEA GOING		CARGO HEATING		CARGO HEATING		CL	IL	CL	IL	CL	IL	CL	IL
		CL	IL	CL	IL	CL	IL	CL	IL	CL	IL	CL	IL	CL	IL
1	MAIN ENGINE AUXILIARIES	71.0	0.0	71.0	0.0	71.0	0.0	71.0	0.0	168.2	0.0	10.1	0.9	10.1	0.9
2	ENGINE ROOM AUXILIARIES	162.3	79.5	302.2	79.5	302.2	79.5	302.2	79.5	128.6	144.9	302.2	78.2	162.8	79.5
3	BOILER PLANT	3.4	0.0	90.7	0.3	90.7	0.3	90.7	0.3	90.7	0.3	0.0	39.4	90.7	0.3
4	CARGO HANDLING SYSTEM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	DECK MACHINERY	29.0	0.0	29.0	0.0	29.0	0.0	29.0	0.0	29.0	362.4	0.0	0.0	0.0	207.1
6	AIR COND./ REF. PROV. PLANT	6.8	0.0	6.8	0.0	6.8	0.0	6.8	0.0	6.8	0.0	6.8	0.0	8.6	0.0
7	VENT. FANS	51.1	0.0	51.1	0.0	51.1	0.0	51.1	0.0	51.1	0.0	25.9	0.0	25.9	0.0
8	GALLEY & LAUNDRY EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	LIGHTING, NAV. & COMM.	101.8	0.0	101.8	0.0	101.8	0.0	101.8	0.0	101.8	0.0	101.8	0.0	101.8	0.0
10	MISCELLANEOUS	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL OF LOAD	426.2	79.5	652.7	79.8	652.7	79.8	653.5	79.8	577.1	507.6	446.9	118.6	400.7	287.8

TOTAL LOAD OF CONTINUOUS LOAD(KW)	426.2	652.7	653.5	577.1	446.9	400.7
TOTAL LOAD OF INTERMITTENT LOAD(KW)	79.5	79.8	79.8	507.6	118.6	287.8
DIVERSITY FACTOR (%)	33	33	33	33	33	33
ACTUAL LOAD OF INTERMITTENT LOAD(KW)	26.2	26.3	26.3	167.5	39.1	95.0
TOTAL LOAD(KW)	452.4	679.1	679.8	744.6	486.0	495.7
CAPACITY OF GENERATOR (KW)	1250.0	1250.0	1250.0	1250.0	1250.0	1250.0
NUMBER OF WORKING GENERATOR	1	1	1	1	1	1
GENERATOR LOAD FACTOR(%)	36.2	54.3	54.4	59.6	38.9	39.7

* GENERATOR

MAIN GENERATOR (NO.1, NO.2, NO.3)	CAPACITY	NO. OF SET	VOLTAGE	PHASE	FREQUENCY
	1250 KW	3	AC 450V	3 PH	60 HZ

01. MAIN ENGINE AUXILIARIES

MODEL NO. 60KPC01(S-1291/93/94/95/96/97)

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NO	NAME OF CONSUMER	MOTOR		AT SEA												MANEUVERING						AT CARGO HANDLING						AT HARBOUR						PT
		CAPACITY		NORMAL SEA GOING				CARGO HEATING				TANK CLEAN'G				MANEUVERING			AT CARGO HANDLING			AT HARBOUR												
		NO	OUTPUT	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL							
1	M/E TURNING GEAR	1	2.2	83.0	2.7	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	
2	M/E AUX. BLOWER	2	55.0	90.5	60.8	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	2	80	97.2	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	
3	MAIN L.O PUMP	2	75.0	90.7	82.7	160.5	50.0	0.0	0.0	160.5	50.0	0.0	0.0	160.5	50.0	0.0	0.0	160.5	50.0	0.0	0.0	160.5	50.0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	
4	M/E JACKET WATER PUMP	2	19.0	91.2	20.8	159.7	12.4	0.0	0.0	159.7	12.4	0.0	0.0	159.7	12.4	0.0	0.0	159.7	12.4	0.0	0.0	159.7	12.4	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	
5	M/E, G/E H.F.O SUPPLY PUMP	2	2.5	84.0	3.0	185.3	2.5	0.0	0.0	185.3	2.5	0.0	0.0	185.3	2.5	0.0	0.0	185.3	2.5	0.0	0.0	185.3	2.5	0.0	0.0	185.3	2.5	0.0	0.0	185.3	2.5	0.0	0.0	
6	M/E, G/E H.F.O CIRC. PUMP	2	6.3	89.5	7.0	184.9	6.0	0.0	0.0	184.9	6.0	0.0	0.0	184.9	6.0	0.0	0.0	184.9	6.0	0.0	0.0	184.9	6.0	0.0	0.0	184.9	6.0	0.0	0.0	184.9	6.0	0.0	0.0	
7	M/E AIR COOL. CLEAN. PUMP	1	2.2	79.5	2.8	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	1	34	0.0	0.9	1	34	0.0	0.9	
8	M/E J.W PREHEAT. CIRC. PUMP	1	2.2	79.5	2.8	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	1	59	1.6	0.0	1	59	1.6	0.0	
TOTAL						71.0	0.0			71.0	0.0			71.0	0.0			168.2	0.0			168.2	0.0			10.1	0.9			10.1	0.9			
TOTAL OF AFTER PREF. TRIP						71.0	0.0			71.0	0.0			71.0	0.0			168.2	0.0			168.2	0.0			10.1	0.9			10.1	0.9			

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STY OFFSHORE & SHIPBUILDING CO. LTD

02. ENGINE ROOM AUXILIARIES (1)

MODEL NO. 60KPC01(S-1291/93/94/95/96/97)

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NO	NAME OF CONSUMER	MOTOR CAPACITY	AT SEA												MANEUVERING						AT CARGO HANDLING						AT HARBOUR					
			NORMAL SEA GOING				CARGO HEATING				TANK CLEAN'G				MANEUVERING			AT CARGO HANDLING			AT HARBOUR											
			NO	OUTPUT	EFF'	INPUT	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL		
1	MAIN C.S.W PUMP	75.0	90.7	82.7	1	69.8	57.7	0.0	1	69.8	57.7	0.0	1	69.8	57.7	0.0	1	69.8	57.7	0.0	1	69.8	57.7	0.0	1	69.8	57.7	0.0				
2	FIRE & BILGE PUMP	85.0	90.7	93.7	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0				
3	FIRE & G/S PUMP	85.0	90.7	93.7	1	67.5	0.0	63.3	1	67.5	0.0	63.3	1	67.5	0.0	63.3	1	67.5	0.0	63.3	1	67.5	0.0	63.3	1	67.5	0.0	63.3				
4	MAIN AIR COMPRESSOR	37.0	91.5	40.4	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0				
5	SERVICE AIR COMPRESSOR	25.3	91.0	27.8	1	40	0.0	11.1	1	40	0.0	11.1	1	40	0.0	11.1	1	40	0.0	11.1	1	40	0.0	11.1	1	40	0.0	11.1				
6	H.F.O PURIFIER	18.5	92.8	19.9	1	70	14.0	0.0	1	70	14.0	0.0	1	70	14.0	0.0	1	70	14.0	0.0	1	70	14.0	0.0	1	70	14.0	0.0				
7	L.O PURIFIER	5.5	89.5	6.1	1	70	4.3	0.0	1	70	4.3	0.0	1	70	4.3	0.0	1	70	4.3	0.0	1	70	4.3	0.0	1	70	4.3	0.0				
8	L.O PURIFIER SUPPLY PUMP	0.8	71.5	1.0	1	60	0.6	0.0	1	60	0.6	0.0	1	60	0.6	0.0	1	60	0.6	0.0	1	60	0.6	0.0	1	60	0.6	0.0				
9	H.F.O TRANS PUMP	7.5	86.0	8.7	1	46	0.0	4.0	1	46	0.0	4.0	1	46	0.0	4.0	1	46	0.0	4.0	1	46	0.0	4.0	1	46	0.0	4.0				
10	L.O TRANS PUMP	2.2	81.0	2.7	1	36	0.0	1.0	1	36	0.0	1.0	1	36	0.0	1.0	1	36	0.0	1.0	1	36	0.0	1.0	1	36	0.0	1.0				
11	M.D.O TRANS PUMP	7.5	86.0	8.7	1	41	0.0	3.6	1	41	0.0	3.6	1	41	0.0	3.6	1	41	0.0	3.6	1	41	0.0	3.6	1	41	0.0	3.6				
12	L/T C.F.W PUMP	45.0	90.5	49.7	2	66.5	66.1	0.0	1	66.5	33.1	0.0	1	66.5	33.1	0.0	1	66.5	33.1	0.0	1	66.5	33.1	0.0	1	66.5	33.1	0.0				
13	CONTROL AIR COMPRESSOR	18.5	91.0	20.3	1	181.6	0.0	16.6	1	181.6	0.0	16.6	1	181.6	0.0	16.6	1	181.6	0.0	16.6	1	181.6	0.0	16.6	1	181.6	0.0	16.6				
14	M.D.O PURIFIER	5.5	89.5	6.1	1	70	4.3	0.0	1	70	4.3	0.0	1	70	4.3	0.0	1	70	4.3	0.0	1	70	4.3	0.0	1	70	4.3	0.0				
15	M.D.O PURIFIER SUPPLY PUMP	1.5	78.0	1.9	1	28	0.5	0.0	1	28	0.5	0.0	1	28	0.5	0.0	1	28	0.5	0.0	1	28	0.5	0.0	1	28	0.5	0.0				

SUB TOTAL		NORMAL SEA GOING	CARGO HEATING	TANK CLEANING	MANEUVERING	AT CARGO HANDLING	AT HARBOUR
		147.6	99.5	114.5	99.5	114.5	102.2
SUB TOTAL OF AFTER PREF. TRIP		147.6	71.8	114.5	71.8	114.5	71.8

02. ENGINE ROOM AUXILIARIES (2)

MODEL NO. 60KPC01(S-1291/93/94/95/96/97)

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NO	NAME OF CONSUMER	MOTOR CAPACITY		AT SEA												MANEUVERING			AT CARGO HANDLING			AT HARBOUR			PT									
		NO	OUTPUT EFF'	NORMAL SEA GOING			CARGO HEATING			TANK CLEAN'G			KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL		KN	LF	CL	IL					
				KN	LF	CL	IL	KN	LF	CL	IL	KN																		LF	CL	IL	KN	LF
16	G/E L.O PRIMING PUMP	3	0.63	74.0	0.9	2	70	1.2	0.0	1	70	0.6	0.0	1	70	0.6	0.0	1	70	0.6	0.0	1	70	0.6	0.0	1	70	0.6	0.0	2	80	1.4	0.0	
17	G/E J.W PREHEATER	1	36.55	100.0	36.6	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0.0	0.0		
18	SCRUBBER C.S.W PUMP	2	110.0	91.2	120.6	0	0	0.0	0.0	1	65	78.4	0.0	1	65	78.4	0.0	1	65	78.4	0.0	1	65	78.4	0.0	1	65	78.4	0.0	0	0.0	0.0		
19	INERT GAS BLOWER	2	127.0	91.0	139.6	0	0	0.0	0.0	1	65	90.7	0.0	1	65	90.7	0.0	1	65	90.7	0.0	1	65	90.7	0.0	1	65	90.7	0.0	0	0.0	0.0		
20	F.O PUMP FOR I.G.G	2	4.3	67.0	6.4	0	0	0.0	0.0	1	70	4.5	0.0	1	70	4.5	0.0	1	70	4.5	0.0	1	70	4.5	0.0	1	70	4.5	0.0	0	0.0	0.0		
21	DECK WATER SEAL PUMP	2	5.5	81.0	6.8	1	40	2.7	0.0	1	40	2.7	0.0	1	40	2.7	0.0	1	40	2.7	0.0	1	40	2.7	0.0	1	40	2.7	0.0	1	45	3.1	0.0	
22	F.W GENE. EJECTOR PUMP	2	18.5	90.0	20.6	154.1	11.1	0.0	0.0	154.1	11.1	0.0	0.0	154.1	11.1	0.0	0.0	154.1	11.1	0.0	0.0	154.1	11.1	0.0	0.0	154.1	11.1	0.0	0	0.0	0.0	0.0	PT	
23	F.W GENE. FRESH WATER PUMP	1	1.5	75.0	2.0	1	75	1.5	0.0	1	75	1.5	0.0	1	75	1.5	0.0	1	75	1.5	0.0	1	75	1.5	0.0	1	75	1.5	0.0	0	0.0	0.0	0.0	PT
24	F.W HYD. UNIT	2	3.7	83.0	4.5	1	39	0.0	1.7	1	39	0.0	1.7	1	39	0.0	1.7	1	39	0.0	1.7	1	39	0.0	1.7	1	39	0.0	1.7	1	39	0.0	1.7	PT
25	SLUDGE PUMP	1	2.2	81.0	2.7	1	39	0.0	1.1	1	39	0.0	1.1	1	39	0.0	1.1	1	39	0.0	1.1	1	39	0.0	1.1	1	39	0.0	1.1	1	39	0.0	1.1	PT
26	OILY WATER SEPERATOR	1	1.3	83.0	1.6	1	80	0.0	1.3	1	80	0.0	1.3	1	80	0.0	1.3	1	80	0.0	1.3	1	80	0.0	1.3	1	80	0.0	1.3	1	80	0.0	1.3	PT
27	INCINERATOR	1	18.5	89.0	20.8	1	70	0.0	14.6	1	70	0.0	14.6	1	70	0.0	14.6	1	70	0.0	14.6	1	70	0.0	14.6	1	70	0.0	14.6	0	0.0	0.0	0.0	PT
SUB TOTAL						16.5	18.6			189.5	18.6			189.5	18.6			189.5	18.6			3.3	2.8			176.9	2.8			4.4	4.1			
SUB TOTAL OF AFTER PREF. TRIP						3.9	2.3			176.9	2.3			176.9	2.3			176.9	2.3			3.3	1.1			176.9	1.1			4.4	2.3			

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02. ENGINE ROOM AUXILIARIES (3)

MODEL NO. 60KPC01(S-1291/93/94/95/96/97)

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NO	NAME OF CONSUMER	MOTOR		AT SEA												AT CARGO			AT			PT													
		CAPACITY	INPUT	NORMAL SEA GOING			CARGO HEATING			TANK CLEAN'G			MANEUVERING			HANDLING			HARBOUR																
				NO	OUTPUT	EFF'	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL		IL	KN	LF	CL	IL								
28	CALORIFIER HEATER	1	15.00	100.0	15.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	PT	
29	SEWAGE TREATMENT	1	3.3	80.0	4.1	1	70	0.0	2.8	1	70	0.0	2.8	1	70	0.0	2.8	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	1	70	0.0	2.8	PT	
30	I.C.C.P.	2	9.0	100.0	9.0	2	60	10.8	0.0	2	60	10.8	0.0	2	60	10.8	0.0	2	60	10.8	0.0	2	60	10.8	0.0	2	60	10.8	0.0	2	60	10.8	0.0	PT	
31	HOT WATER CIRC. PUMP	1	0.75	71.5	1.0	1	20	0.2	0.0	1	20	0.2	0.0	1	20	0.2	0.0	1	20	0.2	0.0	1	20	0.2	0.0	1	20	0.2	0.0	1	20	0.2	0.0	PT	
32	BILGE TRANSFER PUMP	1	2.20	81.0	2.7	1	40	0.0	1.1	1	40	0.0	1.1	1	40	0.0	1.1	1	40	0.0	1.1	1	40	0.0	1.1	1	40	0.0	1.1	1	40	0.0	1.1	PT	
33	M.G.O SHIFTING PUMP	1	3.70	83.0	4.5	1	32	0.0	1.4	1	32	0.0	1.4	1	32	0.0	1.4	1	32	0.0	1.4	1	32	0.0	1.4	1	32	0.0	1.4	1	32	0.0	1.4	PT	
34	CYL. OIL SHIFTING PUMP	1	0.75	70.0	1.1	1	23	0.0	0.2	1	23	0.0	0.2	1	23	0.0	0.2	1	23	0.0	0.2	1	23	0.0	0.2	1	23	0.0	0.2	1	23	0.0	0.2	PT	
35	S/T L.O.CIRC. PUMP	2	0.75	70.0	1.1	1	25	0.0	0.3	1	25	0.0	0.3	1	25	0.0	0.3	1	25	0.0	0.3	1	25	0.0	0.3	1	25	0.0	0.3	1	25	0.0	0.3	PT	
36	LOCAL FIRE FIGHTING PUMP	1	6.30	86.0	7.3	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	PT	
37	SEWAGE DISC. PUMP	1	5.50	71.5	7.7	1	30	0.0	2.3	1	30	0.0	2.3	1	30	0.0	2.3	1	30	0.0	2.3	1	30	0.0	2.3	1	30	0.0	2.3	1	30	0.0	2.3	PT	
SUB TOTAL						11.0	8.2			11.0	8.2			11.0	8.2			11.0	5.3			11.0	5.3			11.0	5.3			11.0	5.3			11.0	8.2
SUB TOTAL OF AFTER PREF. TRIP						10.8	5.3			10.8	5.3			10.8	5.3			10.8	5.3			10.8	5.3			10.8	5.3			10.8	5.3			10.8	5.3
TOTAL						175.1	126.3			315.1	126.3			128.8	174.4			302.4	110.3			163.0	114.4			163.0	114.4			163.0	114.4			163.0	114.4
TOTAL OF AFTER PREF. TRIP						162.3	79.5			302.2	79.5			128.6	144.9			302.2	78.2			162.8	79.5			162.8	79.5			162.8	79.5			162.8	79.5

03. BOILER PLANT

MODEL NO. 60KPC01(S-1291/93/94/95/96/97)

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NO	NAME OF CONSUMER	MOTOR CAPACITY		AT SEA												AT CARGO HANDLING			AT HARBOUR			PT			
		NO	OUTPUT EFF'	NORMAL SEA GOING			CARGO HEATING			TANK CLEAN'G			MANEUVERING			HANDLING			HARBOUR						
				KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF		CL	IL	
1	F.W. PUMP FOR AUX. BOILER	2	30.0	89.5	33.5	0	0	0.0	0.0	154.5	18.3	0.0	154.5	18.3	0.0	154.5	18.3	0.0	1	40	0.0	13.4	154.5	18.3	0.0
2	FORCED DRAFT FAN	1	86.0	91.0	94.5	0	0	0.0	0.0	174.5	70.4	0.0	174.5	70.4	0.0	174.5	70.4	0.0	1	40	0.0	37.8	174.5	70.4	0.0
3	F.O SUP. PUMP FOR AUX. BOILER	2	2.2	85.5	2.6	0	0	0.0	0.0	1	80	2.1	0.0	1	80	2.1	0.0	1	50	0.0	1.3	1	80	2.1	0.0
4	IGNITION OIL PUMP	2	0.3	63.0	0.4	0	0	0.0	0.0	1	80	0.0	0.3	1	80	0.0	0.3	1	80	0.0	0.3	1	80	0.0	0.3
5	F.W. PUMP FOR EXH. GAS BOILER	2	7.5	86.0	8.7	1	39	3.4	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0

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	NORMAL SEA GOING			CARGO HEATING			TANK CLEANING			MANEUVERING			AT CARGO HANDLING			AT HARBOUR								
	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL				
TOTAL	3.4	0.0			90.7	0.3			90.7	0.3			90.7	0.3			0.0	52.8			90.7	0.3		
TOTAL OF AFTER PREF. TRIP	3.4	0.0			90.7	0.3			90.7	0.3			90.7	0.3			0.0	39.4			90.7	0.3		

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06. AIR COND./REF. PROV. PLANT

MODEL NO. 60KPC01(S-1291/93/94/95/96/97)

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NO	NAME OF CONSUMER	MOTOR CAPACITY	AT SEA												AT CARGO HANDLING						AT HARBOUR									
			NORMAL SEA GOING				CARGO HEATING				TANK CLEAN'G				MANEUVERING			HANDLING			PT									
			NO	OUTPUT	EFF'	INPUT	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL				
1	ACC. AIR COND. HAND. FAN	2	17.3	91.0	19.0	1	80	15.2	0.0	1	80	15.2	0.0	1	80	15.2	0.0	1	80	15.2	0.0	1	80	15.2	0.0	1	56.3	10.7	0.0	PT
2	ACC. AIR COND. COMPRESSOR	2	104.00	92.6	112.3	1	60	67.4	0.0	1	60	67.4	0.0	1	60	67.4	0.0	1	60	67.4	0.0	1	60	67.4	0.0	1	180.4	90.3	0.0	PT
3	PROV. REF. PLANT FAN	4	0.2	77.0	0.3	4	80	0.8	0.0	4	80	0.8	0.0	4	80	0.8	0.0	4	80	0.8	0.0	4	80	0.8	0.0	4	80	0.8	0.0	PT
4	PROV. REF. PLANT COMPRESSOR	2	8.6	86.5	9.9	1	60	6.0	0.0	1	60	6.0	0.0	1	60	6.0	0.0	1	60	6.0	0.0	1	60	6.0	0.0	1	178.1	7.8	0.0	PT
5	E.C.R AIR COND. COMP.	2	11.7	86.0	13.6	1	60	8.2	0.0	1	60	8.2	0.0	1	60	8.2	0.0	1	60	8.2	0.0	1	60	8.2	0.0	1	60	8.2	0.0	PT
6	E.C.R AIR COND. FAN	4	0.3	62.5	0.4	2	80	0.6	0.0	2	80	0.6	0.0	2	80	0.6	0.0	2	80	0.6	0.0	2	80	0.6	0.0	2	80	0.6	0.0	PT
7	FAN COIL UNIT FOR GALLEY	1	22.5	100.0	22.5	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	PT
TOTAL						98.2	0.0			98.2	0.0			98.2	0.0			98.2	0.0			98.2	0.0			118.4	0.0			
TOTAL OF AFTER PREF. TRIP						6.8	0.0			6.8	0.0			6.8	0.0			6.8	0.0			6.8	0.0			8.6	0.0			

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07. VENT. FANS

MODEL NO. 60KPC01(S-1291/93/94/95/96/97)

NO	NAME OF CONSUMER	MOTOR CAPACITY	AT SEA												MANEUVERING			AT CARGO HANDLING			AT HARBOUR			PT						
			NORMAL SEA GOING			CARGO HEATING			TANK CLEAN'G			KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL							
			KN	LF	CL	IL	KN	LF	CL	IL	KN														LF	CL	IL			
1	E/R VENT. FAN	15.0 88.5 16.9	4	74.5	50.5	0.0	4	74.5	50.5	0.0	4	74.5	50.5	0.0	2	74.5	25.3	0.0	2	74.5	25.3	0.0	2	74.5	25.3	0.0	0.0	0.0	0.0	
2	PURIFIER ROOM FAN	2.2 83.0 2.7	1	60	1.6	0.0	1	60	1.6	0.0	1	60	1.6	0.0	1	60	1.6	0.0	1	60	1.6	0.0	1	60	1.6	0.0	1	60	1.6	0.0
3	STEERING GEAR ROOM FAN	0.75 77.0 1.0	1	64	0.6	0.0	1	64	0.6	0.0	1	64	0.6	0.0	1	64	0.6	0.0	1	64	0.6	0.0	1	64	0.6	0.0	1	64	0.6	0.0
4	DECK STORE EXH. FAN	0.75 77.0 1.0	1	50	0.5	0.0	1	50	0.5	0.0	1	50	0.5	0.0	1	50	0.5	0.0	1	50	0.5	0.0	1	50	0.5	0.0	1	50	0.5	0.0
5	SAMPLING SPACE EXH. FAN	0.75 77.0 1.0	1	50	0.5	0.0	1	50	0.5	0.0	1	50	0.5	0.0	1	50	0.5	0.0	1	50	0.5	0.0	1	50	0.5	0.0	1	50	0.5	0.0
6	SANITARY FAN	2.2 81.0 2.7	1	50	1.4	0.0	1	50	1.4	0.0	1	50	1.4	0.0	1	50	1.4	0.0	1	50	1.4	0.0	1	50	1.4	0.0	1	50	1.4	0.0
7	GALLEY SUPPLY FAN	0.75 77.0 1.0	1	45	0.4	0.0	1	45	0.4	0.0	1	45	0.4	0.0	1	45	0.4	0.0	1	45	0.4	0.0	1	45	0.4	0.0	1	45	0.4	0.0
8	GALLEY EXH. FAN	0.75 77.0 1.0	1	75	0.7	0.0	1	75	0.7	0.0	1	75	0.7	0.0	1	75	0.7	0.0	1	75	0.7	0.0	1	75	0.7	0.0	1	75	0.7	0.0
9	PAINT STORE EXH. FAN	0.40 77.0 0.5	1	40	0.2	0.0	1	40	0.2	0.0	1	40	0.2	0.0	1	40	0.2	0.0	1	40	0.2	0.0	1	40	0.2	0.0	1	40	0.2	0.0
10	EM'CY GEN. ROOM FAN	0.75 77.0 1.0	1	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0
11	BOSUN STORE FAN	0.40 77.0 0.5	1	70	0.4	0.0	1	70	0.4	0.0	1	70	0.4	0.0	1	70	0.4	0.0	1	70	0.4	0.0	1	70	0.4	0.0	1	70	0.4	0.0
TOTAL			NORMAL SEA GOING			CARGO HEATING			TANK CLEANING			MANEUVERING			AT CARGO HANDLING			AT HARBOUR												
			56.8 0.0			56.8 0.0			56.8 0.0			56.8 0.0			31.5 0.0			31.5 0.0												
TOTAL OF AFTER PREF. TRIP			51.1 0.0			51.1 0.0			51.1 0.0			51.1 0.0			25.9 0.0			25.9 0.0												

09. LIGHTING, NAV., & COMM.

MODEL NO. 60KPC01(S-1291/93/94/95/96/97)

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NO	NAME OF CONSUMER	MOTOR CAPACITY	AT SEA												AT CARGO HANDLING			AT HARBOUR			PT													
			NORMAL SEA GOING				CARGO HEATING				TANK CLEAN'G				KN	LF	CL	IL	KN	LF		CL	IL	KN	LF	CL	IL							
			NO	OUTPUT	EFF'	INPUT	KN	LF	CL	IL	KN	LF	CL	IL														KN	LF	CL	IL	KN	LF	CL
1	MAIN TRANSFORMER(AC 220V)	2	120.0	97.5	123.1	1	60	73.8	0.0	1	60	73.8	0.0	1	60	73.8	0.0	1	60	73.8	0.0	1	60	73.8	0.0	1	60	73.8	0.0	1	60	73.8	0.0	0.0
2	EM'CY TRANSFORMER(AC 220V)	2	45.0	96.5	46.6	1	60	28.0	0.0	1	60	28.0	0.0	1	60	28.0	0.0	1	60	28.0	0.0	1	60	28.0	0.0	1	60	28.0	0.0	1	60	28.0	0.0	0.0
TOTAL																																		
TOTAL OF AFTER PREF. TRIP																																		

WOULD BEST STOCK
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10. MISCELLANEOUS

MODEL NO. 60KPC01(S-1291/93/94/95/96/97)

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NO	NAME OF CONSUMER	MOTOR CAPACITY NO OUTPUT EFF' INPUT	AT SEA												AT CARGO HANDLING						AT HARBOUR									
			NORMAL SEA GOING				CARGO HEATING				TANK CLEAN'G				MANEUVERING			HANDLING			HARBOUR									
			KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL	KN	LF	CL	IL				
1	FOAM PUMP	4.0 90.0 4.4	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0
2	E/R CRANE	5.2 87.0 6.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	1	60	0.0	3.6
3	DRILLING MACHINE	0.8 77.0 1.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	1	60	0.0	0.6
4	LATHE	5.5 88.0 6.3	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	1	60	0.0	3.8
5	HEATER FOR S/G ROOM	5.0 100.0 5.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0
6	M/E EXH. V/V GRIND. MACHINE	0.8 77.0 1.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	1	60	0.0	0.6
7	HYD. POWER PACK FOR V.R.C SYS.	1.5 83.0 1.8	1	40	0.7	0.0	1	40	0.7	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	1	40	0.7	0.0
8	GRINDING MACHINE	0.8 77.0 1.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	1	60	0.0	0.6

MOLDO

RESERVE-2014

제2-4호

제2-4호

제2-4호

TOTAL		NORMAL SEA GOING	CARGO HEATING	TANK CLEANING	MANEUVERING	AT CARGO HANDLING	AT HARBOUR :
		0.7 0.0	0.7 0.0	0.7 0.0	0.7 0.0	0.0 0.0	0.7 9.1
TOTAL OF AFTER PREF. TRIP		0.7 0.0	0.7 0.0	0.7 0.0	0.7 0.0	0.0 0.0	0.7 0.0