

# TECHCROSS BWMS P&ID; Checklist

Ship: TEST VESSEL | Drawing: TEST-001 | Product: ECS

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No	Rule ID	Check Item	Status	Result
1	COM-BASE-001	■■ ■■ ■■	Skipped	-
2	COM-BASE-002	Components List ■■ ■■	Skipped	-
3	COM-BASE-003	■■ ■■ ■■ ■■	Skipped	-
4	COM-BASE-004	■■ ■■ ■■ ■■	Skipped	-
5	COM-BP-001	Ballast Pump ■■ ■■	Skipped	-
6	COM-BP-002	Ballast Pump Head ■ ■■	Skipped	-
7	COM-RETRO-001	Retrofit Case 2 & 3 Valve No ■■	Skipped	-
8	COM-RETRO-002	Retrofit BWMS Inlet/Outlet ■■	Checked	FAIL
9	COM-GRAV-001	Gravity Ballasting Valve Signal	Skipped	-
10	COM-FCV-001	FCV ■■ ■■ (■■ ■■)	Skipped	-
11	COM-FCV-002	FCV ■■■ ■■	Skipped	-
12	COM-ABS-001	ABS Safety to Hazardous Area	Skipped	-
13	COM-LR-001	LR BWTS* Notation Deviation	Skipped	-
14	COM-KR-001	KR + KG MANUAL ■■	Skipped	-
15	COM-BULK-001	Bulker T.S.TK ■■ ■■	Checked	FAIL
16	COM-BULK-002	Bulker ■■ ■■ ■■	Checked	FAIL
17	COM-BARGE-001	Barge Stripping Pump ■■	Checked	FAIL
18	COM-BARGE-002	Barge W.B.TK Overflow Line	Checked	FAIL
19	COM-LNG-001	LNG/LPG BWMS ■■ ■■	Checked	FAIL
20	COM-SAMP-001	Sampling Drawing ■■ ■■	Skipped	-
21	COM-SAMP-002	■■■ ■■ ■■	Skipped	-
22	ECS-BP-001	Ballast Pump ■■ Check Valve ■■	Checked	PASS
23	ECS-BP-002	Ballast Pump ■■ Manual Valve ■■	Checked	PASS
24	ECS-ECU-001	ECU Outlet Signal Valve ■■ (■■ ■■)	Checked	PASS
25	ECS-ECU-002	ECU ■■ T-STRAINER ■■	Skipped	-
26	ECS-PRU-001	PRU Inlet Valve ■■ (Cooling F.W. ■■	Checked	PASS
27	ECS-PRU-002	PRU ■■■ ■■ ■■ (0.45m3/h per PRU)	Skipped	-
28	ECS-PRU-003	HEU/FT ■■ (Cooling F.W. ■■ ■)	Checked	PASS
29	ECS-FMU-001	FMU ECU ■■ ■■	Skipped	-
30	ECS-FMU-002	FMU ■■■ FC KOREA	Skipped	-
31	ECS-FMU-003	FMU ■■ 3m/s ■■ ■■■■■■	Skipped	-
32	ECS-FMU-004	SKID ■ FMU ECU ■■ ■■	Skipped	-
33	ECS-TS-001	T-STRAINER ■■ ■■ ■■	Checked	FAIL
34	ECS-CSU-001	CSU ■■ 5K-50A ■■	Skipped	-
35	ECS-CSU-002	CSU T-STRAINER ■■ ■■	Skipped	-
36	ECS-ANU-001	ANU ■■ ■■ (■■■)	Skipped	-
37	ECS-ANU-002	ANU-TSU ■■ Pipe Line ■■	Skipped	-
38	ECS-ANU-003	ANU Flushing Line ■■	Checked	FAIL
39	ECS-DTS-001	DTS ■■ ■■	Checked	PASS

40	ECS-DTS-002	DTS Flushing Line ■■	Checked	FAIL
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## TECHCROSS BWMS P&ID; Checklist (Continued)

No	Rule ID	Check Item	Status	Result
41	ECS-EXDTS-001	Ex-DTS Sampling Valve ■■	Checked	PASS
42	ECS-EXDTS-002	Ex-DTS IS-Barrier ■■	Checked	PASS
43	ECS-VLS-001	Ex-ECS Common Line VLS ■■	Checked	FAIL
44	ECS-VLS-002	Ex-ECS VLS ■■ ■■	Skipped	-
45	ECS-MIX-001	S.W.H.TK ■■ NOTE ■■	Skipped	-
46	ECS-MIX-002	Mixing Pump ■■ Ballast Pump ■■	Skipped	-
47	ECS-MIX-003	Mixing Point ■■ CSU ■■	Skipped	-
48	ECS-MIX-004	PCU ■■ ■■	Checked	PASS
49	ECS-MIX-005	VCU ■■■ ■■	Checked	PASS
50	ECS-MIX-006	FCV ■■■ HKC	Skipped	-
51	ECS-MIX-007	Mixing Point-CSU ■■ ■■	Skipped	-
52	ECS-MIX-008	Submersible Mixing Pump PI ■■	Checked	FAIL
53	ECS-GDS-001	GDS GASDNA ■■ ■■	Skipped	-
54	ECS-CLASS-ABS-001	ABS FAN Running Signal	Skipped	-
55	ECS-CLASS-ABS-002	ABS Oil Carrier H2 Sensor	Checked	FAIL
56	ECS-CLASS-DNV-001	DNV DTU ■■	Checked	FAIL
57	ECS-CLASS-KR-001	KR CLASS NOTE ■■	Skipped	-
58	ECS-CLASS-KR-002	KR T-STRAINER 10K Flange	Skipped	-
59	HYC-BP-001	Ballast Pump ■■ Check Valve ■■	N/A	-
60	HYC-BP-002	Ballast Pump ■■ Manual Valve ■■	N/A	-
61	HYC-SWH-001	SWH Cooling S.W. System ■■	N/A	-
62	HYC-SWH-002	SWH Plate Type L.T.C. ■■	N/A	-
63	HYC-HGU-001	HGU-DMU-FMU PE CLASS ■■	N/A	-
64	HYC-HGU-002	HGU-DMU CLASS PIPING ■■	N/A	-
65	HYC-DMU-001	DMU AIR VENT 5M ■■	N/A	-
66	HYC-DMU-002	DMU SPARK ARRESTOR ■■	N/A	-
67	HYC-FMUS-001	FMU (SIDE) HGU ■■ 2D/1D ■■	N/A	-
68	HYC-FMUS-002	FMU LOOP ■■ HIGHER THAN FMU ■■	N/A	-
69	HYC-FMUS-003	NOTE ■■■ FMU ■■	N/A	-
70	HYC-FMUS-004	FMU ■■■ FC KOREA	N/A	-
71	HYC-FMUM-001	FMU (MAIN) ■■■■ 3D/2D ■■	N/A	-
72	HYC-FMUM-002	FMU (MAIN) ■■■ FC KOREA	N/A	-
73	HYC-CIP-001	CIP ORIFICE ■■■ ■■	N/A	-
74	HYC-CIP-002	CIP ■■■ ■■■ ■■	N/A	-
75	HYC-CIP-003	CIP-DTS ■■ Pipe Line ■■	N/A	-
76	HYC-NIU-001	NIU ■■ ■■ (■■■)	N/A	-
77	HYC-NIU-002	NIU Flushing Line ■■■	N/A	-
78	HYC-NIU-003	NIU-DTS ■■ Pipe Line ■■	N/A	-
79	HYC-DTS-001	(Ex-)DTU AIR VENT 5M ■■	N/A	-
80	HYC-DTS-002	(Ex-)DTS Sampling Valve ■■	N/A	-

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81	HYC-DTS-003	Ex-DTS IS-Barrier ■■■■ ■■	N/A	-
82	HYC-DTS-004	Ex-DTS ■■■ ■■	N/A	-
83	HYC-EWU-001	EWU MOTOR TYPE ■■	N/A	-
84	HYC-EWU-002	EWU HOSE FLANGE 10K-32A	N/A	-
85	HYC-CLASS-DNV-001	DNV DMU VENT PIPE CLASS PIPING	N/A	-
86	HYC-TANKER-001	Stripping Driving Water Ballast Pum	N/A	-
87	HYC-TANKER-002	Stripping Line On-Deck Main Line ■■	N/A	-
88	HYC-TANKER-003	Vacuum ■■ Arrange	N/A	-
89	HYC-TANKER-004	NIU Injection Line Weather Deck	N/A	-

Total: 58 | Passed: 10 | Violations: 16 | Pass Rate: 38.5%