



# Engine Room Marine Inspection Checklist - Singapore

<https://marineinspection.app/>

Inspector Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Signature: \_\_\_\_\_

## ***Bilge & Ballast Systems***

Sr No.	Inspection Item	Good	Repair	Replace	NA
1	Bilge system operational and compliant with regulations	■	■	■	■
2	Ballast water treatment system functioning and compliant with regulations	■	■	■	■
3	Ballast pumps and valves operable and free of leaks	■	■	■	■
4	Bilge alarms tested and functional	■	■	■	■
5	Ballast management system documented and operational	■	■	■	■

## ***Cooling Systems & Heat Exchangers***

Sr No.	Inspection Item	Good	Repair	Replace	NA
6	Engine cooling system operational and temperature-controlled	■	■	■	■
7	Heat exchangers cleaned, inspected, and serviceable	■	■	■	■
8	Freshwater cooling system for engines in good working condition	■	■	■	■
9	Sea water cooling pumps operational and free of blockages	■	■	■	■
10	Exhaust gas heat recovery systems operational	■	■	■	■

## ***Crew Manning & Training***

Sr No.	Inspection Item	Good	Repair	Replace	NA
11	Crew certifications (STCW) valid and updated	■	■	■	■
12	Crew familiarization with machinery and safety procedures documented	■	■	■	■
13	Engine room personnel trained in emergency response procedures	■	■	■	■

Sr No.	Inspection Item	Good	Repair	Replace	NA
14	Crew medical certificates and safety training available	■	■	■	■
15	Emergency drills and safety training conducted regularly	■	■	■	■

### ***Engine Room Condition & Maintenance***

Sr No.	Inspection Item	Good	Repair	Replace	NA
16	Engine room free of excessive oil spills and leaks	■	■	■	■
17	Main engines and auxiliaries properly lubricated	■	■	■	■
18	Engine room bilge systems operational and properly maintained	■	■	■	■
19	Machinery inspected and serviced according to schedule	■	■	■	■
20	Machinery foundations and supports in good condition	■	■	■	■

### ***Engine Room Safety Equipment***

Sr No.	Inspection Item	Good	Repair	Replace	NA
21	Personal protective equipment (PPE) available and in good condition	■	■	■	■
22	Emergency escape breathing devices (EEBD) available and functional	■	■	■	■
23	Escape routes clearly marked and unobstructed	■	■	■	■
24	Emergency alarms tested and operational	■	■	■	■
25	Safety signage in engine room visible and legible	■	■	■	■

### ***Fire Safety & Detection***

Sr No.	Inspection Item	Good	Repair	Replace	NA
26	Fire detection system fully functional and tested	■	■	■	■
27	Fixed fire suppression systems (CO2, foam) operable	■	■	■	■
28	Fire extinguishers serviced and in place in engine room	■	■	■	■
29	Fire dampers and ventilation systems functional	■	■	■	■
30	Engine room fire doors properly sealed and self-closing	■	■	■	■

### ***Fuel System & Lubrication***

Sr No.	Inspection Item	Good	Repair	Replace	NA
31	Fuel tanks inspected for leaks, damage, and corrosion	■	■	■	■
32	Fuel supply system operational and free of blockages	■	■	■	■

Sr No.	Inspection Item	Good	Repair	Replace	NA
33	Lubricating oil system clean, serviceable, and well-maintained	■	■	■	■
34	Fuel and lubrication systems pressure tested and operating correctly	■	■	■	■
35	Fuel filters and strainers inspected and cleaned as required	■	■	■	■

### ***Power Generation & Emergency Systems***

Sr No.	Inspection Item	Good	Repair	Replace	NA
36	Main and auxiliary engines operational and tested	■	■	■	■
37	Emergency power generator operational and in good condition	■	■	■	■
38	Battery systems for emergency power functional and tested	■	■	■	■
39	Power distribution systems and circuits in operational condition	■	■	■	■
40	Critical power systems (bridge, engine control) operational	■	■	■	■

### ***Pumps & Auxiliary Equipment***

Sr No.	Inspection Item	Good	Repair	Replace	NA
41	Bilge pumps and ballast pumps inspected and serviceable	■	■	■	■
42	Fire pumps and emergency pumps fully operational	■	■	■	■
43	Freshwater, sewage, and other auxiliary pumps functional	■	■	■	■
44	Pumps lubricated and serviced as per maintenance schedule	■	■	■	■
45	Pump motor controls tested and operational	■	■	■	■

### ***Ventilation & Exhaust Systems***

Sr No.	Inspection Item	Good	Repair	Replace	NA
46	Engine room ventilation systems functional	■	■	■	■
47	Exhaust gas cleaning systems operational	■	■	■	■
48	Exhaust fans and ventilation ducts free of blockages	■	■	■	■
49	Engine exhaust systems inspected for leaks or corrosion	■	■	■	■
50	Ventilation alarms tested and functional	■	■	■	■