CLASS CHECKLIST FOR CHEMICAL TANKER

Type of Survey: Annual Survey/Intermediate Survey/Special Survey/General Examination*

Ship Name: ……. I.R. No.: ……..……. Report No.: …...……..……

NOTES:	
1	Use "Y" for Yes/Satisfactory, "N" for Not Satisfactory, "NO" for No, "NA" for Not Applicable, "P" for Remains outstanding.
2	Refer BWM statutory checklist for items related to BWM survey when class & statutory survey for BWM carried out concurrently.
3	Where the services of an approved firm is utilized, details of approval and personnel qualification is to be provided under remarks. Alternatively, copy of approval page may be uploaded with the report.

Sr. No.	Item	Y/N/NO/ NA/P
A	**DOCUMENTATION**	
1	**STATUTORY CERTIFICATES** Verification that all statutory certificates and class certificate are available and valid.	…
2	**APPROVED TRIM & STABILITY INFORMATION** Confirmation of availability of trim and stability booklet approved by administration.	…
3	**MANOEUVRING BOOKLET** Confirmation that the manoeuvring booklet is on board and that the manoeuvring information is displayed on the navigating bridge.	…
4	**FIRE CONTROL PLANS** Confirming that the fire control plans are permanently exhibited or, alternatively, emergency booklets have been provided and that a duplicate of the plans or the emergency booklet are available in a prominently marked enclosure external to the ship's deck house.	…
5	**STEERING GEAR ENTRIES REQUIRED BY SOLAS/FLAG** Verification of entries made in the ship's log for departure steering checks & Emergency steering drills.	…
6	**DAMAGE STABILITY** Availability of damage stability information.	…
7	**LOADING MANUAL** Verification that vessel has an approved Loading Manual.	…
8	**I.G. SYSTEM OPERATIONAL MANUAL** Verification for availability of I.G. Instruction manual. (operation, maintenance, safety, health hazard etc.)	…
9	**DAMAGE CONTROL PLANS & BOOKLET** Verification that damage control plan and booklet are available. (Note: Applicable for vessels of 500 GT and over, keel laid on or after 01/01/2009.)	…
10	**ESP DOCUMENT** Availability of ESP documents on board. Survey report file is to be part of the documentation consisting of reports of structural survey, executing hull summary, thickness measurement reports. Additional supporting documentation to be available on board include, main structural plans of cargo tanks and ballast tanks, previous repair history, cargo and ballast history, inspection by ship's personnel with reference to structural deterioration in general, leakages in bulkheads and piping, condition of coating or corrosion prevention system if any, any other information that will help identify critical structural areas and/or suspect areas requiring inspection, survey programme. (Note: For CSR ships structural plans are to include for each structural element both the as-built and renewal thickness. Any thickness for voluntary addition is also to be clearly indicated on the plans. The midship section plan to be supplied on board the ship is to include the minimum allowable hull girder sectional properties for hold transverse section in all cargo tanks)	…
11	**THE SHIP STRUCTURE ACCESS MANUAL** Checking the Ship Structure Access Manual. (Note: Applicable for 500 GT and over, constructed on or after 1st Jan. 2006)	…
12	**CONSTRUCTION DRAWINGS MAINTAINED ON BOARD** Confirmation that structural alterations performed, if any, have been approved by the classification society and reported on the as-built drawings kept on board. (Note: applicable for ship constructed on or after 1st Jan. 2007)	…

13	**DOCUMENT OF APPROVAL FOR STABILITY INSTRUMENT** Confirmation vessel is provided with DOA for stability instrument. (Note: Applicable for new vessel keel laid on or after 01/01/2016 and existing vessel first renewal survey on or after 01/01/2016)	…
14	**NATIONAL REQUIREMENTS/CODE** Availability of applicable code. (Note: (IBC-for ships whose keel was laid on or after 01-06-1986/BCH Code for ships built before 01-06-1986 but after 31-12-1976) or National Requirements and Material Safety Data sheets for the carriage of cargoes.)	…
15	**P & A MANUAL** Verification that vessel has an approved P & A Manual.	…
16	**EMERGENCY TOWING PROCEDURES** Confirmation that ship specific emergency towing procedures available on board.	…
17	**COATING TECHNICAL FILE** Confirm that Coating technical file is available on board and maintained. (Note: Applicable for ships of not less than 500 gross tonnage provided with dedicated seawater ballast tanks for which the building contract is placed on or after 01/07/2008 or the keels of which are laid on or after 01/01/2009 or which are delivered on or after 01/07/2012.)	…
18	**SHIP CONSTRUCTION FILE** Confirmation that Ship Construction File is on board.	…
19	**CARGO INFORMATION** Confirmation that table giving the filing ratio for cargo tank at various densities provided and information related to the chemical and physical properties of the product provided including provision for measure taken in an accident.	…
20	**CARGO TRANSFER PROCEDURE MANUAL** Confirmation that manual covering procedure for cargo transfer, tank, cleaning, gas freeing and also compatibility information as to material of construction, protective lining and coating is provided.	…
21	**ALTERNATIVE DESIGN & ARRANGEMENT** Confirmation that where applicable, the approved documentation for alternative design and arrangement is on board.	…
22	**CARGO RECORD BOOK** Confirmation that Cargo Record Book is on board.	…
23	**HARMONIC DISTORTION RECORD FOR VESSEL FITTED WITH HARMONIC FILTER.** Verification of annual measurement record of harmonic distortion level at bus bar. (Applicable for vessel keel laid before 1 July 2017 and for any modification on electrical distribution system on existing vessel, total distortion measured along with equipment running at the time of measurement to be recorded)	…
24	**OPERATIONAL MANUAL FOR EFFECT OF HARMONIC FILTER** Verification that following document are available on board. a. Effect of failure on harmonic filter on electrical distribution system. b. Permitted modes of operation for maintaining harmonic distortion level within acceptable limit during normal operation and during failure of filter. c. Approved copy of relaxation on allowable distortion limit, if any d. Record of harmonic distortion level measured. (Note: Applicable for vessel keel laid on or after 01 July 2017 and on exiting ship retrofitted with harmonic filter on or after 01 July 2017)	…
25	**PROCEDURAL REQUIREMENT FOR CERTAIN ESP SURVEYS** Confirmation that procedural requirement in respect of conduct of intermediate and special surveys by two exclusive surveyors complied with for following cases: On ships 20,000 tonnes DWT and above, subject to ESP, starting with special survey No.3, all special and intermediate hull classification surveys are to be carried out by at least two exclusive surveyors. For dual class vessels where this requirement of two surveyors (where compatible with relevant laws and regulations) was fulfilled by having one surveyor from each society, name of the other society surveyor is to be provided in "Remarks section".	…
26	**DETAILS OF STRUCTURAL MODIFICATIONS/ALTERATIONS** Confirmation that, in case of any modifications observed during survey, which may have impact on tonnage values (GT and/or NT), conditions of assignment of Loadlines, strength and stability of the vessel etc., Head office has been notified and necessary changes effected in the survey report, class and statutory certificates and documents.	…

	(Any instructions/authorisation from HO with respect to above to be uploaded in supporting documents)	
B	**HULL AND WEATHER DECK**	
1	**ACCOMMODATION, SERVICE, MACHINERY SPACES & WHEELHOUSES** Verification gas tight condition of wheelhouse doors and windows, fixed type side scuttles and windows in superstructure and deckhouse ends facing the cargo area and containing accommodation, service, machinery and control spaces and gas tight bulkhead penetrations.	...
2	**SEPERATION FROM ACCOMODATION, SERVICE SPACE** Confirmation that tanks containing cargo or residues of cargo are suitably segregated from accommodation, service and machinery spaces and from drinking water and stores for human consumption, that cargo piping does not pass through any accommodation, service or machinery space other than cargo pump rooms or pump rooms and cargoes are not carried in either the fore or the aft peak tank.	...
3	**SPACE NOT NORMALLY ENTERED** Confirmation that double bottoms, cofferdams, duct keels, pipe tunnels, hold spaces and other spaces where cargo may accumulate are capable of being efficiently ventilated to ensure a safe environment when entry into the space is necessary and that, when appropriate, permanent ducting is provided and any ventilation fans comply with non-sparking construction in hazardous locations.	...
4	**VENTILATION OF SPACE IN THE CARGO AREA NORMALLY ENTERED DURING CARGO OPERATION** Examination of arrangement of mechanical ventilation of space for satisfactory condition and verification that it is controlled from outside space, Warning notice placed, if it is the extraction type, with extraction from below the floor plates, unless the space houses electrical motor driving cargo pumps when it should be of the positive pressure type. The ducting does not pass through accommodation, machinery and service space and that exhaust duct are clear of the ventilation inlet and opening to such space.	...
5	**CARGO TANK OPENINGS** Examination of cargo tank openings including gaskets, covers, coamings and flame screens.	...
6	**BUNKER TANKS** Examination of flame screens on vents to all bunker tanks.	...
7	**CARGO & PROCESS PIPING AND FITTINGS** Verification for condition of cargo, bunker, ballast and vent piping system including vent masts and headers and devices to prevent the passage of flame on vents to all bunker, oily-ballast and oily-slop tanks and void spaces, as far as practicable. Examination of associated expansion arrangements and identification/markings on cargo and process piping and valves. The verification to include condition of removable pipe lengths/other approved equipment necessary for cargo operation.	...
8	**CARGO TRANSFER ARRANGEMENTS** Examination of the cargo transfer arrangements and confirmation that any hoses are suitable for their intended purpose and, where appropriate, type-approved or marked with date of testing.	...
9	**CARGO TANK VENTING ARRANGEMENT** Verification of cargo tank venting arrangements. Where controlled tank venting system is employed such verification to include pressure/vacuum valves, mast raisers, devices to prevent passage of flames into the cargo tanks and cargo tanks gas freeing arrangements (on ships constructed on or after 01-07-2002 the controlled venting system should consist of a primary and a secondary means). Confirmation that suitable provision is made for drainage of vent lines and that no shut-off valves or other means of stoppage, including spectacle or blank flanges, are fitted either to the individual vents or to the header, if the vents are combined or either above or below pressure/vacuum relief valves with closed vent systems.	...
10	**EMERGENCY TOWING ARRANGEMENT** Examining the towing arrangements and verification of operational readiness.	...
11	**FIRE DOORS AND CONTROLS** a. Examination of manual/automatic fire doors, verification of their satisfactory operation and confirmation that no holding back arrangements exist and arrangements for self-closing & locking are in order.	...
	b. Confirmation that fire doors provided between machinery space and steering gear compartment are of gastight, self-closing type and without any hold back arrangements. (Note: applicable where emergency fire pump is in steering gear compartment)	...

12	**ANCHORING & MOORING EQUIPMENT** Examining the anchoring equipment & mooring equipment. At renewal survey, during the examination, anchors are lowered and raised using the windlass.	...
13	**SOUNDING PIPES** Sounding pipes, including self-closing devices on short sounding pipes.	...
14	**HATCHWAYS** Examination and testing of hatchways on freeboard and superstructure decks including efficient condition of closing appliances.	...
15	**TIGHTNESS TESTING OF CLOSING APPLIANCES** Where tightness testing of closing appliances such as hatches, doors, etc. is carried out with ultrasonic equipment, confirmation that firm engaged in tightness testing is approved.	...
16	**THICKNESS MEASUREMENT** Where thickness measurements on structure/plating of the vessel is carried out, confirmation that firm engaged in thickness measurement on vessel is approved.	...
17	**REMOTE INSPECTION TECHNIQUES (RIT)** Where remote inspection techniques are used in survey, confirmation that firm engaged for RIT is approved.	...
18	**NON-DESTRUCTIVE TESTING (NDT)** Where NDT carried out onboard, confirmation that the firm providing NDT services is approved.	...
19	**WEATHER DECKS** Examination of weather decks, ships side plating above waterline.	...
20	**HULL MARKINGS** Verification that hull markings such as freeboard markings, draft markings, vessel name, IMO number, port of registry are legible and in satisfactory condition.	...
21	**VENTILATORS** Examination and or testing of ventilators including efficiency of their closing appliances.	...
22	**WINDOWS, SIDE SCUTTLES AND DEAD LIGHTS** Examination and or testing of windows, side scuttles and dead lights, flush deck scuttles, ash shoots & other openings.	...
23	**SCUPPERS, SANITARY DISCHARGES, VALVES AND CONTROLS** Examination scuppers and sanitary discharges and valves together with valves and their control gear.	...
24	**SKYLIGHTS AND FIDDLEY OPENINGS** Examination and or testing of skylights and fiddley openings including their closing appliances.	...
25	**EXPOSED CASINGS, DECK HOUSES, COMPANION WAYS AND SUPERSTRUCTURES** Examination and/testing of exposed casings, deck houses, companionways and superstructure bulkheads including closing appliances, openings on freeboard & superstructure decks.	...
26	**GUARD RAILS AND/OR BULWARKS** Examination of the condition and arrangement.	...
27	**COLLISION & WT BULKHEAD OPENINGS** Examining the collision and the other watertight bulkheads as far as can be seen. Watertight bulkheads penetrations examination as far as practicable for satisfactory condition.	...
28	**MASTS AND STANDING RIGGING** Masts, Derricks & Crane columns including their standing rigging.	...
29	**AIR PIPES** Examination and or testing of air pipes including efficiency of their closing appliances, weld connection between Air pipes and deck plating. Examining and confirming that vents from bunker tanks and ballast tanks (with cathodic protection) are equipped with flame screens and mesh provided are in satisfactory condition..	...
30	**SAFE ACCESS TO BOW** Examining arrangements of safe access to bow including trends, side stringer cross members, decking, deck plate, stanchion, rigid hand rails, hand ropes, support points, shelter and confirmation that it is constructed of fire resistant and nonslip material.	...
31	**BOW AND STERN LOADING** Confirmation, when applicable Bow or Stern loading and unloading arrangement in order and testing of means of communication and remote shut down for cargo pump in satisfactory condition.	...

32	**GANGWAYS, LIFELINES AND MEANS OF EMBARKATION/DISEMARKATION** a. Satisfactory examination of items pertaining to accommodation ladder, gangways, Davits, Winches for their satisfactory condition. Verification of inspection and maintenance records.	…
	b. Confirmation that embarkation ladder and accommodation ladder including safety net are in satisfactory condition and marked with safe working load.	…
33	**TOWING AND MOORING EQUIPMENT** Confirming that towing and mooring equipment are maintained in good condition and are properly marked with any restrictions associated with its safe operation. Relevant plans/procedures/certificates and record of inspection/maintenance are available on board.	…
34	**NEW INSTALLATION OF MATERIALS CONTAINING ASBESTOS** Confirmation that new equipment containing asbestos was not fitted on board since last survey.	…
35	**ACCESS TO AND WITHIN SPACES IN AND OF THE FORWARD CARGO AREA** Verification of the permanent means of access where appropriate of the internal spaces as far as practicable.	…
36	**UPGRADATION/REPAIR TO COATING** Confirmation that maintenance, repair and partial recoating had been done as per manufacturer's specification using acceptable coating system, suitable surface preparation and adequate film thickness under the supervision of coating manufacturer's representative/coating inspector. These had been verified through stage/patrol inspection during survey and considered acceptable. (Note: Ballast tank for which coating condition was upgraded to "GOOD" this time during survey are to be listed in the "Remark" section)	…
37	**WATERTIGHT CABLE TRANSIT SEAL SYSTEMS** (Note: Applicable for all vessels contracted for construction on or after 1st July 2021)	
	a. Review of the cable transit seal systems register to confirm that it being maintained.	…
	b. Confirmation that where any disruption to the cable transits or installation of new cable transits carried out onboard from last annual survey, records are reviewed for the satisfactory condition of those transits. (Note: If deemed necessary examination of such transits to be undertaken)	…
	c. Examination of cable transits as far as practicable for their satisfactory condition.	…
	d. Confirmation that the results of survey are recorded in the cable transit seal system register.	…
	e. Where the cable transits have been examined by an approved service supplier, review of the cable transit seal system register to confirm that it has been properly maintained by the owner and correctly endorsed by the service supplier.	…
38	**FREEING PORTS** Examination of the condition and arrangement including shutters and crew protection bars.	…
39	**MAINTENANCE, REPAIR AND PARTIAL COATING OF DEDICATED BALLAST TANKS** Confirming that maintenance, repair and partial coating of dedicated ballast tanks, as appropriate, are recorded in the coating technical file and the maintenance of the protective coating is included in the overall ship's maintenance scheme.	…
40	**LOADING INSTRUMENT** Availability of an approved loading instrument together with it's operational manual and verification of test cases. [Capable of verifying compliance with intact and damage stability requirement, for new vessel keel laid on or after 01/01/2016 and existing vessel first renewal survey on or after 01/01/2016]	…
C	**MACHINERY SPACES**	
1	**MACHINERY AND BOILER SPACES** Confirming that the machinery, boilers and other pressure vessels, associated piping systems and fittings are so installed and protected so as to reduce to a minimum any danger to persons on board, due regard being given to moving parts, hot surfaces and other hazards.	…
2	**FIRE/EXPLOSION HAZARDS** a. i) Propulsion system and auxiliary machinery, boilers, all pressurized systems (steam, pneumatic, hydraulic) and their associated fittings were examined to see whether they are being properly maintained and with particular attention to the fire and explosion hazards. ii) Verification that oil/water leakages, accumulation of oil, with potential source of ignition does not exist in the machinery spaces. Leakages if any have been dealt and source of leakages rectified. iii) Confirmation that floor plates & gratings are secured and found to be in order.	…

	b. Confirmation that lagging material on hot surfaces, anti-splash tapes on joints are in place as required and high-pressure fuel lines are jacketed and spray shields flanged/screwed joints of pipes are in satisfactory condition.	…
	c. Confirmation that arrangement for high pressure fuel oil leak off alarm for propulsion engine, auxiliary engines or any other diesel engines are satisfactory and operational. Drain lines are connected to alarm unit and working satisfactory.	…
	d. Where flexible hoses/pipes are used, examination of hoses/pipes for any signs of material cracking or deterioration to ensure that, there is no damage, cut, kinked, crushed, twisted, hardened, cracked hoses/pipes exists in the oil systems.	…
	e. Confirmation that the supports and retaining devices of low-pressure fuel system provides adequate restraint and are in satisfactory condition.	…
3	**STEERING GEAR** a. All main and auxiliary steering arrangements and their associated equipment and control systems were examined and tested. Steering chains were verified for wear and tear and it was ensured wear is within 12% of the original rule diameter. Confirmation that various alarms required for hydraulic power operated, electric and electro-hydraulic steering gears are, operating satisfactorily and that the recharging arrangements for hydraulic power operated steering gears are being maintained. Log entries made in accordance with statutory requirements were verified where applicable. Confirm the requisite arrangements to regain steering capability in the event of the prescribed single failure are being maintained. Confirm, that the required arrangement to regain steering capability in the event of the prescribed single failure is maintained.	…
	b. Confirmation that steering gear compartment is in satisfactory condition and provided with handrail arrangements, grating or non-slip surface.	…
4	**MEANS OF COMMUNICATION** All means of communication between the navigating bridge and the machinery control positions including engine room telegraph, as well as the bridge and the main/alternative steering position, if fitted, are tested. Where ships having emergency steering positions there are means of relaying heading information and, when appropriate, supplying visual compass readings to the emergency steering positions. Confirmation that means of indicating the angular position of the rudder is operational.	…
5	**BOILERS AND PRESSURE VESSELS** Periodical Surveys of boilers and other pressure vessels have been carried out as required by the Rules and the safety devices have been tested. External visual examination. External examination of boilers including test of safety & protective devices and test of safety valve using its relieving gear. For exhaust gas economisers, review of engine log book to verify that Chief Engineer has tested the safety valves at sea within the window period of Annual Survey.	…
6	**REMOTE CONTROLS** Examining the means for the operation of the main and auxiliary machinery essential for propulsion and the safety of the ship, including when applicable, the means of remotely controlling the propulsion machinery from the navigating bridge (including the control, monitoring, reporting, alert and safety actions) and the arrangements to operate the main and other machinery from a machinery control room.	…
7	**PROPULSION MACHINERY** Confirmation that normal operation of the propulsion machinery can be sustained or restored even though one of the essential auxiliaries becomes inoperative.	…
8	**SEA WATER PIPE EXPANSION JOINTS** Examining visually the condition of non-metallic expansion joints where fitted in piping systems which penetrate the ship's side, with both the penetration and the expansion joint located below the deepest load waterline, and checking the service record	…
9	**BILGE PUMPING ARRANGEMENT** Examination of the bilge pumping systems and bilge wells including operation of each bilge pump (including hand pumps and eductors), extended spindles and level alarms, where fitted. Operational confirmation of emergency bilge suction and bilge-pumping system for each watertight compartment and drainage from enclosed cargo spaces situated on freeboard deck.	…
10	**FIRST START ARRANGEMENT** Operational confirmation of the means provided to bring the machinery into operation from the dead ship condition without external aid.	…
11	**AUTOMATION** General Examination of automation equipment. Operation of safety devices, bilge level detection and alarm systems and control systems. Examination and testing of the general emergency alarm system and confirmation of the engineer's alarm that it is clearly audible in the engineer's accommodation.	…

12	**SCHEDULE OF BATTERIES** Endorsed schedule of batteries for essential and emergency services available on board and maintenance being done as per this schedule. Confirm that changes (If any) in battery type, location and rating are reviewed and endorsed.	…
13	**MACHINERY SPACE VENTILLATION** Confirmation that machinery space ventilation is in good working condition.	…
14	**EMERGENCY GENERATOR ROOM VENTILATORS ARRANGEMENT** Verification that following requirement of emergency generator room ventilation louvers and its closing appliance examined/tested and found satisfactory. a. Manual or power operation of louvers and its closing appliance. b. Operating instruction, where hand –operated system is in use c. Automatic opening of ventilation louvers whenever emergency generator starting/in operation for power operated system where provided including fail to open operation. d. Manual closing operation from outside the space, where open/closed indication clearly marked. (Note: Applicable for vessel keel laid on or after 01 January 2017)	…
15	**MACHINERY VERIFICATION RUNS** Towards completion of Special/Continuous Survey of Machinery, trial of main & auxiliary machinery including the steering gear & controls carried out to confirm satisfactory operation (In afloat condition).	…
16	**SEA TRIAL** In case of major repairs to main propulsion machinery or steering gear, confirmation that a sea trial has been carried out satisfactorily to confirm proper operation of the relevant machinery in all respects. (Note: With effect from 1st July 2018, in case of major repairs to main propulsion machinery or steering gear, the scope of sea trial is to also include a test plan for astern response characteristics based on those required for such an equipment or system when fitted to the new ship. The tests are to be carried out at least over the manoeuvring range of the propulsion system and from all control positions. A test plan is to be provided by the manufacturer and accepted by the surveyor. If specific operational characteristics have been defined by the manufacturer, same is to be included in the test plan and the reversing characteristics of the propulsion plant, including the blade pitch control system of controllable pitch propellers, are to be demonstrated and recorded during trials.)	…
D	**ELECTRICAL INSTALLATION**	
1	**EMERGENCY SOURCE OF POWER** The operation of the emergency source(s) of electrical power, including their starting arrangement, the systems supplied, and when appropriate, their automatic operation as far as practicable, verification that all electrical equipment in dangerous zones is suitable for such locations, is in good condition and properly maintained. Emergency lights in good working condition.	…
2	**ELECTRICAL SYSTEM** a. General examination visually and in operation, as feasible, of the main electrical machinery, the emergency sources of electrical power, the switch gear, other electrical equipment including the lighting system. The precautions provided against shock, fire and other hazards of electrical origin for proper maintenance.	…
	b. Confirmation that light covers including emergency lights are in satisfactory condition.	…
	c. Confirmation that 440 V/220 V panels are not showing low insulation resistance.	…
	d. Confirmation that insulation mat is provided around the electrical switch board, panels.	…
	e. Confirmation that the generator breakers, interlocks and generator automatic starting as applicable are in satisfactory operational condition.	…
	f. verification of insulation monitoring devices for all distribution systems. Operation of power management system, where fitted.	…
3	**BATTERY CHARGING USING SOLAR POWER** General examination of installation, arrangement and operation of battery charging using Solar power as additional source. (Note: Applicable for IV vessels only)	…
4	**ELECTRICAL INSTALLATION AND ARRANGEMENT** Confirmation that electrical equipment and cables in dangerous spaces and zones are suitable for such locations and in satisfactory condition and properly maintained. The electric motors driving ventilation fans are positioned outside ventilation duct when carriage of flammable product is intended and the ducts, in way of fans only, are of non sparking construction in dangerous zone.	…

	(Note: This to remain independent from the battery source provided for propulsion and/ or main source of power in case battery systems used as main or an additional source of power for propulsion.)	
5	**NAVIGATIONAL LIGHT SYSTEM** Verification of Navigational light systems for satisfactory operation of lights, audio-visual indications and power supply arrangement for their satisfactory condition.	…
6	**INSULATION RESISTANCE** Verification of insulation resistance of electrical equipment and cables in the dangerous zones and space (immediate past records may be accepted when the ship is not in a gas free state) where applicable, the Pipelines and Independent cargo tanks are Electrically bonded to Hull.	…
7	**INTRINSICALLY SAFE SYSTEMS AND CIRCUITS** Confirmation that intrinsically safe systems and circuits used for measurement, monitoring, control and communication purpose in all hazardous location are properly maintained.	…
8	**MONITORING OF HARMONIC DISTORTATION** Confirmation that equipment for continuous monitoring of harmonic distortion level is in good order, alarm tested, logging of measured value verified in engine log book or electronically in case where automation system fitted and found to satisfactory. (Note: Applicable for vessel keel laid on or after 01 July 2017 and on exiting ship retrofitted with harmonic filter on or after 01 July 2017.)	…
9	**PROTECTION ARRANGEMENT FOR HARMONIC FILTER** Confirmation that protection for harmonic filter, including alarm tested and found satisfactory. (Note: Applicable for vessel keel laid on or after 01 July 2017 and on exiting ship retrofitted with harmonic filter on or after 01 July 2017.)	…
10	**MOTOR CONTROLS** Confirmation that motor controls including remote control are in satisfactory operational condition, where provided.	…
11	**ELECTRICAL PROPULSION** Examination of installation, arrangement of electric motors used for propulsion system, including associated cabling, drives, cooling systems (where provided) is to be carried out. Verification of operational and maintenance logs. Confirmation that controls, alarms, indications including remote control system is in satisfactory operational condition.	…
E	**ADDITIONAL REQUIREMENTS FOR BATTERY PROP NOTATION**	
1	**DOCUMENTATION AND RECORDS**	
1.1	Confirmation that batteries are type tested as per relevant IEC standard. Type of battery used: Nickel Cadmium Battery/Lithium-Ion Battery/ Lead Acid Battery/Nickel Metal Hydride Battery*.	…
1.2	Verification that operation and maintenance manual for Battery Management System (BMS) & Power Management System (PMS) is available along with all the required details of batteries such as battery chemistry, test certificates, cell voltages, system voltages, number of battery banks, recommended charge and discharge rates, functional test, monitoring, software maintenance and other environmental requirements as applicable.	…
1.3	Confirmation that battery manufacturer recommended practices for safety have been documented and implemented satisfactorily.	…
1.4	Confirmation that details of schedule as well as records & log towards storage, maintenance, replacement of batteries is available and maintained.	…
1.5	Confirmation from the records that state of health and state of charge of battery system is maintained satisfactorily.	…
1.6	Confirmation that risk assessment towards possible potential hazards associated with type of battery chemistry, system design and its incorporation is available.	…
1.7	Confirmation from the records that the software updates including verification or testing after updates are being carried out.	…
2	**SYSTEM ARRANGEMENT AND TESTING**	
2.1	Examination of arrangement for battery installation, battery spaces and equipment as far as practicable for satisfactory condition.	…
2.2	Confirmation of satisfactory operational testing of battery room//spaces ventilation systems and cooling systems as applicable.	…
2.3	Examination of firefighting systems in battery spaces.	…
2.4	Testing of all smoke, gas and fire detectors for their satisfactory condition.	…
2.5	Verification of all emergency shutdown arrangements to confirm their satisfactory operation.	…
2.6	Verification of operation of UPS for their satisfactory performance.	…

2.7	Verification and testing of safety systems arrangements towards overcharging, undercharging, high temperature, gas leakage etc. for satisfactory condition.	…
2.8	Testing of audio-visual alarms and controls for system power supply failure, cell temperature high, battery space high temperature, cell voltage etc.	…
F	**ADDITIONAL REQUIREMENTS FOR PERFORMANCE MANAGEMENT SYSTEM**	
1	Confirmation that arrangement of performance management system including associated cabling, sensors and interconnections maintained as per approved plan.	…
2	Verification that on loss of hardware, functions of the systems does not get affected. (Applicable where the system is provided with dedicated operator stations and servers)	…
3	Confirmation from the records that hardware & software inventory maintained and changes if any, have been verified and found in order.	…
G	**ADDITIONAL REQUIREMENTS FOR SHIPS USING BIO-FUEL BLEND AS FUEL**	
1	Confirmation of following towards use of bio-fuel blend onboard as fuel oil:	
	a. Availability of documented permission from the Flag Administration for use of bio-fuel blend.	…
	b. Vessel is in possession of required documents issued by the bunker suppliers to show that the bio-fuel blend meets the relevant specification requirements including Test analysis report as per ISO 8217:2017, BDN, Safety Data Sheet, Proof of Sustainability (PoS) for Biofuels).	…
	c. The percentage of bio-fuel in the fuel oil blend supplied to the ship is clearly reflected in the bunker delivery note and that the blend proportion conforms to the limit permitted by Flag Administration.	…
	d. Measures are in place in respect of shelf life of the bio-fuel blend used onboard as declared by the bunker supplier.	…
	e. Ship specific risk analysis for use of bio-fuel blend is available. Any redundancy requirements onboard as per risk analysis is taken care for the operational safety and emergency contingency measures. (Note: Bio-fuel blend is not to be used for emergency equipment e.g. emergency generator, emergency fire pump, etc.)	…
	f. Confirmation by manufacturers of engines and equipment (e.g. purifiers) on suitability for use of bio-fuel blend onboard.	…
	g. Shipboard operational procedures for use/ handling of bio-fuel blend including procedures for procurement, availability test result, storage of biofuel blend, frequency of cleaning of fuel filters, inspection of storage tanks, monitoring of transfer lines and associated piping & fittings and any other requirements specified by the manufacturers of engines/equipment is available.	…
	h. Crew members onboard are familiarized with the shipboard procedures regarding the handling and use of bio-fuel blend including contingency measures and records are maintained.	…
	i. Maintenance and inspection of fuel oil system including storage tanks, filters, fuel transfer hoses and connectors is undertaken as specified in the shipboard operational procedure and records maintained.	…
	j. Logging/ monitoring of all relevant engine parameters, maintenance and checks as specified by the manufacturer is undertaken and records maintained.	…
H	**ADDITIONAL REQUIREMNETS FOR IMPRESSED CURRENT CATHODIC PROTECTION (ICCP) SYSTEMS**	
1	**DOCUMENTATION AND RECO RDS** a. Confirmation that ICCP Manual is available onboard and attachments details of anodes and reference electrodes along with specification of connecting cables are available for reference. b. Confirmation that record of system operation is maintained and downtime if any is recorded. Confirmation that all anode current outputs and potentials monitored are similar to those settled during previous assessment. c. Confirmation from records that ICCP system is maintained and adjusted by the supplier on regular basis as per manufacturer's instructions.	…
2	**SYSTEM OPERATION** Confirmation that system is in operation and working satisfactory. Confirmation that operation of indicators and control on the panel including auto/manual switch are found to be satisfactory.	…
3	**PROTECTION ARRANGEMENT FOR ANODE CABLES** Confirmation that protection arrangement for ICCP anode cables is in satisfactory condition.	…
I	**ALTERNATIVE DESIGN AND ARRANGEMENT**	
1	Where applicable, examination of alternative design and arrangement for machinery or electrical installations, low-flashpoint fuel storage and distribution systems, or fire safety, in accordance with the test inspection and maintenance requirements if any specified in the approved documentation is to be carried out.	…

J	FIREFIGHTING/PROTECTION ARRANGEMENTS	
1	**MAIN & EMERGENCY FIRE PUMP, HYDRANTS, HOSES, NOZZLES** Examining the fire pumps, fire main, hydrants, hoses and nozzles and the international shore connection and checking that each fire pump, including the emergency fire pump, can be operated separately so that two jets of water are produced simultaneously from different hydrants at any part of the ship while the required pressure is maintained in the fire main.	…
2	**FIRE PROTECTION ARRANGEMENTS** Examination of the fire protection arrangements in cargo spaces and confirming, as far as practicable and as appropriate, the operation of the means of control provided for closing the various openings.	…
3	**READINESS OF FIRE HYDRANTS, HOSES** Each hose complete with couplings, nozzle (dual-purpose nozzles where applicable) and tools kept ready for use.	…
4	**PORTABLE EXTINGUISHERS AND FOAM APPLICATORS** Checking the provision and randomly examining the condition of the portable and non-portable fire extinguishers.	…
5	**SPARE CHARGES** Availability of spare charge/s for each portable extinguisher or additional portable extinguishers of the same type.	…
6	**FIRE AND/OR SMOKE DETECTION SYSTEM** a. Examining, as far as possible, and testing, as feasible, any fire detection and alarm system and any sample extraction smoke detection system.	…
	b. Confirmation that maintenance as recommended by manufacturer has been undertaken and spares available as per manufacturer's instructions for the system.	…
7	**DECK FOAM SYSTEM & CARGO PUMPROOM PROTECTION** Checking the deck foam system, including the supplies of foam concentrate, and testing that the minimum number of jets of water at the required pressure in the fire main is obtained when the system is in operation.	…
8	**FIXED FIRE FIGHTING SYSTEM (MACHINERY, CARGO, PAINT LOCKER, DEEP FAT COOKING ETC.)** a. Examining the fixed fire-fighting system and confirming that the installation tests have been satisfactorily completed and that its means of operation is clearly marked. b. Verification with regard to correct positioning (for in service condition) of safety pins, where used on cylinder head discharge valves for fixed fire fighting CO2 system are in accordance with manufacture's instruction manual. c. Checking that fixed carbon dioxide fire-extinguishing systems for the protection of machinery spaces and cargo pump-rooms, where applicable, are provided with two separate controls, one for opening of the gas piping and one for discharging the gas from the storage container, each of them located in a release box clearly identified for the particular space. **d.** Examining the fire-extinguishing system for spaces containing paint and/or flammable liquids and deep-fat cooking equipment in accommodation and service spaces.	…
9	**REMOTE STOPPING VALVES** a. Examining the arrangements for oil fuel, lubricating oil and other flammable oils and testing the remote closing of valves for oil fuel, lubricating oil and other flammable oils and the operation of the remote means of closing the valves on the tanks that contain oil fuel, lubricating oil and other flammable oils	…
	b. Confirmation that quick closing valves are in satisfactory condition and no valve is isolated/disconnected and operating instructions are displayed.	…
10	**CLOSING ARRANGEMENTS FOR SKYLIGHTS, FLAPS ETC** Examining the fire-extinguishing and special arrangements in the machinery spaces and confirming, as far as practicable and as appropriate, the operation of the remote means of control provided for the opening and closing of the skylights, the release of smoke, the closure of the funnel and ventilation openings, the closure of power-operated and other doors, the stopping of ventilation and boiler forced and induced draught fans and the stopping of oil fuel and other pumps that discharge flammable liquids.	…
11	**GASEOUS FUEL FOR DOMESTIC PURPOSE** Examining the arrangements for gaseous fuel for domestic purposes.	…
12	**FIREMAN'S OUTFITS** Confirming that the fire-fighters' outfits including their self-contained compressed air breathing apparatus and emergency escape breathing devices (EEBDs) are complete and in good condition, that the cylinders, including the spare cylinders, of any required self-contained breathing apparatus	…

	are suitably charged, and that onboard means of recharging breathing apparatus cylinders used during drills or a suitable number of spare cylinders to replace those used are provided, and provision of two-way portable radiotelephone apparatus of an explosion-proof type or intrinsically safe.	
13	**STRUCTURAL FIRE PROTECTION AND FIRE DAMPERS** Confirming, as far as practicable, that no changes have been made in the structural fire protection, Testing the fire dampers of ventilation ducts and the means of closing the main inlets and outlets of all ventilation systems and testing the means of stopping power ventilation systems from outside the space served.	…
14	**CLOSING ARRANGEMENTS FOR SKYLIGHTS, FLAPS ETC** Examining the fire-extinguishing and special arrangements in the machinery spaces and confirming, as far as practicable and as appropriate, the operation of the remote means of control provided for the opening and closing of the skylights, the release of smoke, the closure of the funnel and ventilation openings, the closure of power-operated and other doors, the stopping of ventilation and boiler forced and induced draught fans and the stopping of oil fuel and other pumps that discharge flammable liquids.	…
15	**MEANS OF ESCAPE** a. Confirmation that the means of escape from accommodation, machinery and other spaces are satisfactory.	…
	b. Confirmation that opening of escape doors are in the way of direction of escape, handrails are provided in the corridors that are being used as escape routes and none of the doors along any designated escape routes require keys to unlock them when moving in the direction of escape.	…
16	**POTENTIAL SOURCES OF IGNITION** Confirmation that potential sources of ignition in or near the cargo pump room are eliminated, such as loose gear, combustible materials etc, there are no signs of undue leakage and access ladders are in satisfactory condition.	…
17	**CONTINIOUS MONITORING** Confirmation that the system for continuous monitoring of the concentration of flammable vapours is satisfactory.	…
18	**SAMPLING POINTS OR DETECTOR HEADS** Confirmation that sampling points or detector heads are located in suitable positions in order that potentially dangerous leakages are readily detected.	…
K	**CARGO PUMP ROOM/OTHER CARGO HANDLING SPACES**	
1	**ACCESS LADDERS AND RESCUE ARRANGEMENTS** Verification of cargo pump room access ladders, railings and permanent rescue arrangements.	…
2	**CARGO PUMP ROOM VENTILATION, CLEANLINESS Etc** Examination of cargo pump room(s) spaces for freeness from potential sources of ignition; operation of the ventilation system (damper operation and flame screens) including interlocking arrangement to lighting. Verification that no oil leakages and no accumulation of oil in the cargo pump room. Leakages if any have been dealt and source of leakages rectified.	…
3	**CARGO PUMP ROOM DRAINAGE ARRANGEMENT** Verification of cargo pump room bilge system operable form outside the cargo pump rooms.	…
4	**PUMP ROOM BULKHEAD AND PIPE TUNNEL IF FITED** Examinations of all pump room bulkheads for signs of chemical leakage or fractures, the sealing arrangements of all penetrations of pump room bulkheads. Examination of condition of all piping systems.	…
5	**CARGO PUMPS, PRESSURE GUAGES, VALVES** Examination of cargo, bilge, ballast, stripping pumps for excessive gland seal leakage. Verification that installed pressure gauges on cargo discharge lines including those fitted outside the cargo pump room and level indicating systems are operational, verification that pumps, valves and pipelines are identified and distinctively marked.	…
L	**CARGO HANDLING/CARGO CONTROL ROOMS**	
1	**CARGO TANK GAUGING SYSTEM** Verification of cargo tank level gauges, high level alarms and automatic high-liquid-level shut-off system.	…
2	**LOACTION OF VENTING** Examining the location of the vent outlets in respect of the height above the weather deck or the fore and aft gangway, from the nearest air intakes or openings to accommodation, service and machinery spaces and ignition sources are in satisfactory condition.	…

M	**SAFETY ARRANGEMENTS RELATED TO CARGO**	
1	Examinations of gauging devices, high level alarms, valves associated with overflow control. Examination of cargo heating/cooling system sampling arrangements where fitted. Examination of the cargo transfer arrangements and confirming that any hoses are suitable for their intended purpose and mark with date of testing.	…
2	Verification of temperature devices and alarms, removable pipe lengths or other approved equipment necessary for cargo separation. Verification that the ventilation system including portable equipment is operational. Verification that arrangements are made for sufficient inert/padding/drying gas to be carried or generated to compensate for normal losses and that means are provided for monitoring of ullage spaces. Verification that arrangements are made for sufficient medium to be carried where drying agents are used on air inlets to cargo tanks.	…
3	Confirmation that the protective clothing for crew engaged in loading and discharging operations and its stowage is in a satisfactory condition.	…
N	**SAFETY EQUIPMENT & BREATHING APPARATUS**	
1	Confirmation that safety equipment and associated breathing apparatus and associated air supplies and, when appropriate, emergency-escape respiratory and eye protection, are in a satisfactory condition and are properly stowed.	…
O	**PORTABLE GAS DETECTION INSTRUMENTS**	
1	Verify that at least two for toxic & flammable, fixed or portable type gas detection instruments are on board and arrangements have been made for the supply of the appropriate vapour detection tubes.	…
P	**FIRST AID EQUIPMENT**	
1	Confirmation that medical first-aid equipment, including stretchers and oxygen resuscitation equipment are in a satisfactory condition.	…
2	Confirmation that arrangements have been made for the antidotes for the cargoes actually carried to be on board.	…
3	**DECONTAMINATION AND EYE WASH ARRANGEMENT** Functional verification of decontamination and eye wash arrangements including arrangements against freezing.	…
4	**CARGO SAMPLE** Confirmation that stowage of cargo sample is in satisfactory condition.	…
Q	**GENERAL**	
1	**HOUSE KEEPING** a. Verification that general housekeeping /cleanliness in engine room, pump room, on deck, accommodation, hospital, galley, wash basins and toilets are satisfactory. b. Confirmation that no loose drums and no heavy items without securing/lashing on deck. c. Confirmation that Spare anchor where provided, its lashing bracket in good condition.	…
2	**FLAG SPECIFIC REQUIREMENTS** Confirmation that flag specific requirements/instructions, if any are complied with. Please Provide details in Remark section.	…
3	**H.O. INSTRUCTIONS** Confirmation that H.O. Instructions pertaining to this survey if any communicated separately, have been compiled with. Please Provide details in Remark section.	…
4	**SURVEY UNDERTAKEN ON BEHALF OF OTHER SOCIETY** For surveys on behalf of other society, confirmation that authorization, survey status and additional survey requirements if any are available and requirement related to reporting, endorsement of certificate, communication have been followed.	…
5	**OVERDUE SURVEY** Confirmation that H.O. authorization is available for dealing with overdue surveys. (Note: For dealing with overdue statutory surveys held together with Class surveys, Flag Administration authorization is required, details are to be provided in "Remarks")	…
6	**REINSTATEMENT OF CLASS** Where the vessel was attended during suspension period, reference of relevant marine miscellaneous reports are provided in "Remarks" section which have been taken into account towards reinstatement of class.	…
7	**SURVEY HELD BY OTHER SOCIETY ON BEHALF OF IRS** Confirmation that on board records verified for any survey held by other society on behalf of IRS. (details to be included in "Remarks").	…

	Where survey undertaken by other society on behalf of IRS, survey status updated with relevant information and a confirmatory survey carried out and found to be satisfactory.	…
8	**REVIEW OF PORT STATE AND FLAG STATE INSPECTION REPORTS** Confirmation that reports of inspection by port state and flag state since last survey reviewed. Repairs/corrective action taken towards the deficiencies examined. Repairs to outstanding reported using Form "Cert-PSC".	…
	Where the vessel was detained, a general examination was carried out as per Flag instruction and as required by survey procedure D-01 in consultation with H.O.	…
9	**SURVEY ARRANGEMENTS** Verification of preparation for survey, means of access, safety arrangements for the safe and efficient conduct of the survey.	…
10	**CALLIBRATION STATUS OF MEASURING AND TESTING EQUIPMENT** Verification of calibration status of measuring and testing equipment used for survey.	…
11	**REMOTE INSPECTION TECHNIQUES**	
11.1	Confirmation that an inspection plan for the use of remote inspection techniques including any confirmatory survey/close-up survey/thickness measurements is submitted to H.O. and reviewed for acceptance prior commencement of survey.	…
11.2	Confirmation that risk assessment undertaken to identify any hazards, to assess the likelihood of an incident occurring and to establish control measures to minimize the risk so that mitigating measures as required are put in place for safe conduct of survey using the remote inspection technique.	…
11.3	Confirmation that a pre-meeting held between all parties i.e., surveyor, service supplier, ship owner's representatives in order to confirm planned arrangements as per inspection plan are in place so as to ensure safe and efficient conduct of the inspection. The equipment, procedure for observing, two-way communication between surveyor and RIT operator, data presentation including pictorial representation and reporting the surveys using RIT discussed and agreed with the parties prior to the RIT survey, and equipment set-up, calibrated prior the inspection.	…
11.4	When the remote inspection technique is used for a close-up survey, confirmation that such remote inspection technique is also able to carry out the required thickness measurements.	…
11.5	Where remote inspection technique is not able to carry out the required thickness measurements, confirmation that means of access for the corresponding thickness measurements provided. Confirmatory surveys/close up surveys including thickness measurement carried out as required at selected locations to verify the results of the remote inspection technique.	…
11.6	If the RIT reveals damage or deterioration that requires attention, confirmation that traditional survey undertaken without the use of a RIT. (Details to be provided in "Remarks")	…
11.7	**CHANGES TO EQUIPMENT/SHIP PARTICULARS/LIST OF SURVEYABLE ITEMS** Changes to equipment/ship particulars/list of surveyable items reported using corresponding FE forms.	…
11.8	**ADDITION/SUSPENSION/DELETION OF CLASS NOTATION** For any request for additional class notation where plan approval is required, Head Office authorization has been received. Separate reporting done using relevant checklists for class notations assigned to the vessel. Class certificate has been amended to reflect the amended class notation. (Note: Details regarding addition/suspension/deletion of class notation is to be included under "Remarks")	…
11.9	**PLAN APPROVAL COMMENTS** Relevant plan approval comments if any closed out in E-Plan arena.	…
R	**ADDITIONAL REQUIREMENTS TOWARDS CLASS INTERMEDIATE SURVEY**	
1	**APPROVED SURVEY PROGRAM** Confirmation of availability of approved survey program for the survey on board. (Note: Applicable for vessels over 10years of age)	…
2	**SURVEY PLANNING MEETING** Confirmation that survey planning meeting held between the attending surveyor(s), the owner's representative in attendance and where involved, the thickness measurement company representative and the Master of the ship or an appropriately qualified representative appointed by the Master or Company for the purpose to ascertain that all the arrangements envisaged in the survey programme are in place, so as to ensure the safe and efficient conduct of the survey work to be carried out.	…

3	**CARGO, CARGO WASHING, BUNKER, BALLAST, STEAM AND VENT PIPING** **i**) Examination of cargo, cargo washing, bunker, ballast, steam and vent piping on weather decks as well as vent masts and headers to confirm their satisfactory condition. (If upon examination there is any doubt as to the condition of the piping, the pipe is to be pressure tested, thickness gauged or both. Particular attention is to be paid to any repairs such as welded doublers). ii)Where the scope of the intermediate survey is to the same extent as previous special survey, examination of cargo piping on deck, cargo and ballast piping systems within the tanks and spaces and operational testing to working pressure to confirm these are in satisfactory condition. (Note: Special attention is to be given to ballast piping in cargo tanks and cargo piping in ballast tanks and void spaces and when the piping, including valves and fittings are open during repair periods, same to be examined internally).	…
4	**ELECTRICAL EQUIPMENT IN DANGEROUS ZONES** Confirmation that general Examination and testing of insulation resistance of electrical circuits in dangerous zones are maintained in satisfactory condition (Note: i) In cases where a proper record of testing is maintained, consideration should be given for accepting recent readings. ii) These measurements are taken when the ship is in a gas free condition and to be carried out within an acceptable time period).	…
5	**SAFETY ARRANGEMENTS RELATED TO CARGO** a. Verification that vent line drainage arrangements, cargo heating/cooling system and ship's cargo hoses are (approved) and maintained in efficient condition. b. Verification that where applicable, pipelines and independent cargo tanks are electrically bonded to the hull and maintained in efficient condition. c. Confirmation that spares are provided for cargo area mechanical ventilation fans and are in satisfactory condition. d. erification that equipment for personal protection is maintained satisfactorily. e. External examination and confirmation that the pumping and piping systems, including stripping system (if fitted) and associated equipment remain as approved and maintained satisfactorily. f. External examination of the tank wash piping and confirming that the type, capacity, number and arrangement of the tank washing machines are as approved and maintained satisfactorily. g. External examination of the wash water heating system, underwater discharge arrangement and heating system required for solidifying and high viscosity substances (as far as practicable) for satisfactory condition. h. Confirmation that the means of controlling the rate of discharge of the residue, flow rate indicating device and ventilation equipment for residue removal is as approved and satisfactory. i. Confirmation that cargo tank high level alarms and discharge outlets (if possible) are satisfactory. j. Confirmation from the cargo record book that the pumping and stripping arrangements have been emptying the tanks efficiently and all are in working order. k. Confirmation that the operation of the recording device, as fitted is satisfactory and verifying by an actual flow test that it has an accuracy of ± 15% or better.	…
6	**EXAMINATION OF TANKS, SPACES AND THICKNESS MEASUREMENT**	
6.1	Confirmation that examination of tanks, spaces including testing and thickness measurements are carried out satisfactorily as per the rule requirements and reported separately.	…
6.2	Examination of ballast tanks included examination of the condition of the corrosion prevention system in these spaces and found to be satisfactory.	…
6.3	Where special consideration is allowed as per the survey procedure and/or Main Rules Part 1, Chapter 2, the extent of thickness measurements is reduced, the special consideration is reported under “Remarks”.	…
6.4	In case examination of tanks, spaces and thickness measurements are partly carried out, the extent of examination, thickness measurement carried out or pending is reflected in the survey status.	…
6.5	Confirmation that diminution criteria of other class society (under the special survey of which the vessel was built) is adopted for thickness measurement (Details to be provided in “Remarks” section)	…
S	**ADDITIONAL REQUIREMENTS TOWARDS SPECIAL SURVEYS**	
1	**APPROVED SURVEY PROGRAM** Confirmation of availability of approved survey program for the survey on board.	…

2	**SURVEY PLANNING MEETING** Confirmation that survey planning meeting held between the attending surveyor(s), the owner's representative in attendance and where involved, the thickness measurement company representative and the Master of the ship or an appropriately qualified representative appointed by the Master or Company for the purpose to ascertain that all the arrangements envisaged in the survey programme are in place, so as to ensure the safe and efficient conduct of the survey work to be carried out.	…
3	**AIR PIPES** Internal Examination of Automatic air pipe heads at special survey as required by IRS Rules.	…
4	**MOORING ROPES AND TOW LINES** Confirmation that sufficient mooring ropes and tow lines as required by rules are provided onboard.	…
5	**MEANS OF EMBARKATION AND DISEMBARKATION** Accommodation ladders, gangways and its winches incl. brake system are operationally tested with specified maximum operation load in accordance with IRS Rules.	…
6	**CARGO AND BALLAST PIPING SYSTEM** 1) Examination of cargo piping on deck, cargo and ballast piping systems within the tanks and spaces and operational testing to working pressure to confirm these are in satisfactory condition. (Note: Special attention is to be given to ballast piping in cargo tanks and cargo piping in ballast tanks and void spaces and when the piping, including valves and fittings are open during repair periods, same to be examined internally) 2) For chemical tankers exceeding 10 years of age, confirmation that selected steel cargo pipes outside cargo tanks and ballast pipes passing through cargo tanks are thickness measured/internally examined and pressure tested to the maximum working pressure with satisfactory results. (Note: Special attention is to be given to cargo/slop discharge piping through ballast tanks and void spaces).	…
7	**PRESSURE VACUUM VALVES** Confirming that pressure vacuum valves connected to cargo tanks are examined in open condition, tested for the setting, and found satisfactory.	…
8	**EXAMINATION OF TANKS, SPACES AND THICKNESS MEASUREMENT**	
8.1	Confirmation that internal examination of tanks, spaces including testing and thickness measurements are carried out satisfactorily as per the rule requirements and reported separately.	…
8.2	Examination of ballast tanks included examination of the condition of the corrosion prevention system in these spaces and found to be satisfactory.	…
8.3	Where special consideration is allowed as per the survey procedure and/or Main Rules Part 1, Chapter 2, the extent of thickness measurements is reduced, the special consideration is reported under "Remarks".	…
8.4	In case examination of tanks, spaces and thickness measurements are partly carried out, the extent of examination, thickness measurement carried out or pending is reflected in the survey status.	…
8.5	Confirmation that diminution criteria of other class society (under the special survey of which the vessel was built) is adopted for thickness measurement. (Details to be provided in "Remarks" section)	…
9	**WATERTIGHT CABLE TRANSIT SEAL SYSTEMS** (Note: Applicable for all vessels contracted for construction on or after 1st July 2021) a. i) Examination of all cable transit seal systems for their satisfactory condition and review of the cable transit seal systems register to confirm that it being maintained.	…
	b. ii) Confirmation that where any disruption to the cable transits or installation of new cable transits carried out onboard from last special survey, records are reviewed and examination carried out for the satisfactory condition of those transits. Confirmation that the results are recorded in the Register against each of those cable transits. (Note: Entries that were reviewed and examined during previous annual survey may be excluded)	…
	c. iii) Confirmation that the Special Survey is recorded in the Register. (Note: A single record entry will be sufficient to record the survey of all transits.)	…
	d. iv) Where the cable transits have been examined by an approved service supplier, review of the cable transit seal system register to confirm that it has been properly maintained by the owner and correctly endorsed by the service supplier.	…

T	ADDITIONAL REQUIREMENTS FOR CLASS ETNRY (EXISTING SHIP)	
1	Authorization for undertaking the class entry survey including scope of survey, class notation to be assigned is available.	…
2	For transfer of class and dual classification cases confirmation that current classification survey status of the losing society/first society is available.	…
3	For any request for additional class notation where plan approval is required, Same has been undertaken in consultation of HOD (classification & certification). Include details under "Remarks".	…
4	Separate reporting done using relevant checklists for class notations assigned to the vessel.	…
5	**GENERAL EXAMINATION OF ESSENTIAL MACHINERIES**	
5.1	Examination of oil fuel burning equipment of boiler, economizers and steam/steam generators under working conditions. The adjustment of safety valves of this equipment verified.	…
5.2	External examination of all pressure vessels including their associated piping and protective devices. Internal examination and hydraulic testing carried out satisfactorily as considered necessary. (Note: Provide details under remark section where tests carried out.)	…
5.3	Examination of generator circuit breakers, preference tripping relays and generator prime mover governors including verification of insulation resistance, paralleling and load sharing for their satisfactory condition.	…
5.4	Examination of navigating lights and indicators for their working condition including verification of alternative sources of power.	…
5.5	Confirmation that following machinery and items have been dismantled and inspected for satisfactory condition. (Note: Details of items inspected undertaken are to be provided in below table.)	…

Machinery/Items	Details
a. Main Engine	
b. Auxiliary Engine(s)	
c. Pumps	
d. Pressure Vessels (Air bottles)	
e. Compressors	
f. Any other machinery/item (please specify the same under "Details")	

5.6	Examination of following items under working conditions:	
	a. Bilge Pumps	…
	b. Emergency Fire Pumps	…
	c. Remote control for oil valves, oil fuel pumps, lubricating oil pumps, forced draught fans	…
5.7	Examination of recirculating and ice clearing arrangements, if any for satisfactory condition.	…
5.8	Examination of main and all auxiliary machinery necessary for operation of the vessel at sea together with their essential controls to confirm satisfactory working condition.	…
5.9	Examination and testing of steering gear under working condition including testing of alternate means of steering for satisfactory working.	…
5.10	Verification of initial start arrangements for satisfactory condition.	…
5.11	Confirmation that a short sea trial held satisfactorily. (Note: 1. Mandatory where the vessel was laid up for a long period. 2. For class entry of non-compliant vessel subject to IACS PR 1D, sea trial to be undertaken in accordance with approved protocol as per survey procedure B-03)	…
5.12	Any class notation included in H. O. authorization but not assigned. (Note: Include explanation included in "Remarks".)	…
6	**AVAILABILITY OF PLANS/DOCUMENTS**	
6.1	All relevant plans/ documents are available. If not appropriate actions initiated in consultation with Head Office. (Note: (i) For class entry involving IACS PR 1D, plans/documents listed in Part 1, Chapter 1 Section 3.2.1 to 3.2.5 of the IRS Rules are to be appraised. (ii) Plans/documents as listed in survey procedure B-03 Annexure 2 are to be submitted to head office)	…
6.2	Shipboard arrangement verified against plans/documents and confirmation that no alteration/modification is done to the vessel.	…
6.3	Where plans/documents not available, confirmation that technical data collected in lieu of	…

	specific plan/document and sent to Head Office (HOD (PAC-Existing Ships) and HOD (Classification & Certification)).	
7	**THICKNESS MEASUREMENTS**	
7.1	Where class entry survey is to be credited as a periodical survey for maintenance of class thickness measurements undertaken by the losing society carried out within the applicable survey window of the periodical survey being credited and accepted based on satisfactory review for compliance with the applicable survey requirements, and confirmatory gauging now undertaken as reported. (Note: Copy of TM to be uploaded)	…
7.2	Where class entry survey is not to be credited as a periodical survey for maintenance of class thickness measurements undertaken by the losing society carried out within 15 months prior to completion of class entry survey (when it is in the scope of a Special Survey)/within 18 months prior to completion of class entry survey (when it is in the scope of an Intermediate Survey)* and accepted based on satisfactory review for compliance with the applicable survey requirements, and confirmatory gauging now undertaken as reported. (Note: Copy of TM to be uploaded)	…
8	**EXAMINATION OF BALLAST TANKS AND CARGO SPACES**	
8.1	Examination of ballast tanks and cargo spaces undertaken and are reported separately.	…
8.2	In lieu of an internal inspection of cargo tanks without internal stiffening and framing, inspections of surrounding ballast tank(s) and void spaces and deck structure, carried out satisfactorily. (Note: Applicable for chemical carriers of 10 years of age and above but less than 15 years of age)	…
9	**TANKS TESTING** Testing of ballast tanks undertaken as reported separately.	…
10	**ANCHORS AND ANCHOR CHAIN CABLES** Confirmation that anchors examined and chain cables ranged and gauged and found to be satisfactory.	…
11	**OVERDUE SURVEY AND CONDTIONS OF CLASS**	
11.1	Confirmation that (i) all overdue surveys and (ii) all overdue conditions of class previously issued against the vessel as specified to the Owner by the losing Society, have been dealt with satisfactorily. (Note: Applicable for vessels less than 15years of age)	…
11.2	Confirmation that (i) all overdue surveys and (ii) all overdue conditions of class previously issued against the vessel have been dealt with satisfactorily by the losing society. (Note: Applicable for vessels of 15years of age and over)	…
12	**OUTSTANDING CONDITION OF CLASS** Confirmation that all outstanding conditions of class issued by the losing society which have not been dealt with during class entry have been reflected in the survey status. (Note: Details of outstanding conditions of class dealt with at the time of class entry are to be reported separately)	…
13	**MATERIAL TESTING** Confirmation that material used for construction of the vessel meet Rule requirements and confirmed through material testing as required by survey procedure B-03. (Note: (i) Material testing is required to be carried out at accredited laboratory (accredited to ISO 17025 or equivalent) or at a laboratory approved by the respective Flag Administration. (ii) Applicable to class entry of non-compliant vessel subject to IACS PR 1D)	…
14	**NON-DESTRUCTIVE TESTING** Confirmation that NDT of weld joints undertaken as required by survey procedure B-03. (Note: Applicable to class entry of non-compliant vessel subject to IACS PR 1D)	…
15	**HYDRAULIC TEST** Confirmation that hydraulic testing of pressure vessel and piping system carried out in accordance with applicable class rules as per survey procedure B-03. (Note: Applicable to class entry of non-compliant vessel subject to IACS PR 1D)	…
16	**COMPLIANCE TO RETROACTIVE RULE REQUIREMENTS** Confirmation that vessel is in compliance with retroactive Rule requirements which are applicable to the vessel at the time of class entry. (Note: Applicable to class entry of non-compliant vessel subject to IACS PR 1D)	…

17	**INSTRUCTION FROM FLAG ADMINISTRATION**	…

	Confirmation that specific instruction from flag if any is taken into account.	
U	**CHANGE OF FLAG/CHANGE OF CERTIFICATION SURVEY (EXISTING SHIP)**	
1	Valid Permanent/ Provisional Registry certificate is available as issued by gaining flag/flag for which certification is being done.	…
2	IRS has authorization to carry out surveys on behalf of the flag. HO authorization including scope of survey, requirement for approval of statutory documents on behalf of the flag has been received.	…
3	Statutory certificates, supplements & documents issued on behalf of previous flag/RO are available.	…
4	Exemptions, where applicable, have been issued by the gaining flag/flag for which certification is being done.	…
5	Information on additional flag requirements, if any are taken into account.	…
6	All relevant drawings, documents etc. are available. If not appropriate actions initiated.	…
7	Plans and documents requiring approval on behalf of gaining flag have been approved.	…
8	Confirmation that mandatory certificate, documents required to be carried on board are available. (Note: Refer Instruction to Surveyors (Statutory) D-05 and Flag instruction)	…
9	Confirmation that statutory documents/plans onboard are in the language as required by applicable conventions, codes and confirming flag specific requirements.	…
10	Confirmation that marking and carving as required by flag has been done on the vessel.	…
11	Confirmation that new flag, port of registry and ship's name are indicated, as applicable, on life boats, life rafts, life buoys, statutory documents as applicable.	…
12	Confirmation that vessel is in compliance with new statutory requirements due to changes to statutory regulations as applicable to the vessel on the date of survey.	…
V	**STATUS OF SURVEY AND CERTIFICATE**	
1	Confirmation that the Annual Survey/Intermediate Survey/Special Survey* completed satisfactorily.	…
2	General examination of the vessel carried out satisfactorily towards [postponement of special survey/for granting voyage permission/towards class entry/towards condition improvement program/(specify)]* with the scope of Annual survey/ Intermediate Survey/Special Survey* relevant to the age and type of the vessel as per Rules. (Note: (i) Authorisation reference received from head office/flag Administration are to be provided under "Remarks" (ii) Further survey scope covered for postponement survey are to be confirmed by indicating under "Remarks")	…
3	On satisfactory completion of the survey/examination* Full-Term Certificate issued/endorsed/extended/interim certificate issued/short term certificate issued*. (Note: Validity of the short-term certificates and other conditions based on which the certificate is issued are to be included in the "Remarks" section)	…
4	Confirmation that where a Condition is imposed/extended affecting the statutory requirements, same is in compliance as per survey procedure, A-01-06 and relevant Flag Instructions, D.13.	…
5	Confirmation that the Annual Survey/Intermediate Survey/Special survey* carried out partly as reported. Extent of survey/examination* carried out/pending* is reflected in the survey status. (Note: Explanation for carrying out surveys partly may be included under "Remarks")	…
6	Annual Survey/Intermediate Survey/Special survey/General examination* could not be completed due to reason as provided under "Remarks" and the survey window having been expired it is recommended that the class of the vessel may be suspended. Extent of survey/examination carried out/pending is reflected in the survey status as additional information and pending repairs to deficiencies have been reflected in the survey status as condition of class.	…
7	The special survey has been preponed in consultation with the Flag Administration for alignment with statutory renewal surveys. A fresh date for special survey is recommended to be assigned.	…
8	The Annual/Intermediate* survey has been completed before the survey window at the request of the owner and the anniversary date is amended in the class certificate accordingly.	…
REMARKS:		