

## H&M Condition Survey Practices

As TPI Sigorta Insurance, we have been providing Hull and Machinery cover since 2016, which traditionally carries a larger scale risk comparing with the other types of marine insurance, thus creating a need for us to conduct comprehensive analyses, especially during the risk assessment phase.

Even if we decide to assume the risk of this coverage because of these analyses, we apply condition surveys to these vessels, which will be carried out to a large extent before the commencement of coverage or immediately after the inception of the policy (preferably within 30 days at the latest), and we feel the need to see that our risk analysis is supported by these results.



Here, in this circular, we will try to explain what is expected from our insured, Masters, and crew members, what kind of inspection they will encounter, which tests, and examinations will be requested from them in Hull and Machinery condition surveys.

Basically, the examinations made during this survey can be summarized under the following headings:

Ship Certificates, Safety Management System related records, documents (Plans, Manuals, Logbooks, Booklets),

- Hull Structure and Outfitting,
- Engine Room Spaces and Machinery,
- Engine Department Planned Maintenance Records, Overhaul and Measurement Reports,
- Navigation and Communication Equipment,
- Fire Fighting and Life Saving Equipment,
- Crew/Manning considerations and shipboard management,

The basic examinations, tests, records, and reviews included in these departments can be roughly classified under the following items.



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Upon graduation from Maritime Academy in 1990, Capt. Pamuk joined Zihni Shipping and worked more than 18 years as Master Mariner on board in various size of bulk carriers/tankers for 12 years, and as ISM Manager/Ship Operations Manager/General Manager at shore management for 6 years, respectively. In 2008, he joined as a Marine Surveyor to Kalimbassieris Maritime which is being acted as marine consultants and P&I correspondents of IG Clubs. In addition to overseeing P&I claims and correspondency for Clubs along with his regular loss prevention/damage related surveys, he also attended on various casualties in Turkey, assisted to salvage/towage issues, investigated pollutions and human injuries/loss of life. Then he acted as Head of P&I Department in same company from 2009 until his fall in with Türk P&I Sigorta family as Technical Manager, in the beginning of 2014.



**TURKP&I**

## 1. Ship Certificates, Safety Management System Records, Documents (Plans, Manuals, Logbooks, Booklets)

- Certificates, issued by the flag state and the classification society
- Last class Survey status reports, potential class conditions, memoranda, due dates,
- Class Survey programme, class notations, trading restrictions,
- Safety Management System records, internal/external audits, Master`s Review, Safety Management Meetings, periodic records
- Last Port State Control and Flag State Reports
- Examining various ship plans, booklets, logbooks (Last Ultrasonic Thickness Measurement Report, Trim Stability Booklet, SOPEP, Cargo Securing Manual, Ballast Management Plan, Garbage Management Manual, Deck/Engine Logbooks, Cargo Gear Booklet, Oil Record Book, Ship Security Plan etc.).

## 2. Hull Structure, Integrity

- External shell plating and hull markings (to visible extent),
- Windlasses, anchor, chains, bollards, fairleads, mooring winches,
- Cargo holds, internals, sounding pipe and electric cable foundations, condition of bilge wells, bilge suction testing,
- Structural condition of hatch covers, packing materials, internal elements, opening and closing operations,
- Deck cranes,
- Main deck, open decks, ventilation equipment, stanchions, handrails, stairs, doors, windows, portholes,
- Deck piping schemes including, fresh water, main fire, and bunkering lines, as well as their ventilation heads,
- Bunkering stations, save-alls, scupper plugs,
- Securing and lashing devices including intermediate fittings, twist locks, bars, sockets,
- Testing/examining of cargo ramps, elevators, cargo control rooms, pump rooms according to ship types,
- Ballast Tanks, tank internals, cofferdam, and void spaces
- Hydrostatic pressure tests of ballast tanks

## 3. Engine Room Spaces and Machinery

- Engine Room and Steering Gear Room
- Main engine,
- Diesel Generators, Emergency Generator
- Exhaust gas pipes, lines, and insulations,
- Electrical equipment, lines and cables, batteries,
- Sea water, fire, fresh water, lubricating oil, fuel oil pumps,
- Air compressors,
- Sea chest valves,
- Pipelines and connections,
- Emergency lightings,
- Cleanliness of engine room and equipment in general maintenance, such as oil/water leakages, colour coding and proper marking.

## Tests and Examinations

- Main Engine (Visual control from outside and inside control by opening the crankcase cover)
- Main engine lubrication system (check by removing the filter) and critical safety alarms / shutdowns (low lube oil pressure, lube oil high temperature, main leakage alarm.)
- Diesel Generators, generators tripping (parallelizing) and safety alarms (lube oil low pressure, fresh water high temperature, leakage alarm.)
- Emergency diesel generator
- Safety devices including remote stops and quick closing valves
- Steering gear on both normal and emergency modes
- Main pumps (General Service, Water Ballast, Main Fire, Lube oil pumps, etc)
- Main and emergency air compressors
- Ventilation fan remote stops
- Engine room bilge high level alarm
- Engine room fixed fire extinguishing system alarm,
- Emergency lighting/black-out tests (through emergency generator).

## **4. Engine Department Planned Maintenance Records, Overhaul and Measurement Reports**

- Engine Department Planned Maintenance System (PMS) Records, forms, routine reports,
- Major spare parts inventory and requisitions,
- Main and Auxiliary Engine working hours,
- Main Engine Performance Report,
- Main Engine Crankshaft Deflection Report, (to verify if crankshaft has been processed with the usage of original parts and under the class control).
- Main and auxiliary engines latest shipyard/repair and overhaul records,
- Anchor and chain measurement reports,
- Megger Test Reports
- Last main engine, auxiliary engine, steering gear, and stern tube lube oil analysis

## **5. Navigation and Communication Equipment,**

- Radars,
- Gyro and Magnetic compasses, Autopilot
- Navigation Lights, Signalling Equipment,
- Communication (GMDSS) Equipment,
- AIS, Electric Sounder, NAVTEX, GPS,

## Examination of bridge documents and related records:

- Trim Stability Calculations,
- GMDSS Logbook,
- Voyage plan
- Navigational Charts, Nautical publications, and related corrections,
- Bridge Instructions, (ship port arrival, departure, etc.)
- Master's Standing Orders, Night Orders,
- Weather forecast reports,
- Bridge equipment related Safety Management System planned maintenance (PMS) records,

## 6. Fire Fighting and Life Saving Equipment,

- Fire line, main fire pump, emergency fire pump,
- Fire hydrants, hoses, and nozzles,
- International shore connection,
- Fixed CO2 fire extinguishing system (for engine room),
- Portable fire extinguishers,
- Fire doors, fire dampers, escape routes, hatches,
- Fire detection system (accommodation and engine room),
- Equipment belonging to the crew assigned to extinguish the fire,
- Fixed and portable gas detectors,
- Line throwing apparatus,
- Fire plans,
- Life rafts, Lifeboat,
- Drills and records,
- Maintenance records of firefighting equipment and personal life-saving equipment,

### Tests and Examinations

- Main and emergency fire pump,
- Fire dampers and vents,
- Remote shutdowns,
- Fire Detection system,

## 7.Crew/Manning considerations and shipboard management,

- Number of crew members, competency, certificates, endorsements
- Checking that the ship is manned as per Minimum Safe Manning Certificate
- Personnel training and familiarization records
- Working language on board,
- Experience of crew members
- Crew members` awareness on safety measures and practices,
- Crew members general attitude on safety measures and personal protective clothes,
- Galley, provision stores, hospital, crew cabins, crew mess rooms and common living areas,

With all these explanations, we tried to inform our insureds (and potential candidates) in advance about the minimum standards on board we expect as TPI Insurance and the tests/examinations they will encounter during the surveys.

However, in the meantime, as a maritime related company, we would like to emphasize that, we believe all the above-mentioned items should not be considered only as a preparation for the survey, and that appropriate measures/routine inspections are essential at any time on board for the safety of the ship and its crew.