# U. S. Coast Guard Sector



Machinery Inspector (Steam)

Performance Qualification Standard

<u>Task</u> <u>Number</u>	MS Tasks	Completed Date	<u>Defer</u>
CD04	Discuss scope of inspection with owner's representative.		
CD05	Obtain CG-2692 for reportable marine casualties.		
CD06	Examine gas-free certificate.		
CD08	Review any outstanding CG-835s and ask if other deficiencies exist.		
ES01	Inspect switchboards.		
ES02	Inspect ship's service generators.		
ES04	Inspect emergency generators.		
ES05	Inspect battery installation.		
ES07	Inspect motor controllers.		
ES08	Ensure lighting systems/fixtures are adequate and meet requirements.		
ES10	Ensure receptacle outlets are properly grounded.		
ES11	Inspect distribution panels.		
ES13	Inspect electrical cable installation.		
ES15	Test power operated watertight doors from local/remote control units.		
ES16	Test/inspect internal communication and control systems.		
ES18	Inspect components installed in designated hazardous locations.		
ES21	Inspect the general alarm system emergency batteries.		
ES22	Perform operational test of remote ventilation shutdowns.		
FF01	Determine amount, type, location of fire protection equipment required.		
FF08	Inspect semi-portable firefighting equipment.		
FF09	Inspect portable firefighting equipment.		
FF10	Inspect fire main and fire stations.		
FF13	Witness operational test of fire detection system.		
FP01	Verify that required forms, placards and notices are posted.		
FP04	Verify that the International Safety Management Code Safety Management system is properly implemented aboard the vessel.		
GH07	Inspect paint lockers.		
GH08	Inspect ladders, railways, and gangways.		
LS04	Inspect life preservers.		
LS08	Inspect immersion suits.		
MI01	Determine condition of the components of the steering gear assembly.		

<u>Task</u> <u>Number</u>	MS Tasks	Completed Date	<u>Defer</u>
MI04	Inspect fuel oil service and transfer system.		
MI06	Inspect bilge pumps installation, piping, and valves in machinery spaces.		
MI10	Examine refrigeration/air conditioning machinery.		
MI11	Examine potable water system.		
MI13	Observe operational tests of machinery.		
MI16	Inspect the diesel installation and assembly.		
MI19	Inspect air starting systems.		
MI20	Inspect hydraulic starting systems.		
MI21	Inspect electric starting systems.		
MI22	Witness operational test of main propulsion diesel automation.		
MI23	Witness operational test of steam propulsion automation.		
MI24	Observe operational test of forced draft fans and shutdowns.		
MI25	Internally examine UPVs requiring internal examination.		
MI26	Externally examine UPVs.		
MI27	Witness Hydrostatic test of UPV.		
MI28	Ensure all UPVs are properly equipped with pressure relief valves.		
MI29	Witness pressure relief valve test.		
MI30	Conduct an external examination of a watertube boiler.		
MI31	Conduct a waterside examination of a watertube boiler.		
MI32	Conduct a fireside examination of a watertube boiler.		
MI33	Conduct an examination of an auxiliary/heating boiler.		
MI34	Conduct required mountings inspections.		
MI35	Conduct a hydrostatic test of the boiler(s).		
MI36	Witness the lifting and reseating of safety valves.		
MI37	Inspect main/auxiliary condensate and sea water circulating systems.		
MI38	Inspect feedwater system.		
MI39	Inspect main steam turbine.		
MI40	Ensure insulation on steam piping provided to reduce personnel hazard.		
NT01	Witness dye penetrant NDT in accordance with applicable standards.		
NT02	Witness magnetic particle NDT in accordance with applicable standards.		

<u>Task</u> <u>Number</u>	MS Tasks	Completed Date	<u>Defer</u>
NT03	Witness radiography NDT in accordance with applicable standards.		
NT04	Witness ultrasonic NDT in accordance with applicable standards.		
PP03	Inspect pollution prevention equipment and documentation in machinery spaces.		
RT01	Complete Initial Indoctrination Marine Safety (IIMS) Course.		
RT02	Complete Marine Inspector Course (MS-601)		
RT05	Complete SMI Machinery Course.		
RT06	Complete SMI Machinery Course Steam Propulsion Supplement.		
WI01	Inspect watertight doors.		
WI03	Test power-operated watertight doors from local/remote control units.		
WI04	Inspect watertight bulkhead penetrations.		
WI06	Inspect remote-operated valves and controls.		
WR01	Evaluate welding repair proposal.		
WR02	Complete initial visual inspection of weld repair.		
WR03	Complete intermediate visual inspection of weld repair.		
WR04	Complete final visual inspection of weld repair.		
WR05	Witness pressure testing of welded repairs.		
WR06	Complete steps to approve Weld Procedure Specification (WPS) for engineering and cargo system construction or repair IAW Subchapter F of the Code of Federal Regulations.		
WR07	Complete steps to approve Weld Performance Qualifications (WPQ) for engineering and cargo system construction or repair IAW Subchapter F of the Code of Federal Regulations.		
WR08	Review approved Weld Procedure Specification (WPS) for engineering and cargo system construction or repair.		
WR09	Review approved Welder Performance Qualification (WPQ) for engineering and cargo system construction or repair.		

DATE	LOCATION	VESSEL NAME	VESSEL CLASS	INSPECTION TYPE	LEAD INSPECTOR

#### **NOTES**