§ 61.10–5 Pressure vessels in service.

(a) Basic requirements. Each pressure vessel must be examined or tested every 5 years. The extent of the test or examination should be that necessary to determine that the pressure vessel’s condition is satisfactory and that the pressure vessel is fit for the service intended.

(b) Internal and external tests and inspections. (1) Each pressure vessel listed on the Certificate of Inspection must be thoroughly examined externally every 5 years.

(2) In addition, each pressure vessel listed on the Certificate of Inspection that is fitted with a manhole or other inspection opening so it can be satisfactorily examined internally, must be opened for internal examination every 5 years.

(3) No pressure vessel need be hydrostatically tested except when a defect is found that, in the marine inspector’s opinion, may affect the safety of the pressure vessel. In this case, the pressure vessel should be hydrostatically tested at a pressure of 1½ times the maximum allowable working pressure.

(c) Special purpose vessels. (1) If your vessel’s Certificate of Inspection is renewed annually, the following must be examined under operating conditions at each inspection for certification: all tubular heat exchangers, hydraulic accumulators, and all pressure vessels used in refrigeration service.

(2) If your vessel’s Certificate of Inspection is renewed less often than annually, the following must be examined under operating conditions twice every 5 years: all tubular heat exchangers, hydraulic accumulators, and all pressure vessels used in refrigeration service.

(3) No more than 3 years may elapse between any examination and its immediate predecessor.

(d) Hydrostatic tests under pressure.

Each pressure vessel, other than one exempted by this section, must be subjected to a hydrostatic test at a pressure of 1½ times the maximum allowable working pressure twice within any five-year period, except that no more than three years may elapse between any test and its immediate predecessor.

(e) Exemptions from hydrostatic tests.

The following pressure vessels will not normally be subjected to a hydrostatic test:

(1) Tubular heat exchangers.

(2) Pressure vessels used in refrigeration service.

(3) Hydraulic accumulators.

(4) Pressure vessels which have been satisfactorily examined internally by a marine inspector and in which no defects have been found which impair the safety of the pressure vessel.
§ 61.15–1 Periodic Tests of Piping Systems

(5) Pressure vessels which were initially pneumatically tested in accordance with part 54 of this subchapter.

(6) Pressure vessels not stamped with the Coast Guard Symbol.

(1) Compressed gas or hazardous liquid pressure vessel tests. Cargo tanks of pressure vessel configuration containing liquefied, compressed gases or hazardous liquids must be inspected and tested as required by the applicable regulations published in subchapter D or subchapter I of this chapter.

(2) Bulk storage tanks. Each bulk storage tank containing liquefied, compressed gases or hazardous liquids must be inspected and tested as required by the applicable regulations published in subchapter D or subchapter I of this chapter.

(f) Compressed gas or hazardous liquid pressure vessel tests. Cargo tanks of pressure vessel configuration containing liquefied, compressed gases or hazardous liquids must be inspected and tested as required by the applicable regulations published in subchapter D or subchapter I of this chapter.

(g) Bulk storage tanks. Each bulk storage tank containing liquefied, compressed gases or hazardous liquids must be inspected and tested as required by the applicable regulations published in subchapter D or subchapter I of this chapter.

(h) Pneumatic tests. (1) Pressure vessels that were pneumatically tested before being stamped with the Coast Guard Symbol must be examined internally twice every 5 years and examined externally at each Inspection for Certification. No more than 3 years may elapse between any check and its immediate predecessor.

(2) For tanks whose design precludes a thorough internal or external examination, the thickness must be determined by a nondestructive method acceptable to the Officer in Charge, Marine Inspection.

(i) Safety or relief valves on pressure vessels. (1) If your vessel's Certificate of Inspection is renewed annually, the marine inspector must check the settings of the safety or relief valves on all pressure vessels, except cargo tanks, at each inspection for certification.

(2) If your vessel's Certificate of Inspection is renewed less often than annually, the marine inspector must check the settings of the safety or relief valves on all pressure vessels, except cargo tanks, twice every 5 years. No more than 3 years may elapse between any check and its immediate predecessor.

(3) Cargo tank safety or relief valves must be checked at the interval required in subchapter D (Tank Vessels) or subchapter I (Cargo and Miscellaneous Vessels) of this chapter.


Subpart 61.15—Periodic Tests of Piping Systems

§ 61.15–5 Steam piping.

(a) Main steam piping shall be subjected to a hydrostatic test equal to 1¼ times the maximum allowable working pressure at the same periods prescribed for boilers in § 61.05–10. The hydrostatic test shall be applied from the boiler drum to the throttle valve. If the covering of the piping is not removed, the test pressure shall be maintained on the piping for a period of ten minutes. If any evidence of moisture or leakage is detected, the covering shall be removed and the piping thoroughly examined.

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