

Kansas Administrative Regulations

Department of Labor

Article 50.—General Requirements for All Boilers

49-50-6. Hydrostatic pressure tests and inspection.

(a) When there is doubt as to the extent of a defect or deterioration found in a pressure vessel or boiler, a pressure test may be required by the inspector. A pressure test shall not be required as part of a normal periodic inspection. A pressure test shall be required when either of the following conditions is met:

- (1) Forms of deterioration are found that could affect the safety of a vessel.
- (2) Major repairs have been completed.

(b) Pressure test considerations shall be as follows:

(1) To determine tightness, the test pressure shall not be required to be greater than the set pressure of the safety valve having the lowest setting.

(2) The pressure test shall not exceed 1½ times the maximum allowable working pressure, as adjusted for temperature. When the original test pressure included consideration of corrosion allowance, the test pressure may be further adjusted based on the remaining corrosion allowance and other requirements set forth in part RC of the national board inspection code, which is adopted by reference in K.A.R. 49-45-20.

(3) If the test pressure will exceed the set pressure of the safety valve having the lowest setting, the safety relief valve or valves shall be removed during the test or each disc held down by means of a test clamp and not by applying additional load to the valve spring by turning the compression screw.

(4) The temperature of the water used to apply a hydrostatic test shall not be less than 60° F, unless the owner provides information on the toughness characteristics of the vessel material to indicate the acceptability of a lower test temperature. The metal temperature shall not exceed 120° F, unless the owner specifies the requirements for a higher test temperature that are acceptable to the inspector.

(5) When contamination of the vessel contents by any other medium is prohibited or when a hydrostatic test is not possible, other testing media may be used if the

precautionary requirements of the applicable sections of the ASME code and the national board inspection code (NBIC), as adopted in these regulations, are followed. In these cases, there shall be agreement as to the testing procedure among the owner, repair organization, the inspector, and the chief inspector.

(c) Each boiler log, record of maintenance, corrosion rate record, and any other examination results shall be reviewed by the inspector. The owner or user shall consult with the inspector regarding repairs, if any, made since the last internal inspection. The records of the repairs shall be reviewed for compliance with applicable requirements.

(d) Any defects or deficiencies in condition, maintenance practices, or misuse of the boiler shall be identified and documented by the inspector and owner, and, if necessary, corrective action shall be taken by the owner. All repairs shall be carried out in accordance with the requirements of part RC of the national board inspection code.

(Authorized by K.S.A. 44-916; implementing K.S.A. 44-916 and 44-923; effective May 1, 1987; amended April 28, 2000; amended Nov. 2, 2007.)

***** Authenticated Kansas Administrative Regulation *****