Case 2870-1
Use of Stainless Steel Plate and Tube for Hot Water Heating Boilers
Section IV

Inquiry: Under what conditions may stainless steel tube and stainless steel plate listed in Table HF-300.1 with a thickness less than that permitted in HF-204.3 and HF-301.1, respectively, be used for the construction of Section IV heating boilers?

Reply: It is the opinion of the Committee that stainless steel tube and stainless steel plate listed in Table HF-300.1 with a thickness less than that permitted in HF-204.3 and HF-301.1, respectively, may be used for the construction of Section IV heating boilers, provided the following requirements are met:

(a) Minimum wall thickness of tube shall not be less than 0.020 in. (0.5 mm) with an outside diameter not exceeding 0.98 in. (24.9 mm).
(b) Minimum thickness of plate shall not be less than 0.039 in. (1.0 mm).
(c) Maximum allowable working pressure shall not exceed 45 psi (310 kPa).
(d) The design shall be validated by a proof test in accordance with the requirements of HG-500.
(e) All other applicable parts of Section IV shall apply.
(f) This Case number shall be shown on the Manufacturer’s Data Report.

The Committee’s function is to establish rules of safety, relating only to pressure integrity, governing the construction of boilers, pressure vessels, transport tanks and nuclear components, and in-service inspection for pressure integrity of nuclear components and transport tanks, and to interpret these rules when questions arise regarding their intent. This Code does not address other safety issues relating to the construction of boilers, pressure vessels, transport tanks and nuclear components, and the in-service inspection of nuclear components and transport tanks. The user of the Code should refer to other pertinent codes, standards, laws, regulations or other relevant documents.