The errata corrections listed below apply to ASME BPVC.IV-2021. These corrections will be incorporated into the 2023 edition of BPVC Section IV.

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THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
Two Park Avenue, New York, NY 10016-5990

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HG-330.6 Modular Boilers. DELETED
HG-530.3 Modular Boilers. Requirements for marking are shown in Article 8.
HG-607 Modular Steam Heating Boilers. DELETED
HG-615 Modular Hot Water Heating Boilers and Hot Water Supply Boilers. DELETED
HG-710.4 Modular Boilers. DELETED
HG-716 Modular Boilers. DELETED

ARTICLE 8
MODULAR BOILERS

HG-800 INSPECTION AND ACCESS OPENINGS
Modular boilers that are installed side by side, front to back, or by stacking in accordance with the Manufacturer's recommendations shall have their inspection openings located so that they are accessible.

HG-801 Marking of Boilers
Modular boilers may be marked and certified as follows:

(a) Individual boilers are marked and certified as complete boilers as follows:
   (1) Individual boilers that are not constructed primarily of cast iron or cast aluminum shall have their own markings applied directly on the boilers per the requirements of HG-530.1. Each individual boiler shall have its own Manufacturer's Data Report.
   (2) Individual boilers constructed primarily of cast iron or cast aluminum shall have their own markings applied per the requirements of HG-530.2.
   (3) The common supply and return headers are exempt from Section IV requirements.

(b) Multiple individual unmarked modules are combined together and certified as a complete boiler as follows:
   (1) The assembled boiler shall have a single nameplate and Manufacturer's Data Report.
   (2) The aggregate heating surface of all the modules and the combined minimum relief valve capacity shall be marked on the nameplate.
   (3) The supply and return headers shall be constructed in accordance with Section IV and recorded on the Manufacturer's Data Report.

HG-802 Instruments, Fittings, and Controls

HG-802.1 Modular Steam Heating Boilers.

(a) Each individual boiler of a modular steam heating boiler shall be equipped with
   (1) a steam gage (see HG-602)
   (2) a water gage glass (see HG-603)
   (3) a pressure control that will cut off the fuel supply when the pressure reaches an operating limit, which shall be less than the maximum allowable pressure [see HG-605(b)]
   (4) a low-water cutoff (see HG-606)

(b) The assembled modular steam boiler shall also be equipped with a safety limit control that will cut off the fuel supply to prevent steam pressure from exceeding the 15-psi (100-kPa) maximum allowable working pressure of the boiler. The control shall be constructed to prevent a pressure setting above 15 psi (100 kPa) [see HG-605(a)].

(c) When the assembled steam heating boiler is certified as a single boiler in accordance with HG-801(b), the boiler assembly shall be equipped with
   (1) a steam gage, which may be located on the supply header (see HG-602).
   (2) a water gage glass (see HG-603).
   (3) a pressure control that will cut off the fuel supply when the pressure reaches an operating limit, which shall be less than the maximum allowable pressure [see HG-605(b)].
   (4) a low-water cutoff (see HG-606).
   (5) a safety limit control that will cut off the fuel supply to prevent steam pressure from exceeding the 15-psi (100-kPa) maximum allowable working pressure of the boiler. The control shall be constructed to prevent a pressure setting above 15 psi (100 kPa) [see HG-605(a)].
HG-802.2 Modular Hot Water Heating and Hot Water Supply Boilers.

(a) Each individual boiler of a modular hot water heating or hot water supply boiler shall be equipped with
   (1) a pressure or altitude gage (see HG-611)
   (2) a thermometer (see HG-612)
   (3) a temperature control that will cut off the fuel supply when the temperature reaches an operating limit, which
       shall be less than the maximum allowable temperature [see HG-613(b)]

(b) The assembled modular hot water heating or hot water supply boiler shall also be equipped with
   (1) a safety limit control that will cut off the fuel supply to prevent the water temperature from exceeding the
       maximum allowable temperature at the boiler outlet. The control shall be constructed to prevent a temperature setting
       above the maximum. This control shall be located within 3 ft (1 m) of the fitting connecting the last boiler to the supply
       piping [see HG-613(a)].
   (2) a low-water fuel cutoff (see HG-614).

(c) When the assembled hot water heating or hot water supply boiler is certified as a single boiler in accordance with
    HG-801(b), the boiler assembly shall be equipped with
    (1) a pressure or altitude gage, which may be located on the supply header (see HG-611).
    (2) a thermometer, which may be located in the supply header (see HG-612).
    (3) a temperature control that will cut off the fuel supply when the temperature reaches an operating limit, which
        shall be less than the maximum allowable temperature [see HG-613(b)].
    (4) a safety limit control that will cut off the fuel supply to prevent the water temperature from exceeding the
        maximum allowable temperature at the boiler outlet. The control shall be constructed to prevent a temperature setting
        above the maximum. This control shall be located within 3 ft (1 m) of the fitting connecting the last module to the supply
        piping [see HG-613(a)].
    (5) a low-water fuel cutoff (see HG-614).

HG-803 Installation Requirements

HG-803.1 Modular Boilers.

(a) The individual boilers shall be manifolled together without intervening valves between modules and shall be
    provided with a single set of stop valves on the common supply and return headers in accordance with HG-710.

(b) Flow control valves and circulating pumps may be located in the return line of each boiler.

(c) Modular boilers that are installed side by side, front to back, or by stacking in accordance with the Manufacturer’s
    recommendations shall have their nameplate marking located to provide access for inspection in the assembled position.

(d) When the assembled boiler is certified as a single boiler in accordance with HG-801(b), the boiler manifold assembly
    shall be provided with stop valves as follows:
    (1) Steam Boiler. When a stop valve is used in the supply pipe connection, a stop valve shall be used in the return pipe
        connection.
    (2) Water Boiler

      (-a) Stop valves shall be located at accessible points in the supply and return pipe connections as near the boiler
          nozzle as is convenient and practicable to permit draining the boiler without emptying the system.

      (-b) When the boiler is located above the system and can be drained without draining the system, stop valves may
          be eliminated.

HG-803.2 Modular Steam Heating Boilers.

(a) Each individual boiler of a modular steam heating boiler shall be equipped with
    (1) a safety valve (see HG-701)
    (2) a blowoff valve [see HG-715(a)]
    (3) a drain valve [see HG-715(c)]

(b) The assembled modular steam heating boiler shall also be equipped with
    (1) a feedwater connection [see HG-705(a)]
    (2) a return pipe connection (see HG-703.2)

(c) When the assembled steam heating boiler is certified as a single boiler in accordance with HG-801(b), it shall be
    equipped with
    (1) a safety valve, which may be located on the supply header (see HG-701)
    (2) a blowoff valve [see HG-715(a)]
(3) a drain valve [see HG-715(c)]
(4) a feedwater connection [see HG-705(a)]
(5) a return pipe connection (see HG-703.2)

HG-803.3 Modular Hot Water Heating and Hot Water Supply Boilers.

(a) Each boiler of a modular hot water heating or hot water supply boiler shall be equipped with
(1) one or more safety relief valves (see HG-701)
(2) a drain valve [see HG-715(c)]
(b) The assembled modular hot water heating or hot water supply boiler shall also be equipped with
(1) a makeup water connection [see HG-705(b)]
(2) a provision for thermal expansion (see HG-709)
(c) When the assembled hot water heating or hot water supply boiler is certified as a single boiler in accordance with HG-801(b), it shall be equipped with
(1) one or more safety relief valves, which may be located on the supply header (see HG-701)
(2) a drain valve [see HG-715(c)]
(3) a makeup water connection [see HG-705(b)]
(4) a provision for thermal expansion (see HG-709)

HLW-801.3 Requirements for Common Connection for Two or More Valves.

(a) When a water heater is fitted with two or more pressure relief valves on one connection, this connection shall have a cross-sectional area not less than the combined areas of the inlet connections of all the pressure relief valves with which it connects.
(b) A Y-base shall not be used with temperature and pressure relief valves.
(c) When a Y-base is used, the inlet area shall be not less than the combined outlet areas. When the size of the water heater requires a pressure relief valve larger than 4 1/2 in. (114 mm) in diameter, two or more valves having the required combined capacity shall be used. When two or more valves are used on a water heater, they may be single, directly attached, or mounted on a Y-base.