No Manufacturer or assembler may accept Code responsibility for work that falls within the scope of the Code, that is performed by workmen employed by any other organization, except through proper Code certification. The responsibilities set forth herein relate only to Code compliance and are not to be construed as involving contractual relations or legal liabilities.

NOTES:

(1) Boiler Manufacturer or Manufacturer as used in PG-104 or other paragraphs referenced to this Note may also be an Engineering-Contractor organization with or without fabricating facilities, but having the capability of providing a design specification that establishes the pressure and temperature conditions for each component of a complete boiler unit and of assembling the fabricated parts in the field with authorization from the Society to use the Certification Mark with the "S" Designator in accordance with the Code provisions in PG-105.3.

(2) When boiler external piping within the scope of Section I is manufactured, the boiler Manufacturer shall furnish certification of such piping. The following reports shall be furnished by the Manufacturer, in accordance with PG-104.2, for each test report as required by PG-104.2.1, PG-104.2.2, and PG-104.2.3.

(a) design and fabricate welded boiler external piping. Such piping shall be stamped or marked and recorded as required by PG-109.

(b) fabricate other parts of boilers, such as superheater, waterwall, or economizer headers, where the complete design requirements are provided by others. Such parts shall be stamped or marked as required by PG-106.8 and documented on a Form P-4, Manufacturer's Partial Data Report, as called for in PG-112.2.4.

PG-105.7 "PP" Designator. A Manufacturer in possession of a valid Certificate of Authorization to use the Certification Mark with the "PP" Designator may

(a) design and fabricate welded boiler external piping. Such piping shall be stamped or marked and recorded as required by PG-109.

(b) fabricate other parts of boilers, such as superheater, waterwall, or economizer headers, where the complete design requirements are provided by others. Such parts shall be stamped or marked as required by PG-106.8 and documented on a Form P-4, Manufacturer's Partial Data Report, as called for in PG-112.2.4.

PG-105.8 "PRT" — fabricated parts Designator

Each boiler, superheater, waterwall, economizer, or boiler part to which a Certification Mark is to be applied shall be fabricated by a Manufacturer who is in possession of a Certificate of Authorization to use the Certification Mark with appropriate Designator.

PG-105.2 Application for Certificate of Authorization. Any organization desiring a Certificate of Authorization shall apply to the ASME in accordance with the certification process of ASME CA-1. Authorization to use Certification Marks may be granted, renewed, suspended, or withdrawn as specified in ASME CA-1.

PG-105.3 Designated Oversight. The Manufacturer or Assembler shall comply with the requirements of ASME CA-1 for Designated Oversight by use of an Authorized Inspection Agency or Certified Individual, as applicable.

PG-105.4 Quality Control System. Any Manufacturer or Assembler holding or applying for a Certificate of Authorization shall demonstrate a quality program that meets the requirements of ASME CA-1 and establishes that all Code requirements including material, design, fabrication, examination (by the Manufacturer), and inspection for boilers and boiler parts (by the Authorized Inspector) will be met. The quality control system shall be in accordance with the requirements of A-301 and A-302.

Certificates of Authorization will be endorsed to indicate the scope of activity authorized.

The Manufacturer may at any time make changes in the quality program concerning the methods of achieving results subject to acceptance by the Authorized Inspector. For manufacturers or assemblers of pressure relief valves bearing the "V" Designator, such acceptance shall be by the ASME designated.

PG-105.5 Code Construction Before Receipt of Certificate of Authorization. When used to demonstrate his quality control system, a Manufacturer may start fabricating Code items before receipt of a Certificate of Authorization to use a Certification Mark under the conditions specified in ASME CA-1.

PG-105.6 Regulations on Use of Certification Marks. ASME may at any time revise the requirements concerning the issuance and use of Certification Marks as it deems appropriate, and all such regulations shall become binding upon the holders of any valid Certificates of Authorization.

PG-106 STAMPING OF BOILERS

PG-106.1 The Manufacturer shall stamp each boiler, superheater, waterwall, or economizer constructed in compliance with this Section in the presence of the Authorized Inspector, after the hydrostatic test, in the shop of the Manufacturer, except that in cases where boilers, superheaters, waterwalls, or economizers are not
PG-107.2 Jointly by the boiler Manufacturer and the assembler responsible for performing the hydrostatic test of the completed boiler, signing of the Certificate of Field Assembly Compliance on the Master Data Report, and for providing the supplemental stamping in accordance with PG-108.2, provided

PG-107.2.1 Assembly work is performed by workmen employed by the assembler.

PG-107.2.2 The assembler uses his own properly qualified welding procedures, welders and/or welding operators.

PG-107.2.3 Any work performed in the field by others, such as erection of boiler external piping or partial assembly of the boiler proper, that falls within the scope of the Code, is handled by proper Code certification.

(a) Code certification of boiler external piping installed by an organization other than the boiler Manufacturer or assembler shall be provided in accordance with PG-109.

(b) Code certification of work performed by an organization responsible for partial field assembly of a boiler shall be provided as follows:

(1) The work performed shall be described on a Form P-3. The form shall be marked as not being the Master Data Report. Lines 1 through 5 of the form shall be completed by the assembler responsible for partial field assembly of the boiler, except that the words “partial field assembly” are to be inserted on Line 4 instead of the unit identification and ID numbers. The portion of partial field assembly completed by the assembler and the location of the stamping required by (3) shall be described on Line 15, Remarks.

(2) The Certificate of Field Assembly Compliance on the form shall be completed and signed by the assembler. The Certificate of Field Assembly Inspection on the form shall be completed and signed by the assembler’s Authorized Inspector.

(3) When authorized by the Authorized Inspector, the assembler’s Certification Mark together with the assembler’s name, or an acceptable abbreviation, and the words “partial field assembly” shall be stamped by the assembler on a major pressure part assembled as part of the work covered by the Code certification. If limited space prevents this, the stamping shall be applied near the Manufacturer’s stamping required by PG-106.

PG-107.2.4 The completed boiler unit is properly stamped with the Manufacturer’s Certification Mark with the “S” Designator and the assembler’s Certification Mark in accordance with PG-108.2.

PG-107.2.5 Data Reports are prepared in accordance with PG-113.2 and such Data Reports clearly define the work completed by the Manufacturer and the assembler.

PG-108 STAMPING FOR FIELD-ASSEMBLED BOILERS

Field assembly of a completed boiler unit may be made by anyone possessing a valid Certificate of Authorization for a power boiler stamp or an assembly stamp provided responsibility is assumed in accordance with the requirements of PG-107. Stamping for field assembled boiler units shall be completed as specified in PG-108.1 and PG-108.2.

PG-108.1 When responsibility for the completed boiler unit is assumed under PG-107.1, no additional stamping beyond that required by PG-106 is necessary.

PG-108.2 When responsibility for the completed boiler unit is assumed under PG-107.2, the Manufacturer’s [see PG-104.1, Note (1)] stamping shall be supplemented with the assembler’s stamp, together with the name of the assembler or an acceptable abbreviation. This supplementary stamping shall be applied on the boiler on the boiler or the equipment covered by for by PG-106 when authorized by the field Inspector after the required inspections and the hydrostatic test of the completed boiler unit. This supplementary stamping shall also be reproduced on a nameplate as required by PG-106.6 or PG-106.7 and attached in a location immediately adjacent to the master stamping plate, as required in PG-111.13.

PG-109 STAMPING OF PRESSURE PIPING

PG-109.1 Boiler external piping, as defined in the Preamble, may be fabricated by a manufacturer other than the Manufacturer of the boiler, provided that the manufacturer has been issued a Certificate of Authorization to use the Certification Mark with the “S” or “PP” Designator. Boiler external piping may be installed by welding by a manufacturer or contractor other than the Manufacturer of the boiler, provided such an organization has been issued a Certificate of Authorization to use the Certification Mark with the “S,” “PP,” or “A” Designator. When boiler external piping is installed by welding, the welding, including the qualification of welding procedures, welders, and welding operators, shall be done in accordance with the applicable rules of ASME B31.1. The welding shall be inspected by an Authorized Inspector at such stages of the work as he may elect. The organization which fabricate or install such piping shall furnish proper code certification (PG-104.2) for it including a Manufacturer’s Data Report Form P-4A as required by PG-112.2.5 and PG-112.3.

PG-109.2 Welded boiler external piping included within the scope of this Code, over NPS 2 (DN 50), shall be stamped with a Certification Mark, together with the manufacturer’s or contractor’s name and serial number. Such stamping shall be on the pipe, valve, or fitting adjacent to the welded joint farthest from the boiler. For piping operating at temperatures above 800°F (425°C) the Certification Mark may be stamped on a nameplate that

INSERT "A"
The Organizations which fabricate or install such piping shall furnish proper code certification (PG-104.2).

**PG-109.1.1** When contracted for by the boiler Manufacturer, that piping shall be documented on a Form P-4, Manufacturer's Partial Data Report, in accordance with PG-112.2.4.

**PG-109.1.2** When contracted for by other than the boiler Manufacturer, that piping shall be documented on a Form P-4A, Manufacturer's Data Report for Fabricated Piping, in accordance with PG-112.2.5.
is irremovably attached by welding, provided such welding is postweld heat treated, or on a circular metal band at least \( \frac{1}{4} \) in. (6 mm) thick. This band around the pipe shall be secured in such a manner as to prevent it from slipping off during handling and installation.

Welded piping NPS 2 (DN 50) or less included within the scope of this Code shall be marked with an identification acceptable to the Inspector and traceable to the required Data Report. Such marking shall be of a type that will remain visible until the piping has been installed.

**PG-109.3** A manufacturer in possession of the pressure piping Certification Mark may

(a) design and fabricate welded piping. Such fabrications shall be stamped and reported on a Form P-4A, Manufacturer’s Data Report for Fabricated Piping, as called for in PG-112.2.5.

(b) fabricate other parts of boilers, such as superheater, waterwall, or economizer headers, where complete design requirements are provided by others. Such parts shall be stamped or marked as required by PG-106.8 and reported on a Form P-4, Manufacturer’s Partial Data Report, as called for in PG-112.2.4.

Mechanically assembled boiler external piping which contains no pressure boundary welds does not require stamping, and as such may be assembled by a nonstamp holder. Note that the responsibility for documentation and hydrostatic testing of a mechanically assembled boiler external piping must be assumed by a holder of a valid Certification Mark with the “S,” “A,” or “PP” Designator (see PG-112.2.5).

**PG-110 STAMPING OF BOILER PRESSURE RELIEF VALVES**

Each pressure relief valve shall be plainly marked with the required data by the Manufacturer or Assembler (see PG-73.4.4) in a legible and indelible ink on the valve or on a valve. The marking shall include the following:

(a) the name (or an acceptable abbreviation) of the Manufacturer and Assembler, as applicable

(b) Manufacturer’s design or type number

(c) NPS (DN) (the nominal pipe size of the valve inlet)

(d) set pressure _____ psi (MPa), and if applicable per PG-73.5.2, cold differential test pressure _____ psi (MPa)

(e) Capacity

(1) capacity _____ lb/hr (kg/h) (for saturated steam service in accordance with PG-69.2) or

(2) capacity _____ lb/hr (kg/h) at _____ °F (°C) (for power-actuated pressure-relieving valves in accordance with PG-69.4, or for pressure relief valves for superheated steam service in accordance with PG-68.7 or supercritical steam service in accordance with PG-67.5) or

(3) capacity _____ gal/min (l/min) at 70°F (20°C) at an overpressure of 10% or 3 psi (20 kPa), whichever is greater, for valves certified on water or

(4) capacity _____ lb/hr (kg/h) at _____ °F (°C) _____ fluid identification) (for organic fluid vaporizers in accordance with PVG-12.4)

(f) year built, or alternatively, a coding may be marked on the valve such that the valve Manufacturer or Assembler can identify the year the valve was assembled and tested

(g) Certification Mark as shown in Figure PG-105.1 with a “V” Designator placed under the Certification Mark. A marking method other than the stamp issued by the Society may be used, provided that it is acceptable to the ASME Designated Organization.

(h) The pilot of a pilot-operated pressure relief valve shall be plainly marked by the Manufacturer or Assembler showing the name of the Manufacturer, the Manufacturer’s design or type number, the set pressure in pounds per square inch (MPa), and the year built, or alternatively, a coding that the Manufacturer can use to identify the year built.

**PG-111 LOCATION OF STAMPINGS**

The location of the required stampings shall be as listed below. These stampings shall be left uncovered or an easily removable marked cover may be provided over the stamping when a boiler is covered with insulation, or jacketed. No piping, boiler appliance, or other obstructions shall interfere with reading of the stamping.

**PG-111.1** Horizontal-return tubular boilers — on the front head above the central rows of tubes.

**PG-111.2** Firetube boilers — on the horizontal jacket end above the manhole opening. Or boilers — on the furnace end above the handhole. Or traction boilers of the locomotive type — on the left wrapper sheet forward of the driving wheel.

**PG-111.4** Vertical firetube and vertical submerged tube boilers — on the shell above the firedoor and handhole opening.

**PG-111.5** Watertube Boilers.

**PG-111.5.1** Drum type — on a head of the steam outlet drum near and above the manhole.

**PG-111.5.2** Forced-flow steam generator with no fixed steam and waterline — the master stamping (PG-106.3) shall be located on a major pressure part, located near the main operating floor where readily visible. The Data Report Form shall record the location of the master stamping.
PG-112.2.3 Form P-3A, Engineering-Contractor Data Report for a Complete Boiler Unit, shall be used when such an organization assumes the Manufacturer’s Code responsibility as provided for by PG-104.1, Note (1). This form shall be used to certify Code responsibility for the design specification of the complete boiler unit, of which the components are individually certified by their individual manufacturers in accordance with the Code rules. This form also provides for field assembly certification.

Form P-3A shall not be used by a Manufacturer to provide Code certification for only a portion of the complete boiler unit.

PG-112.2.4 See below.

(a) Form P-4, Manufacturer’s Partial Data Report, shall be used to record parts requiring inspection and stamping under this Section which are furnished by other than the Manufacturer responsible for the completed boiler, superheater, waterwall, or economizer.

(b) Except as provided in (b), Form P-4 shall be used only to provide supporting data for the information given on the Master Data Report (see PG-113) or on a Form P-3 that is used to record a superheater, waterwall, or economizer.

(c) Form P-4 shall be used to record boiler parts requiring inspection and stamping under this Section that are furnished by other than the Manufacturer responsible for the completed boiler.

(1) Form P-4 shall be used only to provide supporting data for the information given on the Master Data Report for the completed boiler.

(2) When used to record parts furnished to the user of an existing boiler as replacement or repair parts, Form P-4 is sufficient and need not support a Master Data Report Form. A copy of the parts Manufacturer’s Form P-4 shall be forwarded to the purchaser.

(3) The parts Manufacturer shall indicate under “Remarks” the extent to which he has performed the design functions. When the parts Manufacturer performed only a portion of the design, he shall state which portion of the design he has performed.

PG-112.2.5 Form P-4A, Manufacturer’s Data Report for Fabricated Piping, shall be used to record all shop or field-welded boiler external piping that falls within the scope of this Section but is not furnished by the boiler Manufacturer. Form P-4B, Manufacturer’s Data Report for Field-Installed Mechanically Assembled Piping, shall be used to record all field-installed mechanically assembled boiler external piping. Form P-4B shall be used only for piping that contains no joints brazed or welded by the field installer. The organization certifying Form P-4A or P-4B retains the responsibility for the Code design.

PG-112.2.6 Form P-5, Summary Data Report for Process Steam Generators, may be used by the Manufacturer [see PG-104.1, Note (1)] to record all items of field-assembled process steam generators of the waste heat or heat recovery type, comprising one or more drums and one or more arrays of heat exchange surface designed for different pressure levels. All such component items shall be constructed to the applicable rules of the Code and shall be certified by individual Data Report Forms executed by the component manufacturer and the Authorized Inspector. When used, the Summary Data Report Form P-5 shall list all the properly executed data report forms for components comprising the complete process steam generator and shall be attached to the Manufacturer’s Data Report.

PG-112.2.7 When using a print version of a Data Report Form, Form P-6, Manufacturer’s Data Report Supplementary Sheet, shall be used to record additional data where space was insufficient on a Data Report Form. This Manufacturer’s Data Report Supplementary Sheet will be attached to the Manufacturer’s Data Report Form where used. When using an electronic version of a Data Report Form, it may be expanded to include all additional data, or Form P-6 may be used in accordance with PG-112.2.5.2.

PG-112.2.8 Form P-7, Manufacturer’s Data Report for Pressure Relief Valves, shall be used to record required pressure relief valves. Form P-7 shall be used as supporting data for Form P-2, P-3, P-3A, or PL-1. Form P-7 is not required for boilers certified on Form P-2A, or for boilers with a single pressure relief valve when the pressure relief valve size, set pressure, and capacity [lb/hr (kg/h)] are included in the remarks section of Form P-2 or P-3.

PG-112.2.9 See below.

(a) Form PL-1, Manufacturer’s Data Report for Locomotive Boilers, shall be used to record all of the items comprising a complete locomotive boiler. The box at the top of the form shall be checked to indicate it is a Master Data Report.

(b) When Form PL-1 is used as a Partial Data Report, it shall be used to record locomotive boiler parts requiring inspection and stamping under this Section that are furnished by other than the Manufacturer responsible for the completed locomotive boiler.

(1) Form PL-1, when checked as a Partial Data Report, shall be used only to provide supporting data for the information given on the Master Data Report Form PL-1 for the completed locomotive boiler.

(2) When used to record parts furnished to the user of an existing boiler as replacement or repair parts, Form PL-1, Partial Data Report, is sufficient and need not support a Master Data Report Form PL-1. A copy of the parts Manufacturer’s Form PL-1 shall be forwarded to the purchaser.

(3) The parts Manufacturer shall indicate under “Remarks” the extent to which he has performed the design functions. When the parts Manufacturer performed only a portion of the design, he shall state which portion of the design he has performed.
(a) Form P-4, Manufacturer’s Partial Data Report, shall be used to

(1) record boiler parts requiring inspection and stamping under this Section which are furnished by other than the
Manufacturer responsible for the completed boiler, super heater, water wall, or economizer

(2) record boiler external piping when required by PG-109.1

Note to Committee:
No colon is used at the end of (a) based on §SG2-2.2.2(a)(2) of the Style Guide.
Paragraphs (1) and (2) start with lower case and do not end with punctuation based on §SG2-2.2.2(b)(1)(-a).