

ASME CODE CHANGES

2015 EDITION

SECTION I

- 2015 Edition published July 1, 2015, mandatory January 1, 2016.
- No more addenda. Publish every 2 years.
- Table A-360 : All ASME standards reference “current year of publication”.
- New ASME CA-1 standard for obtaining ASME shop certification.

SECTION I

- Preamble Note 6 – “Solar receiver steam generator – a boiler system in which water is converted to steam using solar energy as the principle source of thermal energy. The solar energy is typically concentrated onto the solar receiver through the use of an array of mirrors that focus solar radiation on the heat transfer surface.”

SECTION I

Parts fabrication certificate program:

- New “PRT” fabricated parts designator added for ASME Certification Mark
- New paragraph in Table A-370:
 - “Certification Mark with ‘PRT’ Designator”
 - See PG 106.8.3 for details.

SECTION I

- Locomotive boilers:

Part PL – Requirements for Locomotive Boilers

- New Part PL added on requirements for locomotive boilers
- PL-1 – “The rules in this Part are applicable to steam locomotive boilers and their parts and appurtenances. These rules shall be used in conjunction with the general requirements in Part PG, and the specific requirements in the applicable Parts of this Section that apply to the method of fabrication used.”

SECTION IV

- Additional requirements for multiple page data reports were added to Mandatory Appendix 4.
- Welding on cast iron is not permissible per HC-213.
- Manufacturer's with multiple locations can ship parts between locations per HG-520.2(c).
- Certified Individuals (CI's) qualified per QAI-1.

SECTION V

- Digital radiography has a pixel tolerance of 2%.
- Liquid penetrant has a maximum dwell time of 2 hours.

SECTION VIII

- If a manufacturer is also the User, then the User is required place the word “User” above the ASME Code stamp.
- Not positive about the RT, W, etc. stamping.
- See next slide.

SECTION VIII

(13)

**Figure UG-118
Form of Stamping**

 U or UM	Certified by _____ (Name of Manufacturer) (Pressure) ____ at (temperature) ____ <small>Max. allowable working pressure (internal)</small> (Pressure) ____ at (temperature) ____ <small>Max. allowable working pressure (external) (if specified, see Note (1))</small> (Temperature) ____ at (pressure) ____ <small>Min. design metal temperature</small> _____ <small>Manufacturer's serial number</small> _____ <small>Year built</small>
W (if arc or gas welded) RT (if radiographed) HT (if postweld heat treated)	

GENERAL NOTE: Information within parentheses is not part of the required marking. Phrases identifying data may be abbreviated; minimum abbreviations shall be MAWP, MAEWP, MDMT, S/N, FV, and year, respectively. See L-11 for sample Nameplate markings.

NOTES:

(1) The maximum allowable external working pressure is required only when specified as a design condition.

(2) For cases where the MAWP (internal) and MAWP (external) values have the same designated coincident temperature, the values may be combined on a single line as follows:

P_{int}/FV (psi) at Temp ($^{\circ}F$)

(1) The required markings on a nameplate shall be in characters not less than $\frac{5}{32}$ in. (4 mm) high, except that characters for pressure relief device markings may be

Insert above Certification Mark:

USER (when inspected by a user's inspector as provided in UG-91)

Insert under Designator:

[see paragraphs UG-116(a)(1)(a) and (b)]

Replace:

Letters denoting construction type
 [see paragraphs UG-116(b)(1), (c), (e), (f), (h)(1)(a)]

SECTION VIII

Item Number 07-2041:

Section VIII, Division 1; U-1(g)(1), UG-116, UG-120

- New paragraph UG-116 (f) – “An unfired steam boiler, referenced in U-1 (g)(1), shall have its maximum designed steaming capacity recorded in the ‘Remarks’ section of the data report.”

UG-116 REQUIRED MARKING

(10)
(a)

(a) Each pressure vessel shall be marked with the following:

(1)(a) the official Certification Mark with the U Designator shown in Fig. UG-116 sketch (a) on vessels inspected in accordance with the requirements in UG-90 through UG-97 (when inspected by a user’s Inspector as provided in UG-91, the word USER shall be marked above the Certification Mark); or

(b) the official Certification Mark with the UM Designator shown in Fig. UG-116 sketch (b) on vessels constructed in accordance with the provisions in U-1(j).

(2) name of the Manufacturer of the pressure vessel preceded by the words “certified by”;

(3) maximum allowable working pressure^{37,38} _____ at temperature _____;

(4) maximum allowable external working pressure³⁹ _____ at temperature _____;

(5) minimum design metal temperature _____ at maximum allowable working pressure³⁷ _____;

(6) Manufacturer’s serial number;

(7) year built.

(b)(1) The type of construction used for the vessel shall be indicated directly under the Certification Mark by

³⁷ When a pressure and temperature working pressure was added as required.

(8) The maximum designed steaming capacity for vessels in accordance with U-1(g)(1).

at more than one maximum allowable temperature may be

SECTION IX

- Modified paragraph QG-106.1 (a) - **“The personnel who produce test joints for procedure qualification shall be under the full supervision and control of the qualifying organization during the production of these test joints.”**
- Modified paragraph QG-106.2 (a) – **“The personnel who produce test joints for performance qualification shall be tested under the full supervision and control of the qualifying organization.”**

SECTION V IX-QW-423.1

- **Base Metals for Welder Qualification**
- Any unassigned metal to the same unassigned metal
- Any unassigned metal to any P-Number metal
- Any unassigned metal to any other unassigned metal
- **Qualified Production Base Metals**
- The unassigned metal to itself
- The unassigned metal to any metal assigned to the same P-Number as the qualified metal
- The first unassigned metal to the second unassigned metal

NBIC CHANGES

2015 EDITION

NBIC CHANGES

Several general revisions were made to the NBIC

- Tables and figures – consistency, resolution, numbering, placement
- Complete revision of Index in NBIC Parts 1, 2, and 3
- Administrative requirements removed from Part 3 and posted on National Board web site
- Roman numeral pages formatting updated
 - Table of contents moved to beginning
- Interpretation index formatting improved – see National Board web site
- Future – color pictures and figures no longer used

NBIC CHANGES

2013 Interpretations

Interpretation	Edition	Part	Section	Subject
13-04	2013	3	3.3.2 e)	Seal Welding of Inspection Opening Covers
13-03	2011	3	3.3.2 d) 1)	Standard Threaded Fitting Welded through ASME VIII, Div. 1 Vessel
13-02	2011	3	5.7.5	Stamping Requirements for Alterations
13-01	2013	3	1.8.5 q)	Personnel Qualified IAW ANSI/ASME N45.2.23

2011 Interpretations

Interpretation	Edition	Part	Section	Subject
11-06	2011	3	3.2.5	Calculations / Start of Work
11-05	2011	2	5.2.2 – 5.2.3	Replacement of Stamped Data on Corrugator Rolls
11-04	2011	3	1.7	Application of "VR" Stamp
11-03	2011	2	2.5.8	Test Frequencies
11-02	2011	3	4.4.2 a)	Liquid Pressure Test Requirements
11-01	2011	3	3.3.2	Routine Repair Considerations

NBIC CHANGES

- NBIC Part 2, Supplement 9 details the requirements and guidelines to be followed when a change of service or service type is made to a pressure retaining item.

NBIC CHANGES

NBIC Part 2, 4.4.8.7 – Added requirements for leaving widely scattered corrosion pits in a pressure retaining item

- “Widely scattered corrosion pits may be left in the pressure retaining item in accordance with the following requirements:”
 - “Their depth is not more than one-half the required thickness of the pressure-retaining item wall (exclusive of corrosion allowance);”
 - “The total area of the pits does not exceed 7 in.² (4500 mm²) within any 50 in.² (32000 mm²); and”
 - “The sum of their dimension (depth and width) along any straight line within this 50 in.² (32000 mm²) area does not exceed 2 in. (50 mm).”

NBIC CHANGES

- Part 2 Changes:
- Changes made to the various R-Forms.
- NB-136 Nameplate Replacement form changed.
- Various changes to historical boiler supplement, including bulged stay sheet.
- Added details to Supplement 7 for change of LPG service from aboveground to below.
- Supplement 10 Inspection of High Pressure Composite Vessels.

NBIC CHANGES

- Part 3 Changes:
- New “NR” Quality Program requirements.
- Temper Bead welding methods for steam above 900°F.
- New Welding Method 6 for Grade 91 steel.
- Details for fire-tube plugging.
- Unidentified materials require hardness testing & chemical analysis.