

PRESSURE POINTS

The Official Newsletter of HSB  Global Standards

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THE NEW PRESSURE EQUIPMENT DIRECTIVE PED 2014/68/EU

The Pressure Equipment Directive (PED) 97/23/EC which was established May 29, 2002 is being replaced by Pressure Equipment Directive (PED) 2014/68/EU on July 19, 2016.

This revision will be implemented in two parts. The first part, effective June 1, 2015, is in relation to Article 13 of the new PED. This is a new regulation for the classification of hazardous substances.

The second part, the implementation of the new guidelines becomes effective July 19, 2016. This includes Article 14, the classification of Pressure Equipment and Assemblies, a revision of Article 9 of the PED 97/23/EC.

As a result of these changes, there are a small number of substances that will be affected and change from Group 2 to Group 1.

Group 1 fluids are classified as hazardous, in accordance with Article 14 of the new PED 2014/68/EU, defined by the Regulation EC No. 1272/2008.

Group 2 fluids are all other substances and mixtures not classified as Group 1.

It is highly recommended that all manufacturers re-evaluate the classification of their pressure equipment on all existing EC Design or EC Type certificates to ensure the categorization of pressure equipment is still correct.

All designs for pressure equipment due for certification after June 1, 2015 must follow the classification rules of

Article 14 of the new PED 2014/68/EU and Regulation EC No. 1272/2008.

The introduction of PED 2014/68/EU will not be retroactive on certificates issued under the current PED. Article 48 states, "Certificates and decisions issued by conformity assessment bodies and Directive 97/23/EC shall be valid under this directive."

2015 EDITION ASME BOILER AND PRESSURE VESSEL CODE SYNOPSIS

The Codes and Standards Technical staff of **HSB Global Standards** is pleased to announce the publication of the 2015 Edition ASME Boiler and Pressure Vessel Code Synopsis.

ASME publishes a New Edition to the ASME Boiler and Pressure Vessel Code every two years containing revisions/additions/errata to the existing Code Requirements. As a value-added service to our clients and partners, our Codes and Standards staff summarize all changes to the Code in a Synopsis database, thereby eliminating a line-by-line comparison to determine the change. In many instances, **HSB Global Standards'** Codes and Standards staff have also provided some brief notes to clarify the revision to the Code and its potential impact on Code stamp holders.

The 2015 Edition of the ASME Boiler and Pressure Vessel Code Synopsis Report includes:

- ❖ Section I – Power Boilers
- ❖ Section III and Section XI – Nuclear
- ❖ Section IV – Heating Boilers
- ❖ Section VIII, Division 1, 2, 3 – Pressure Vessels
- ❖ Section XII – Transport Tanks

The **HSB Global Standards** Code Synopsis is available through the **HSB Global Standards** website – www.HSBGlobalStandards.com.

ASK THE ENGINEER

By Codes and Standards Group

Q My shop is constructing a Section VIII Division 1 spherical vessel made of P-No. 5A that requires PWHT. UCS-56(d)(2) requires that there shall not be a greater variation in temperature throughout the portion of the vessel being heated than 250°F (140°C) within any 15 ft (4.6 m) interval of length. While conducting PWHT in accordance with Section VIII Division 1 for this spherical vessel inside the furnace, is it required to maintain the maximum permitted temperature difference of 250°F (140°C) within 15 ft (4.6 m) in all directions during the heating period per UCS-56(d)(2)?

A The short answer to the above question is Yes.

However, it is not clearly stated in UCS-56(d)(2) how the “15 ft (4.6 m) interval of length” needs to be measured/maintained in order to fulfill the above requirement. For a Pressure Vessel with cylindrical shell, the word “length” in “15 ft (4.6 m) interval of length” could possibly suggest that the requirement applies only along the longitudinal axis of the cylinder. For a spherical shell or a formed head, the word “length” could be interpreted in many ways in the absence of a clear guidance as to how the “length” needs to be measured [e.g. along the meridian, along the circumference, or along the diameter ,etc].

The following Section VIII Interpretation (recently published) makes it very clear that the intent is to maintain the thermal gradient limit of 250°F (140°C) within a 15 ft. (4.6 m) interval of in any or all directions.

Standard Designation: BPV VIII-1
Edition/Addenda: 2013
Para./Fig./Table No: UCS-56(d)(2)
Subject Description: Section VIII, Division 1;
UCS- 56(d)(2)
Date Issued: 08/12/2015
Record Number: 14-1370
Historical Interpretation numbers:

Question(s) and Reply(ies):

Q Is it the intent of UCS-56(d)(2) that the thermal gradient limit of 250°F (140°C) within a 15 ft. (4.6 m) interval of length is applicable to intervals of this distance in any or all directions?

A Yes.

As a result of the above Question and Reply, revisions to paragraph UCS-56(d)(2) of Section VIII Division 1 and Paragraph 6.4.4(b) of Division 2 have been made by eliminating the word “length” as follows:

During the heating period there shall not be a greater variation in temperature throughout the portion of the vessel being heated than 250°F (140°C) within any 15 ft (4.6 m) interval.

These revisions will be published in the 2017 Editions of Section VIII Divisions 1 and 2.

NPT CODE SYMBOL STAMP - UPDATE

By letter dated June 17, 2015, ASME provided NPT stamp holders additional guidance on the use of stamp show below:



The recently approved Code Case N-852 further confirms that the NPT Code Symbol Stamp with the NPT letters arranged horizontally is equivalent to the NPT Code Symbol Stamp as depicted and required by NCA-8000 and WA-8000.

ASME has decided to recall the NPT Code Symbol Stamps with the NPT letters arranged horizontally, in order to avoid any further confusion in the industry. If you have an NPT Code Symbol Stamp with the NPT letters arranged horizontally in your possession, ASME asks stamp holders to return it to ASME’s Headquarters at Two Park Avenue, New York, NY 10016. The Society will then send you the NPT Code Symbol Stamp as illustrated in Section III, Table NCA-8100-1 of the Boiler and Pressure Vessel Code, 2010 Edition and earlier Editions and Addenda. All items that have been already stamped with the NPT stamp shown above, are still compliant with the code due to the approval of Code Case N-852. Please note however, the US NRC has not provided guidance of the acceptance of this code case, but is expected to do so in the near future.

THIRD-PARTY INSPECTION

HSB Global Standards (HSB GS) continues to promote and provide independent third-party inspections of boilers and pressure vessels to recognized pressure equipment standards and customer specifications. These third-party inspections verify quality and may include inspection activities that are customized to our customer’s requirements such as monitoring fabrication (in whole or in part) from start to finish, witnessing of pressure tests, supplier and vendor surveillance, expediting, witnessing of material testing, evaluation and controls, and design verification (including

certification, where required).

HSB GS has seen an increase in the global demand for these various types of third-party inspections and we continue to expand our inspection service offerings to address that increased market need. Our value proposition to our customers continues to focus on simultaneously verifying specification compliance while providing inspections required for formal certification to international standards, optimizing inspection resources by leveraging our familiarity with manufacturer's quality systems and procedures and providing effective global coordination of inspection activities and a uniform inspection



approach.

A recent example of a third-party inspection project successfully completed by HSB GS was for a boiler erection in Malaysia, where our customer was required to erect a boiler in accordance with ASME Code Section I without Code stamping. Although they had a lot of experience with boiler assemblies/erectations, they had no prior experience working to the requirements of the ASME Code.

We helped our customer develop and maintain a Quality Control Program in compliance with ASME Code Section I. We also verified that the site assembly meets the requirements of ASME Code Section I, and the FMA (Factories and Machinery Act, 1967 Factories and Machinery (Steam Boiler and Unfired Pressure Vessel)) Regulations 1970, including the issuance of a Fifth Schedule for the completed boiler.

As this project is just one example of a third-party inspection project completed by HSB GS, there have been several other various types of third-party inspection projects that HSB GS has undertaken and successfully completed. HSB GS continues to strive to ensure that the delivered services provide for consistent service quality and meet our customers' needs and requirements wherever they require our support.

EXPAND YOUR BUSINESS TO INTERNATIONAL MARKETS

Manufacturers and exporters of Boilers and Pressure Equipment will join us for a two-day seminar on understanding International Import Requirements of the European Pressure Equipment Directive (PED), upcoming PED and changes and other International Codes.

Why should you attend?

- ❖ To gain a better understanding of the PED compliance including: Design, Materials, Welding, Nondestructive Testing and Surviving a Quality Survey.
- ❖ To learn more about export of boiler and pressure equipment to countries outside of the United States, in accordance with the standards and regulations of each individual country. Countries include: Australia, Brazil, India, Malaysia, Singapore and others.
- ❖ Learn the future changes to the PED, including how fluids are classified, conformity assessment module changes, and New Legal Framework (NLF).
- ❖ Learn methods of Third Party oversight of code inspection activities by others.
- ❖ Seminar led by experienced ASME, PED, International codes and Third Party Instructors

Dates and Times

Tuesday, November 17 and Wednesday, November 18

Courtyard Marriott
Charlotte Airport
2700 Little Rock Road
Charlotte, NC
704-319-9900

Cost per person

\$195

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Expand Your Business (continued from page 3)

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Online – <https://bookstore.hsbc.com> **click on Seminar**”

Email – Jennifer_Apruzzese@hsbc.com

HSB Global Standards offers a wide range of inspection services for boilers, pressure vessels, nuclear components, and process and power plants. Established in 1866, we provided engineering services to users of steam powered equipment. Today, **HSB Global Standards** has grown to be a worldwide leader in the interpretation and application of boiler and pressure vessel codes, standards, directives and customer specifications. **HSB Global Standards** has operations in 16 countries and employs more than 600 people worldwide. With local representation and jurisdictional experience, **HSB Global Standards** provides virtually every aspect of boiler and pressure vessel inspection and certification globally.

PRESSURE EQUIPMENT DIRECTIVE 2014/68/EU SYNOPSIS

Hartford Steam Boiler UK Limited (HSB UK), a designated Notified Body for the European Pressure

Equipment Directive (PED), is pleased to announce the publication of the Pressure Equipment Directive 2014/68/EU Synopsis. The PED 2014/68/EU Synopsis refers to the outgoing “New Approach” PED 97/23/EC as 97/23/EC and the “New Legal Framework” Pressure Equipment Directive 2014/68/EU as 2014/68/EU. This PED 2014/68/EU Synopsis was prepared by the **HSB Global Standards** Notified Body Staff to provide insights into the intent of these changes, and their potential impact on PED users.

The Pressure Equipment Directive 2014/68/EU was published on June 27, 2014 in the European Union (EU) Official Journal approved by the European Parliament and will be implemented in two parts.

- ❖ The first part became mandatory on June 1, 2015, and is in relation to Article 13, Classification of pressure equipment.
- ❖ The second part, the replacement of the 97/23/EC becomes effective July 19, 2016.

The Pressure Equipment 2014/68/EU Synopsis is available through the **HSB Global Standards** website – www.HSBGlobalStandards.com.