PRESSURE POINTS

The Official Newsletter of HSB Global Standards

APRIL 2014

INSIDE

UPCOMING EVENTS

Every year, HSB Global Standards participates in a number of industry events to promote our services to new and existing customers.

Many of our staff that focuses on Codes and Standards development will be attending the ASME's Boiler and Pressure Vessel Code meeting and the 83rd General Meeting of the National Board of Boiler and Pressure Vessel Inspectors held May 11 – 16, 2014 in Bellevue, Washington. Our participation provides feedback for continued Code development from an inspector's point of view and a way to gain feedback from our customers.

Internationally, HSB Global Standards is exhibiting and attending PowerGen Europe, June 3 – 5, 2014, located at Booth 7K15. November 11 – 13, 2014, HSB Global Standards is exhibiting and PowerGen Brazil in São Paulo, Booth C821. June 23 – 24, 2014, HSB Global Standards is presenting at the ASME Shale Gas Seminar in Argentina.

In the United States, HSB Global Standards is exhibiting and attending Power Gen International in Orlando, Florida, December 9 – 11, 2014 at the Orlando County Convention Center, located at booth 3251.

EVENT	DATE	LOCATION	BOOTH
PowerGen Europe	June 3 – 5, 2014	Cologne, Germany	7K15
PowerGen Brazil	November 11 – 14, 2014	São Paulo, Brazil	C821
PowerGen International	December 9 – 11, 2014	Orlando, Florida	3251

HSB GLOBAL STANDARDS ESTABLISHES A LEGAL ENTITY IN BRASIL

HSB Global Standards, a worldwide leader in inspection services for boilers, pressure vessels, nuclear components, and power and process plants, recently announced that it has established an international subsidiary, HSB Brasil Serviços de Engenharia e Inspeção, Ltda., based in Sáo Paulo, Brasil. HSB Global Standards performs inspections for the pressure vessel industry offering local availability, global coverage and technical experience with consistent measureable results.

"Pressure equipment demand is growing in Brasil driven predominately by the refining and petrochemical industries, power and manufacturing," said Fred Bull, president, HSB Global Standards. "HSB Global Standards' worldwide presence gives us the ability to manage third-party certification for virtually any type of pressure equipment in the world."

The Brasilian pressure equipment market is regulated. All pressure equipment installed must meet the requirements of its NR-13 Brasilian regulations. Any code recognized by the Brasilian government may be used to establish the design/fabrication requirements for the equipment, including the ASME Boiler and Pressure Vessel Code.

"The establishment of a legal entity in Brasil will strengthen our position within Brasil and South America," said Fred Bull. "Owners and users of pressure vessel equipment are increasingly demanding that the ASME Code be met for equipment purchased domestically and abroad. There is a recognized need for increased technical support for the formal implementation of ASME Code requirements including stamping of pressure vessel equipment ordered to the Code.

Even though formal ASME Code Stamping is not currently the norm in Brasil, compliance with the ASME Code requirements is generally required by purchasers of pressure equipment to meet NR-13 requirements. Other recognized codes may also be used, but ASME is the predominant standard in Brasil owing to its familiarity to buyers, fabricators and designers."

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HSB Global Standards Establishes... *(continued from page 1)*

Third-party inspection is typically required by owners/users in Brasil for equipment they import, to ensure compliance with their specifications. These specifications have evolved from the ASME Code requirements over time; giving HSB Global Standards an opportunity to leverage its ASME knowledge as a differentiator and to uniquely qualify itself to provide third-party inspection services in Brasil.

For more information contact **GetInfo@hsbct.com**

ASK THE ENGINEER

By Codes and Standards Group

Q How many sets of Impact test specimens are required for material over 1 ½" [38mm] thick when qualifying welding procedures with impact testing in accordance with ASME Section VIII Division 1 2013 Edition?

A While UG-84(h)(3) seems to provide an immediate straightforward answer to this question, there is more to it when you carefully read the paragraph. It says three sets of impact specimens are required and out of those three, two of them are required to be removed from the weld and it leads to the short answer: 2 sets from the weld and 1 set from the HAZ.

However, UG-84(h)(3) makes reference to UG-84(g)(2) for the HAZ specimens. UG-84(g)(2) says the HAZ specimens shall be removed in accordance with Figure UG-84.5 and Table UG-84.6. Per Table UG-84.6, two sets of HAZ specimens are required when the material thickness is greater or equal to 1 ½". Note that Paragraph UG-84(h)(3) recognizes (g)(2) as one set. The one set for the HAZ is all encompassing. If (g)(2) requires more than one "subset" then all of those "subsets" are considered the "one set for HAZ" specified in (h)(3). Therefore, four (4) sets of impact test specimens [2 sets from the weld and 2 sets from the HAZ] are required for thicknesses over 1 ½" [38mm].

Q I am designing a pressure vessel using SA-240 Type 316 L plate. Paragraph 8.1 of SA-480 [Specification for General Requirements for Flat-Rolled Stainless and Heat-Resisting Steel Plate Sheet, and Strip] says the following for Material Test Report and Certification:

> " 8.1 A report of the results of all tests required by the product specification shall be supplied to the purchaser. This material test report shall reference the product specification designation and year date indicating that **the material was manufactured, sampled, tested, and inspected in accordance with requirements of the product specification and has been found to meet those requirements.** The material test report shall report the melting process when the purchase order requires either a specific type of melting or requires that the melting process used is to be reported."

Is it required that the words shown above in bold from paragraph 8.1 appear in the Material Test Report for this material?

A There is a very specific Interpretation published by ASME for SA-240/SA-480 that speaks to this issue directly for stainless steel plate (IIA-04-09R, copied below). The reason why an MTR with those specific words is not required per SA-480, 8.1 is because of the way that the words are written: "This material test report shall reference the product specification designation and year date **indicating** that the material was manufactured, sampled, tested, and inspected in accordance with requirements of the product specification and has been found to meet those requirements." This could be rewritten as: "This material test report shall reference the product specification designation and year date **which indicates** that the material was manufactured, sampled, tested, and inspected in accordance with requirements of the product specification and has been found to meet those requirements." So, the listing of the product specification designation and year date alone is the certification by the material manufacturer that it meets the requirements of the specification, and a separate certification statement is not required.

Interpretation:	II-A-04-09R
Subject:	Material Test Report Requirement for SA-240/SA-240M, Section II, Part A (2001 Edition, 2002 and 2003 Addenda)
Date Issued:	September 28, 2004
File:	BC04-1068

Q For stainless steel plate, sheet or strip supplied to SA-240/SA-240M, is it necessary for the certification to include the following sentence on the material test report: "The material was manufactured, sampled, tested, and inspected in accordance with the requirements of SA-240/SA-240M and has been found to meet those requirements"?

A No.

HSB GLOBAL STANDARDS PED SERVICES IMPROVEMENTS

In continued support of our customers, we have made

further investments in our PED services to better serve our customers. We have merged our Design Review location with our Certification location to improve review efficiency.

The Benefits of our PED Services:

- Improved efficiencies transmitting and reviewing design files electronically.
- Continued access to technical specialists that focus on pressure vessel inspection services.
- Experience completing more than 200 HRSG projects involving multiple subcontractors in different world regions that are complex in nature.
- Local representation in Europe, Asia and the Americas.
- Our knowledge and experience of the ASME Codes and Standards, quality development, and surveillance activity, along with a unique understanding of many country codes, which helps save time and money while navigating the PED process.

The address for the sending design and certification files is:

HSB Global Standards
Landersumer Weg 40
D-48431 Rheine, Germany
Tel: +49-5971-91436 0

Design Reviews can be sent electronically to:

HSBI_Design_Documents@hsbct.com

Please continue to contact your local Account Manager for all PED services.

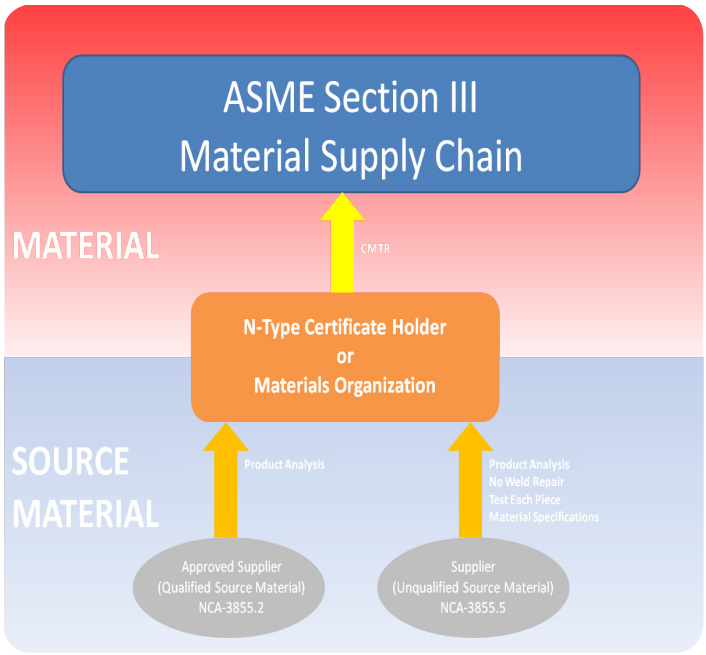
ASME SECTION III USE OF SOURCE MATERIAL AND MATERIAL

Certified Material Test Reports (CMTRs) attest that material is in accordance with specified requirements, including the actual results of all required chemical analyses, tests, and examinations. "Product form conversion," as described in NCA-3800, is the conversion of source material into material. Upon completion of "product form conversion," the metallic product, now known as material, conforms to a SA, SB, SFA, or any other material specification permitted in Section III.

When used for Section III applications, metallic products can be purchased by N-type Certificate holders or Materials Organizations from approved suppliers to manufacture material. Approved suppliers are audited and evaluated by N-type Certificate holders or Materials Organizations, to verify compliance with the requirements of NCA-3800. Metallic products that come from approved suppliers are known as Qualified Source Material. N-type Certificate holders or Materials Organizations can also use suppliers which do not meet the requirements of NCA-3800. In doing so, N-type Certificate holders or Materials Organizations can only use these metallic products by meeting the provisions of NCA-3855.5. Metallic products from unqualified suppliers are known as Unqualified Source Material.

Metallic products become known as Source Material when the final chemical compositions are established at the mill and documented in a product analysis. Source material then becomes material when the final mechanical properties are established, the material conforms to a SA, SB, SFA, or any other material specification permitted in Section III, and documented on a CMTR. Source material can already conform to material specification permitted in Section III if the final specification requires product form conversion to any other material specification permitted in Section III. An example of such a conversion would be using plate SA-240 machined into a blind flange with dimensions compatible with ASME B16.5.

For more information on ASME Section III, please contact Paul Coco at **Paul_Coco@hsbct.com**



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One State Street
PO Box 299
Hartford, CT 06141-0299
(800) 417-3437 • (860) 722-5705 Fax

Editor:
Stephen McKelvey
(860) 722-5450
Stephen_McKelvey@hsbct.com

Contributors:
- Paul Coco
- Richard Prendergast
- Jayaram Vattappilly
- Delinda Whiting

IBR - INDIAN BOILER REGULATIONS

HSB Global Standards is pleased to announce the release of Indian Boiler Regulations (IBR) services. The IBR services include design review, inspection, material certification and welder qualifications for equipment that will be installed in India. Our accreditation with the Central Boiler Board in India is for services provided in all countries with the exception of China and India.

India is the world's fourth largest energy consumer after United States, China and Russia. Currently, India is suffering from a major shortage of electricity generation capacity. The International Energy Agency estimates India will add between 600 to 1200 GW of additional new power generation capacity before 2050. Global manufacturers have been exporting to India over the past decade and with the release of this Program, HSB GS customers will now be able to use one inspection body to support their exporting needs.

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 500 people worldwide. With local representation and jurisdictional experience, HSB Global Standards provides virtually every aspect of boiler and pressure vessel inspection and certification globally.

For more information on Indian Boiler Regulations services, please contact Delinda Whiting at **Delinda_Whiting@hsbct.com**

If you would like to receive an electronic copy of *Pressure Points,* please email **GetInfo@hsbct.com**