

# PRESSURE POINTS

The Official Newsletter of HSB  Global Standards  
Code Services

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## UPCOMING EVENTS

*By Marketing*

Every year, we selectively participate in conferences around the world to promote our services, gain new customers, and learn the leading market trends. There are still many potential customers that either don't know our name or realize all the services we can provide.

Looking back in 2009, we attended the American Boiler Manufacturer Association's (ABMA) summer meeting, where our senior staff networked directly with boiler manufacturer's owners. We also exhibited and attended ICONE17 in Brussels Belgium where we presented both "How to Obtain an N Stamp" and participated in a panel discussion on global nuclear supply chain management.

More regionally, we attended the Steel Tank Institute/Steel Plate Fabrication Association (STI/SPFA) summer meeting to present topics on international code inspection requirements. We also exhibited and attended the American Society of Quality and Energy Environmental Division's (ASQ-EED) summer meeting to present Nuclear Quality Assurance Manual topics as well as participate in panel discussion on nuclear supplier requirements.

Our final conference show is the big one, Power Gen and Nuclear Power International. These co-located shows are big by any measure. We presented topics of NQA Manual requirements along with an exhibit booth in each show.

On the horizon for next year, we plan on presenting in Nuclear Power Europe, ICONE18 in Xi'an China, and Power Gen International in USA. We will also be looking forward to hosting a number of public seminars to both assist our customer base and demonstrate our experience to new customers.

If you have need for a public seminar in your region, please contact [Edu\\_svcs@HSBCT.com](mailto:Edu_svcs@HSBCT.com)

## WHAT'S NEW AT ASME?

*By Codes and Standards Group*

### REORGANIZATION OF THE BOILER AND PRESSURE VESSEL COMMITTEES

The Boiler and Pressure Vessel Code (BPV) is made up of Sections I through XII. Prior to February 1, 2009, these 12 sections of the BPV were developed and maintained by 10 Subcommittees (e.g. Subcommittee I, Subcommittee II, etc) and any revisions to these 12 sections were ultimately approved by the Boiler and Pressure Vessel Standards Committee. This committee was made up of 30 members, and was responsible for over 20,000 pages that make up the BPV. The size of the BPV has steadily increased over the years such that the burden of responsibility placed on the Boiler and Pressure Vessel 30-member Standards Committee was becoming untenable. After careful evaluation of the situation, it was decided to reorganize the Boiler and Pressure Vessel Committees and to elevate the status of the 10 Subcommittees to Standards Committees, and to disband the Boiler and Pressure Vessel Standards Committee. This action was a monumental event considering that the Boiler and Pressure Vessel Standards Committee was first formed in 1912, and for 97 years it oversaw the development and maintenance of the Boiler and Pressure Vessel code.

Giving the Subcommittees the authority to approve code revisions means that one layer of voting has been eliminated. The net result is that the cycle time to approve new code cases and some revisions will be reduced. To be sure that all revisions still receive a meaningful review during the approval process, a new committee called the Technical Oversight Management Committee (TOMC) was created. The members of TOMC are made up of representatives from the 10 Sections, and they have the responsibility of reviewing all proposed revisions for technical adequacy and consistency.

One additional consequence of this change is that the number of volunteers that are now directly involved in the final approval of revisions to the boiler code has significantly increased, since the 10 Subcommittees were elevated to Standards Committee status. What this means is that there are now more opportunities for volunteers to earn a seat on a Standards Committee. The work required to maintain and enhance the Boiler and Pressure Vessel Code continues to expand such that ASME is always looking to recruit volunteers with the requisite skills and desire to work on one or more ASME committees.

*(continued on page 2)*

Anyone interested in learning more about participating on an ASME committee should visit the following ASME webpage: [http://www.asme.org/CodesDevelopmentCommittees/Participating\\_Codes\\_Standards.cfm](http://www.asme.org/CodesDevelopmentCommittees/Participating_Codes_Standards.cfm)

ASME Suspends Addenda Service - On November 16, 2009, the ASME Standards and Certification Board of Directors voted to eliminate the addenda service for the ASME Boiler and Pressure Vessel Code. This means that the recently published 2009 Addenda to the 2007 Edition of the boiler and pressure vessel code will be the last. Starting with the 2010 Edition, the boiler and pressure vessel code will be published without addenda on either a two-year or three-year cycle, which is yet to be determined. Stay tuned for further information on this important development.

#### SPECIAL NOTICE — CODE CASE 2199 — 2.25Cr-1.6W-V-Cb (Grade 23)

In April 2009, ASME issued a Special Notice concerning the use of Code Case 2199, 2199-1, 2199-2, and 2199-3. These Cases address the use of 2.25Cr-1.6W-V-Cb (Grade 23) material for Section I applications. Table 1 of Code Case 2199-3 was revised to ensure adequate material hardenability and to modify subparagraph (b) to clarify hardness testing requirement. For Table 1, the maximum amount of N was reduced, the minimum amount of B was increased, a limit on Ni was added, a Ti requirement was added and a Ti to N ratio was added. An exemption to the Ti:N ratio was included based on hardness test results from fully hardened material. Sub-paragraph (b) was modified to clarify when in the processing order the maximum hardness limit would be invoked. Manufacturers are cautioned that these revisions to Case 2199 have safety implications insofar as material produced to earlier revisions of the Case (2199-3, 2199-2, etc.) could meet the chemistry requirements specified in the Code Case, but it may not achieve the specified mechanical properties following the normalizing heat treatment. A Special Notice was issued by ASME stating that Code Case 2199-4 should now be used, and the use of Code Cases 2199, 2199-1, 2199-2, 2199-3 should be discontinued immediately. A copy of this Special Notice can be found at the following link: <http://cstools.asme.org/csconnect/pdf/CommitteeFiles/28922.pdf>

## ASK THE ENGINEER

By Codes and Standards Group & TRS

**Q** My company is constructing a stainless steel vessel per Section VIII, Division 1 with an MDMT of -320°F (-196°C). The material is an austenitic chromium-nickel stainless steel, Type 304. The welds will be made with E308 filler metal, and the SAW weld process is being used. Are production impact tests required for the Category A and B welds in this vessel?

**A** Per UHA-51(d)(1)(a), the base material and heat affected zone are exempt from impact tests for an MDMT of -320°F

(-196°C). However, per UHA-51(e)(1) the weld procedure qualification would need to include impact testing since the MDMT is colder than -155°F (-104°C). With regard to production tests of high alloy materials, a major revision was introduced in the 2007 Addenda in UHA-51(f). The focus of this paragraph was changed to address pre-use testing of welding consumables for MDMT's colder than -155°F (-104°C) in lieu of production tests. For your particular case, UHA-51(f)(4)(b) would require pre-use testing of your welding consumables (each heat of filler metal and batch of flux combination) at the MDMT or colder. The test coupons are to be prepared in accordance with Section II, Part C, SFA-5.4, A9.12, and the acceptance criteria shall conform with UHA-51(a).

**Q** What are the Quality Management System (QMS) Certificate requirements for the European Pressure Equipment Directive (PED) compliance?

**A** The QMS Certificate requirement is satisfied when the material manufacturer has a quality management system of at least ISO 9002:1994 type, certified by a competent body (according to the definition given in Guideline 7/2) established as a legal entity within the European Community, and when the field of validity of the certification specifies production of material indicating the relevant material types. The specific assessment of the quality system shall properly cover all the relevant processes and material properties referred to in the material specifications, and attested in the material certificates. A single reference to section 4.3 of Annex I of PED is not sufficient to validate the quality system of the material manufacturer. The reference document for quality assurance which has been used shall be identified. Reference to the PED in the quality system certification is not a mandatory requirement (see Guideline 7/16).

A competent body for certification of the quality systems of material manufacturers can be any third party body established as a legal entity within the Community which has recognized competence in the assessment of quality (assurance) systems for the manufacture of materials and in the technology of the materials concerned. Competence can be demonstrated, for example, by accreditation.

NOTE 1: A body not established as a legal entity within the Community, even if it has a recognition agreement through the International Accreditation Forum, does not comply with the requirements of Annex I section 4.3.

NOTE 2: A notified body may perform this task only if it has a recognized competence in the field of quality assurance, materials and related process technology. For this certification, the possible use of the notification number for PED is irrelevant.

NOTE 3: The certificate of quality system shall make reference to the legal entity established in the Community and its address. If you are interested in receiving in more information on PED, please contact your regional TRS Account Manager or visit [www.hsbglobalstandards.com](http://www.hsbglobalstandards.com).

## INTERNATIONAL CODES: SINGAPORE

By TRS

Singapore is a small island City-State with a vibrant economy based on international trade of pressure systems for the petroleum, chemical, and pharmaceutical industries. Exporting pressure vessels to Singapore is relatively routine, if you know the requirements.

HSB Global Standards frequently assists customers exporting pressure systems into Singapore and is an approved inspection agency authorized by the Occupational Safety and Health Division, Ministry of Manpower (MOM), Singapore. These pressure vessels are frequently built to ASME Codes and Standards (or sometimes British standards) plus some additional steps included below, but not limited to;

- Review and approval of design calculations and drawings,
- Survey of the manufacturer's facility,
- Verification of weld procedure and personnel qualifications,
- Review of all nondestructive examination procedures, results, and personnel qualifications,
- Verification and inspection of all material used in fabrication,
- Perform in process examinations to ensure compliance to the code of construction,
- Witness all tests required by the code of construction.
- Singapore Inspection Certificate

HSB Global Standards is authorized by the Ministry of Manpower (MOM) to conduct fabrication surveys and certifications of pressure systems during construction, when design and fabrication is performed to the ASME Code (or British Standards).

If you or your customers are looking for ways to expand business, you may wish to consider international exporting. For additional information or assistance in complying with the Singapore import requirements, please contact your regional Technical Resource Support (TRS) Account Manager or visit our website at [www.HSBGlobalStandards.com](http://www.HSBGlobalStandards.com).

## AN ISO SUCCESS STORY

One of HSB Registration Service's customers is a 100 year old manufacturer of marine hardware and accessories. They created their original ISO-9000 Quality Management System in 1996. Being a multi generation family owned business, their products, processes and procedures have evolved over a long period of time. They looked at the implementation of an ISO-9000 system as a way to document and maintain their operations for future generations and for providing them with a competitive marketing strategy.

During initial implementation, they met internal resistance to having to follow certain procedures or maintain records. Their first audits were filled with many corrective actions, but once they as a company began to understand and accept the ISO Quality System for what it was, they became certified to the 1994 standard. They maintained certification to the ISO 9001:2000 Standard and in 2009 transitioned to ISO 9001:2008. Their partnership with HSB Registration Services has allowed them to implement systems and process improve-

ments that were above and beyond the requirements of the existing standards. When it came time to comply with the requirements of the new standard they obtained a copy, identified the areas within their organization that were affected by the changes, created a Transition Plan, implemented the requirements, measured and monitored their progress towards completion of the plan and transitioned easily.

Throughout the years their system has matured. Their internal audit staff consists of 15 auditors, performing an average of 48 internal audits annually. Once leery of the audit process, their supervisors now welcome the results of both the internal and external audits as opportunities for improvement. They are constantly revising and updating their process procedures and work instructions. When their renewal or surveillance audits are performed the supervisors are eager and proud to show off their accomplishments. Because of the buy in of the staff, a more proactive approach to the process improvements that have been implemented and the preventive actions that have been generated they've seen a decline in externally generated corrective actions on surveillance audits. Their initial audit in 1997 identified 37 deficiencies, several of which were majors whereas their most recent audits have resulted in 0 deficiencies. They see more and more positive results with each audit event.

The ISO system of documentation of procedures has helped them to maintain their training efforts for new supervisors and employees. It allows them to find, through the audit process, where they are neglecting their procedures/processes and correct them. Without ISO-9001 certification they would not have been able to compete on an international playing field. The ISO Quality Management System has made them a better company. They are more organized. Their management review team is consistently monitoring the ISO program and providing direction as needed. Through the system they have been able to identify their deficiencies and improve customer satisfaction. Though initially skeptical of ISO-9000 certification the owners are now the most vocal proponents of it in the entire organization. It's Proven to be a Success.

If you would like to learn more about how to become ISO certified, please visit <http://www.hsbiso.com> for more information.

### Pressure Points is published by HSB Global Standards

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## INSPECTOR MILESTONE ANNIVERSARIES

HSB Global Standards would like to take this opportunity to thank all of our inspectors for their hard work and company loyalty. We recognize the contribution you make in helping us maintain the position we enjoy in the boiler and pressure vessel industry. We offer our congratulations on your 2009 anniversaries.

### *Celebrating 35 years of service:*



Kent Cocking



Leon Pecoraro

Benjamin Doshier

### *Celebrating 30 years of service:*



Alex Garbolevsky

Carl Enos  
Scott Laley  
Dean Niznik  
Chilton J. Barnes, Jr.

### *Celebrating 25 years of service:*

Robert Redfern

### *Celebrating 20 years of service:*

Raun Swanson  
Wesley Ward  
Donald Smith  
John David Radel  
Greg Feigel

### *Celebrating 15 years of service:*

James Niemerg  
Tommy Green  
James W. Gurganus

### *Celebrating 10 years of service:*

Gerald Daly  
Oliver Moss

### *Celebrating 5 years of service:*

Jeffrey Bukowiecki

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