

ASME

(American Society of Mechanical Engineers)

H₂ Standards Development Activities

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**NHA Codes & Standards Workshop
September 23, 2003
Detroit, Michigan**

ASME Background

(American Society of Mechanical Engineers)

- ◆ Founded in 1880 as the American Society of Mechanical Engineers, today ASME International is a nonprofit educational and technical organization serving a worldwide membership of 125,000.
- ◆ Conducts one of the world's largest technical publishing operations, holds some 30 technical conferences and 200 professional development courses each year, and sets many industrial and manufacturing standards.
- ◆ Staff: ~400
- ◆ \$59M revenues (\$34M Codes and Standards)

ASME Background

(American Society of Mechanical Engineers)

◆ ASME - Codes and Standards

- First standard issued in 1884
- Develops and publishes approx. 600 consensus standards
- Accredits companies, certifies individuals
- Over 100 ASME standards committees
- Over 3,600 volunteer committee members
- Address pressure technology, nuclear safety, metrology, drafting, safety (general), and performance test codes

ASME Boiler and Pressure Vessel Code

- ◆ Originated in 1914.
- ◆ Over 900 volunteers develop and maintain the BPV Code
- ◆ ASME BPV Code - Uniform set of technical requirements for the materials, design, construction, methods of fabrication, inspection, certification, and overpressure protection of boilers and pressure vessels

ASME Boiler and Pressure Vessel Code

- ◆ ASME BPV Code is now adopted in part or in its entirety by 49 states and by all of the provinces of Canada as a means of satisfying regulations.
- ◆ ASME BPV Code is now adopted in part or in its entirety by 70 countries as a means of meeting their government safety regulations. [British Standards Institute (BSI)]
- ◆ 3200+ companies in the USA & Canada are certified by ASME that they are manufacturing B&PV's according to the ASME Code.
- ◆ 1300+ Companies in 65 countries are certified by ASME that they are manufacturing B&PV's according to the ASME Code.

ASME H₂ Steering Committee

- ◆ As a result of developments in the Fuel Cell industry, the H₂ Steering Committee was formed in November 2002
- ◆ Volunteer membership includes industry, academia, and government organizations
- ◆ Committee charge includes:
 - Identifying ASME codes and standards for H₂ infrastructure applications
 - Forming H₂ Infrastructure Task Forces
 - Coordinating with standards developers
 - Involvement in related global regulations
- ◆ Contact: koehrij@asme.org

ASME H₂ C&S Leadership Assignments

- ◆ ASME was assigned the following leadership assignments by the DOE
 - Fuel Delivery and Storage
 - Composite Containers
 - Piping
 - Pipelines
 - Equipment
 - Fueling and Service
 - Storage Tanks
 - Piping
 - H₂ Generation and Fuel Cells
 - Piping
 - Storage Tanks

Target Schedule

- ◆ **Task Force Recommendation:**
 - Preliminary: OCT'03
 - Final: DEC'03
- ◆ **BPTCS (Board on Pressure Technology Codes and Standards) Action: MAY'04**
- ◆ **Technical Reports: JAN – JUN'04**
- ◆ ***Draft Standard: JUN – DEC'04***
- ◆ **Standards Committee: DEC'04 - NOV'05**
- ◆ ***Finalize Standard : NOV'05 - APR'06***

ASME H₂ C&S Web Page

◆ Content

- ASME H₂ Steering Committee
- H₂ C&S Task Forces
- Various Presentations
- Schedule

◆ www.asme.org/cns/hydrogen

◆ Contact:

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