



*SETTING THE STANDARD*

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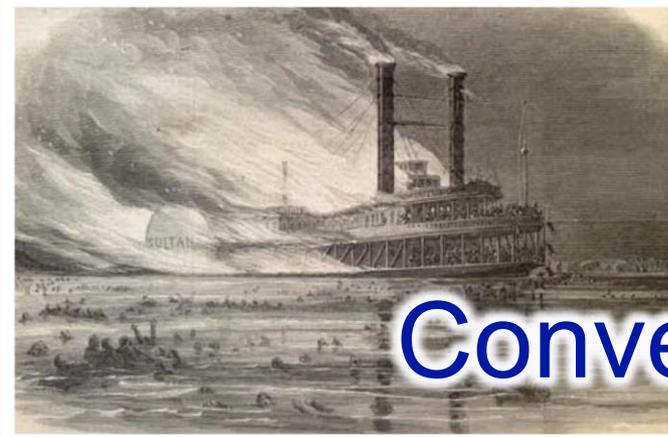


# 100 Years of the BPVC

May 12, 2014

National Board General Session  
Bellevue, Washington

**MADIHA EL MEHELMY KOTB**  
**ASME PRESIDENT**



1865, Steamboat Sultana—twin boilers exploded

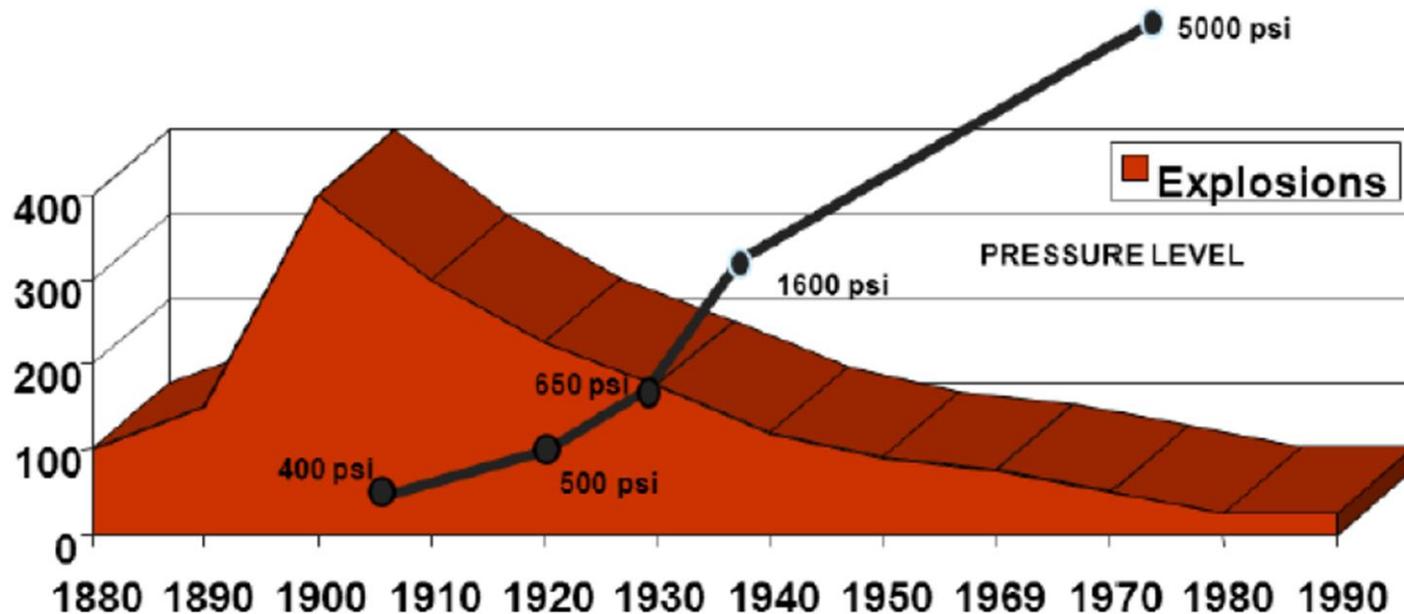


1905, R. B. Grover & Company Shoe Factory

# Converging Histories

- 1884 ► First ASME performance test code for the conduct of trials of steam boilers
- 1889 ► American Boiler Manufacturers Association (ABMA) formed
- 1914 ► ASME Boiler Code
- 1916 ► ASME certification for boilers begun in US and Canada
- 1918 ► American Engineering Standards Committee (later, ANSI)
- 1918-20 ► Canadian Inter-Provincial Code for the Construction and Inspection of Steam Boilers, Unfired Pressure Vessels and Machinery
- 1919 ► National Board of Boiler and Pressure Vessel Inspectors

# Safety and Reliability through Standards



Boiler Explosion Trends in United States <sup>1</sup>



# ASME Today —

- More than 500 Standards
- Recognized and accepted in more than 100 nations
- Growing percentage of committee volunteers reside outside of USA — originating from 52 countries
- ASME administers over 40 US Technical Advisory Groups to ISO
- 7,000 certified companies in 75 countries (more than half non-U.S.)
- 200 professional development courses (many standards based)

# Making a Difference

## Engineers —

- Use resources wisely
- Make energy, manufacturing, transportation, and sustainable infrastructure development safer
- Advocate for and implement response strategies
- Expand socio-political dialogue
- Build public trust in engineering solutions



# Global Trends

- Energy more widely traded
  - LNG, oil, refined products, coal
- Energy technology more widely dispersed and more rapidly adopted
- Engineering more widely practiced and shared
- ASME standards and certification more international



# Coming Up to Date — Globally

- 1972 ► Certification offered internationally as part of a consent decree
- 2000-2002 ► C&S Connect (online balloting and tracking)
- 2001 ► ISO Piping Standard references B31.3 Process Piping Code
- 2007 ► ISO TC11 Standard 16528 on Boilers and Pressure Vessels published
- 2014 ► ASME's largest program with 7,000 certified companies in 75 countries
- Transitioning from 30 ASME product certification marks to a single mark



# How do we look?

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- Leading standards across an array of industries throughout the world
- Licensed translations of ASME standards by others in Chinese, French, Japanese, Korean, & Portuguese
- Growing portfolio of Spanish language versions for key standards (BPV, pipelines, elevators, etc.)
- Recent references in national regulations of: India - Nigeria - South Africa – Colombia
- Normative references to ASME Standards in ISO Standards
- International Working Groups with key organizations in China, South Korea, India and Europe on nuclear BPV Code and in India on piping codes

# World Trade Organization

*“Committee Decision on Principles for the Development of International Standards” (2008)*

Transparency

Openness

Impartiality and Consensus

Effectiveness and Relevance

Coherence

Development Dimension



**WORLD TRADE  
ORGANIZATION**

**Implication: Confirmed that standards developed by ASME are eligible to be considered as international standards**

# ASME Strategic Priorities / Standards

Global  
Impact

Conformity Assessment  
Global growth and new  
certification programs

Workforce

Energy

Standards

New technologies/ energy/ + /  
technical relevancy

Training +

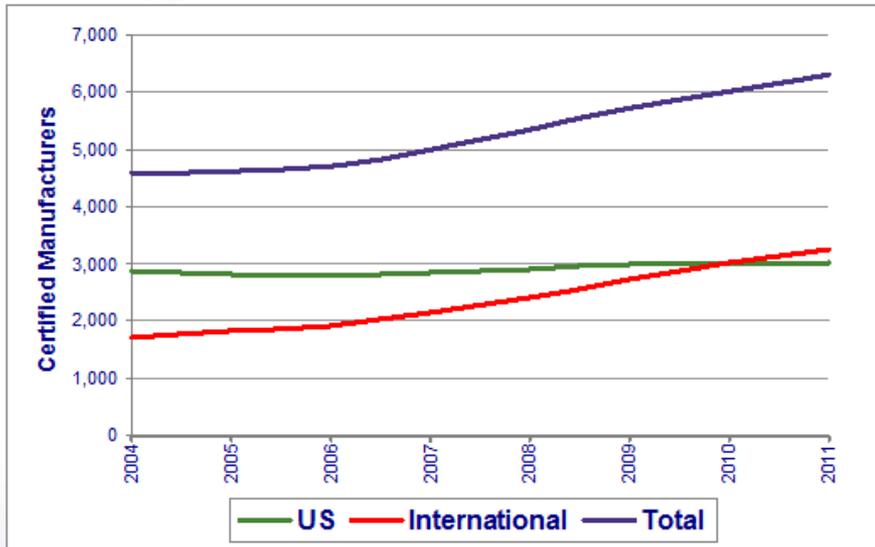
Global development needs



# Emerging Technologies

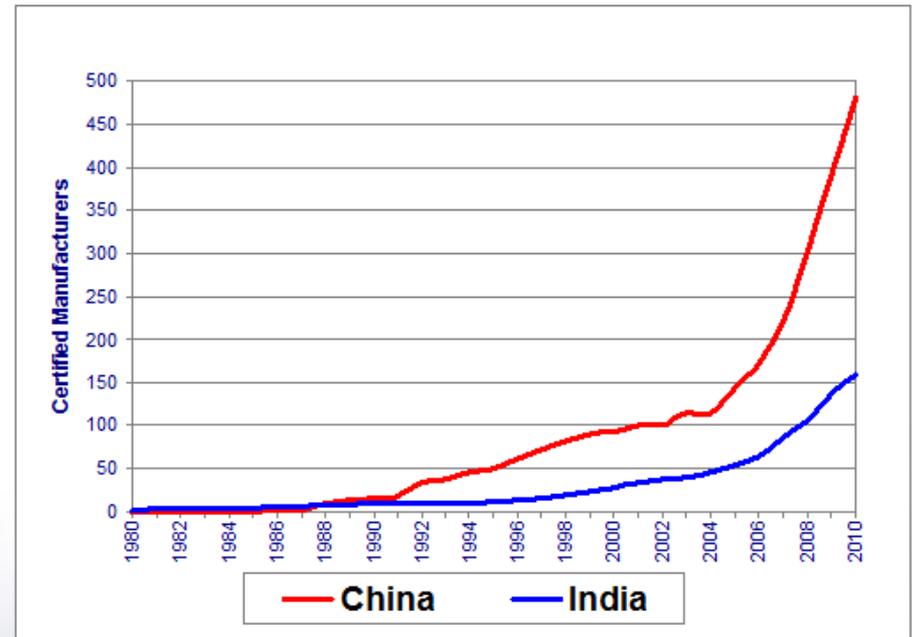
- Energy Assessments
- Hydrogen Infrastructure
- Concentrated Solar Power Plants
- Ultra-supercritical Boilers
- Nuclear Gen III+ and Small Modular Reactors
- Plant Performance with Carbon Capture

# Global Trends: Manufacturing & Product Certification



Number of Manufacturers with ASME Boiler and Pressure Vessel and Nuclear Certifications

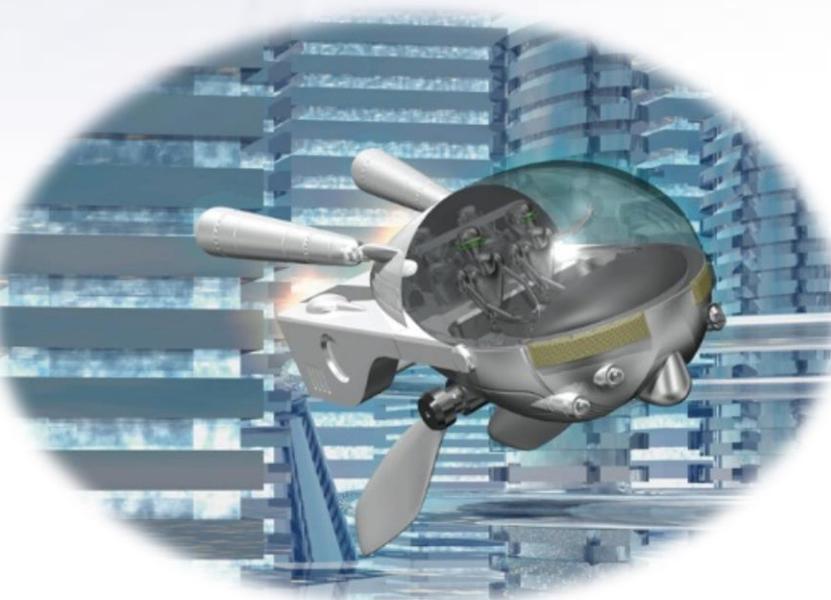
Number of Manufacturers with ASME Boiler and Pressure Vessel and Nuclear Certifications in China and India



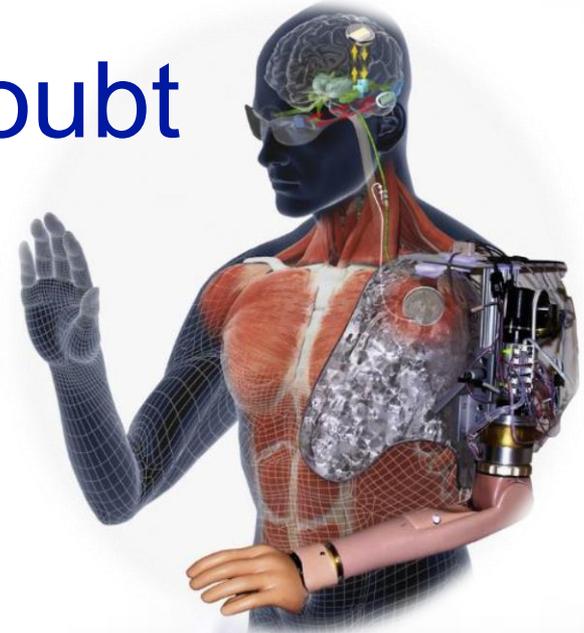
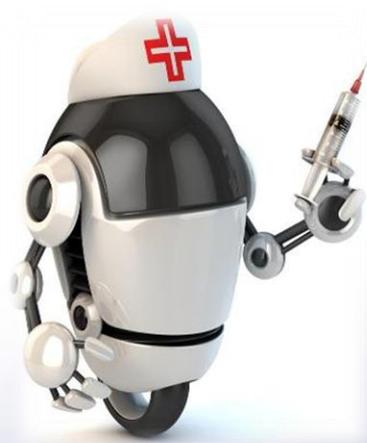
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- Energy / electricity for billions
  - Clean water & sanitation
  - Sustainable, greener development
  - Cities, bigger, more complex and smarter
  - Greater mobility
  - More diversity in the workforce, in economic drivers

# Will technology better the world?

40% doubt



An issue of  
public trust?



Grazie

谢谢

Merci

ありがとう

Gracias

Danke

Obrigado

شكرا

Thank you

