

ISO 16528 - 2007

A Brief Overview

**Association of Chief Inspectors Annual Meeting
Virtual Meeting
2020-08-24/25**



Origin and History ^(a)

- **ISO Standards and ISO/TCs**

- **ISO/TC11**

- 25 Members Countries and 33 Observer Countries
- Canada participates through TSO/TC11 CAC
- ISO 16528 developed under ISO TC11
- ISO/TC11 on “Standby”



Origin and History ^(b)

- **ISO/TC11 - one of the earliest TC established by ISO**
- **No consensus standards for decades**
- **Renewed energy of ISO/TC11 end of last century driven by**
 - increase globalization, international/free trade & movement of pressure equipment;
 - European Pressure Equipment Directive (97/23/EC) - now PED 2014/68/EU).



Origin and History ^(c)

- ISO 16528 first released in 2002
- Restructured into
 - ISO 16528 Part 1; and
 - ISO 16528 Part 2
- Both Parts were released in 2007
- Reviewed and reaffirmed in 2016



ISO 16528 – 2007*

Part 1

Boilers and Pressure vessels
Performance requirements

Part 2

Procedures for fulfilling the
requirements of ISO-16528-1

*August 2007, reviewed and reaffirmed in 2016



What is ISO 16528-1

- A “Standard” ?
- *“Performance-based” allowing “regional and national standards to co-exist, providing an approach that can accommodate technical innovations, existing regulatory frameworks and market needs”*



Some “standard” provisions

- Scope – boundaries and limits
- Terms and Definitions
- Units of measurements
- Duties and responsibilities – Users, Manufacturers, 3rd party Inspectors,
- Technical requirements – Materials, Design, Design factors, Examination, Welding, ...etc.
- Conformity assessment



An “unusual” provision

- **Clause 6** - Failure Mode

- List of common failure modes under Clause 6.2
- As a minimum, failure modes listed under Clause 6.3 shall be taken into account

- **Annex A** – Description of some common failure modes and limit states



Another “unusual” provision

- **Annex B** – Guidance on selection of standards
 - Not to define how to select a standard but to note issues to be considered
 - Not to recommend any specific standard
 - Optimal performance, safety, economy and compliance with regulations
 - Many issues including: types of standards, design methods, parties involved; operation; and cycles.



ISO 16528-2

- Process and procedure for application for assessment and registration
- Application form and tables
 - “For standards-issuing bodies to demonstrate that their standards fulfil the performance requirements of Part 1”



Applications for ISO Recognition

- Began in 2008
- CSA applied to ISO and in 2010, CSA B51 received ISO recognition as meeting the requirements of ISO16528-1



Standards received Recognition*

- AD 2000
- AS 1228
- ASME I, IV & VIII (Divs 1, 2, 3)
- CEN 1335-9
- CODAP 2005
- CSA B51
- JIS 8265 & 8201
- PD 5500



*That is all,
Folks !*