

SC6 Update

2012

BSEE 1st Annual Standards Workshop

SC6 Overview

- SC6 maintains standards, recommended practices and technical reports associated with wellhead and tree equipment and pipeline valves.
- SC6 Document Breakdown
 - 4 Product specifications
 - 4 Validation specifications
 - 2 Recommended practices for product operation and maintenance
 - 9 Technical reports
- Recent activities have been related to document maintenance, materials, design validation, manufacturing quality, field testing, repair/remanufacture and documentation.

State of SC6 Documents

Excludes Technical Reports and Bulletins

No.	Document	API Ed.	Ballot Activity	Current Activity	Future Activity
SC6 Documents Referenced in CFR					
6A	Spec: Wellhead and Christmas Tree Equipment	20	2624 & 2696, 2713	Welding Changes- Issued, Material Changes- Ballot Resolution,	TG recomentdation for initiating 21st edition at SC6 winter meeting
6AV1	Spec: Verification Test of Wellhead Surface Safety Valves and Underwater Safety for Offshore Service	1	2785	2ed Edition Ballot- Open	
14H	RP: Installation, Maintenance and Repair of Surface Safety Valves and Underwater Safety Valves Offshore	5	2715	6th Edition- Ballot Resolution	
6D	Spec: Pipeline Valves	23	2678	Addendum 3- Issued	2013 Reaffirmation Required
SC6 Documents Not Referenced in CFR					
6FA	Spec: Fire Test for Valves	3			
6FB	Spec: Fire Test for End Connections	3			
6FC	Spec: Fire Test for Valves with Automatic Backseats	4			2014 Reaffirmation Required
6FD	Spec: Fire Test for Check Valves	1			2013 Reaffirmation Required
6HT	RP: Heat Treatment and Testing of Large Cross Section and Critical Section Components	1	2536	2ed Edition- Ballot Resolution	
6A718	Spec: Nickel Base Alloy 718 (UNS N07718) for Oil and Gas Drilling and Production Equipment	2		Active Work Group	
11IW	Spec: Independent Wellhead Equipment	1	2625	Withdrawn, Closed	
6DSS	Spec: Subsea Pipeline Valves	2			2014 Reaffirmation Required
6DX	Std: Actuator Sizing and Mounting Kits for Pipeline Valves	1	2663	ISO Adoption- Issued	
6DR	RP: Repair and Remanufacture of Pipeline Valves	2	2482	Ballot Closed, Issued	
6H	Spec: End Closures, Connectors and Swivels	2	2692	Withdrawn, Closed	
New	Design Standard based on 2004 ASME Section VIII Division 2 Appendix 4 currently used in API 6A, 16A, 16C and 17D			Active Joint Work Group	
New	17TR8: SC6 Liaison with SC17 Committee HPHT Design			Active Joint Work Group	

SC6 Break-Out Session

API Spec 6A

Specification for Wellhead And Christmas Tree Equipment

Addendum 1

- Marking Changes: Corrections to marking requirements of equipment.

Addendum 2:

- Welding Changes: Defines “full Clad” and “partial clad”. Clarifies quality and inspection requirements for clad overlay.

Ballot Resolution:

- Material Changes: Clarifies and corrects requirements for material testing and ASME BPV welding and quality references. Adds furnace calibration after minor repairs.

API Spec 6A

(Continued)

Considerations for 21st Edition

- Shift away from 2004 ASME BPV reference and adopt new API document for design methods
- Valve Removal (VR) plug changes
- Incorporation of 6AV1 2ed edition changes
- Incorporation of API14 6th edition changes

API 6AV1

Verification Test of Wellhead Surface Safety Valves and Underwater Safety for Offshore Service

2nd Edition Ballot Work Includes

- Removal of PR1 (Class I) testing
- Maintains PR2 (Class II) testing procedure
- Reorganized into a chronological order
- Addition of Class III testing
 - Provides Limits on scaling and product family
 - Defines flow parameters for valves other than 2-1/16" 5k
 - Defines N2 test pressure relative to working pressure
 - Evaluation of stem seal, body and bonnet for leakage
 - Defines a more onerous viscosity of slurry make-up

API 14H

Recommended Practice for Installation, Maintenance and Repair of
Surface Safety Valves and Underwater Safety Valves Offshore

6th Edition Ballot Work Includes

- Change classification from RP to Standard
- Consolidate SSV and USV test procedures
- Added requirement for zero external leakage
- Expanded Failure reporting requirements
- Expand documentation requirements
- Eliminated offsite repair (Scope of API 6A Annex J)
- Minimum hold time
- Annex A, Rewritten and expanded to provide
 - Flow Diagram
 - Assumptions
 - 2 Examples
 - Nomenclature
 - Methodology
 - Data Validity
 - Procedure

API Spec 6D

Pipeline Valves

Addendum 2: Addition of new annexes

- Annex I: Requirements for Extended Hydrostatic Shell Test duration and Records Retention for Valves in Jurisdictional Pipeline Systems
- Annex J: Quality Specification Levels (QSL) for pipeline valves

Addendum 3: Clarifies testing requirements for back seat testing.

API Spec 6DSS

Subsea Pipeline Valves, 2ed (2009)

Specification for the design, manufacturing, testing and documentation of ball, check, check, gate and plug valves used for subsea application in offshore pipeline systems.

- Contains two standard quality levels, QL1 and QL2
- Higher quality and longer test times than API Spec 6D
- Provides for design and validation of hydrostatic pressure
- Material requirements for parts exposed to sea water

API 6DX

“Standard for Actuator Sizing and Mounting Kits for Pipeline Valves

New Standard

Requirements for mechanical integrity and sizing of actuators used on valves manufacture under API 6D/ISO 14313

- Applicable to all types of electric, pneumatic and hydraulic actuators, inclusive of mounting kit, installed on pipeline valves.
- Adoption of ISO 12490

Withdrawn Standards

API Standard 11 IW:

Specification for Independent Wellhead Equipment

- Provides requirements for performance, design, interchangeability, materials, testing, inspection, welding, marking, handling, storage and shipping

API Standard 6H:

Specification on End Closures, Connectors and Swivels

- Specification for pipeline closures, connectors, couplings, swivels and split mechanical fittings

Additional Activities

New: API Design document for standard service

- Joint Committee Work Item, API 6A, 16A, 16C and 17D
- Based on 2004 ASME Section VIII Division 2 Appendix 4
- Maintains SC6 design methods, without referencing a revised document

New: API Design document for HPHT service

- Joint Committee Work Item, API 17TR8 , API 6A, 16A and 17D

API Spec 6A718: Nickel Base Alloy 718 (USN N07718)

- Work Item; Addition of high strength grades of alloy 718
- Work Item; Addition of other nickel base alloys

API RP 6HT:Heat Treatment and Testing of Large Cross Section and Critical Section Components

- 2nd edition, ballot resolution; provides additional processing guidance