API 16C Choke and Kill Equipment

SC 16 Winter Update

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API 16C 2nd Edition

- Published – March 2015
- Effective monogram date – Sept. 28, 2015
- Since publish – 3 errata and one addendum have been issued
- 16C task group have begun process of a massive overhaul the document
- BSEE request for use of 20E & 20F as bolting requirements
- API Standard 53 being revised (remove equipment specification requirements)
- Industry gaps
  - MGS
  - Electric Actuators
  - SS C&K valves
  - Flex Loops
  - LP testing
- Change of strategy – reduced scope of changes
  - The objective of the 3rd edition is to address BSEE, industry gaps and S53
  - Add clarity to the document for ease of use
API 16C – 3rd Edition development

- Expect to provide 3rd edition draft to API for ballot this quarter
  - Clarify test requirements
  - Update Storing and Shipping
  - Develop LP test requirements
  - Define fluid cushion requirements
  - Generate electric actuator requirements
  - Include bolting requirements (20E / 20F)
  - Draft specifications for mud gas separator
  - C&K manifold assembly specifications
BSEE Bolting Request

• Align with 16 series documents for bolting requirements as applicable to C&K Equipment

• New text and a table to provide the user requirements based on function and operation type
Industry Gaps

- MGS
- Electric Actuators
- SS C&K valves
- Flex Loops
Add to document clarity

• Storing and Shipping – Section 9
• Address text requested for interpretation
• Clarify test requirements
TG Progress

- Ready documents
  - LP testing
  - Fluid cushion
  - Storing and shipping
  - Electric actuators
  - Clarified test requirements
  - MGS
Issue worth hi-lighting

The definition of equivalent design

3.1.28

**equivalent design and construction** *(flexible lines)*

Design and construction is regarded as equivalent if it is based on the same design methodology and stress criteria, same number of reinforcing layers, same nonmetallic materials, but physical size of reinforcement (e.g. size of tendon, pressure armor, or reinforcing cable) may be different for different flexible line sizes and pressure ratings.

Questions to the group:

1. Does the requirement for the same # of reinforcing layers impact performance more than the thickness of each layer?
2. Does reducing the # of layers but not changing the layer size (thickness) impact the performance?

Proposed definition for 3rd edition:

**Equivalent Design** – Manufacture using the same material, processes and procedures for construction. Additionally, as it relates to hoses, equivalent design will also include use of the same coupling materials and attachment method.

Request from the industry: During the 16C 3rd edition ballot, please provide your position regarding this definition
What’s Next

- Submit draft 3rd ed. to API end of Q1 for ballot
- Comment resolution