SC 16A Drill through equipment

API 2016 Summer Standards Meeting
Committee on Standardization of Oilfield Equipment
and Materials

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Current document
API 16A Drill through Equipment - Third edition -

API 16A Drill through Equipment Fourth edition
- Extensively rewritten
- Third Ballot 360 comments
- Resolving comments
- Reballot in July
- Publish before the end of the year
Major additions and changes

Bolting

- 16A Adopts 20E and 20F As bolting standard for all pressure containing, pressure retaining and pressure controlling bolting
- Created BSL (bolting service levels) Table for land and offshore applications
- Sets maximum 34 Rockwell C hardness for pressure containing, retaining and controlling Bolting
- Utility bolting – all other bolting
Major additions and changes

Performance requirements for equipment

- Created a Performance requirement system
  Qualification testing PR1 And PR2
- PR1 Is basically 16A 3rd Edition qualification testing
- PR2 is enhanced qualification testing
- PR2 sets Minimum requirements to qualify equipment
Major additions and changes

Shearing Changes and Additions

- Minimum pipe size/grade increased
- Diametrical design range test added to verify the range of pipes that can be sheared.
- Side load shearing test to verify what side load the shear rams can resist
- 16TR2 Protocol for shearing - data base
**Major additions and changes**

Elastomer ratings

- Revised the testing and rating protocol to add continuous elevated operating temperature
- PR1 will be rated Low temperature and High Temperature
- PR2 will be rated Low temperature (3 cycles), Elevated Continuous Operating temperature (10 Cycles), High temperature (1 hour)
Major additions and changes

Well head connectors

Added requirements (PR2) to the capacity chart. Chart to include

- Rated Capacity with a design factor of 1.5
- Extreme capacity with a design factor of 1.2
- Survival capacity with a design factor of 1.0
Major additions and changes

Pressure controversy PSIA, PSIG, PSID

- Added definitions
- Added a statement requiring a design verification analysis when differential pressures exist.

Removed Repair Annex

- 16 AR has been created to address repair and remanufacture issues
API 16A 5th edition new topics include:

- Enhanced shearing requirements / expanded shear testing
- HP/HT Annex
- Closing on flow
- Differential pressure
- Closing on odd shapes
- Well head connectors (more)
- 5 Year marking
- Elastomer QA requirements
- Bop instrumentation