

**THIS BALLOT IS FOR A PROPOSED AMENDMENT TO CURRENT API RP 16ST
SHEAR-BLIND RAM TEXT**

As published in 2nd Edition of API RP 16ST (February 2021)

ISSUES TO BE ADDRESSED:

Sections 3, 4, and Annex E: In discussions with Users and Service Vendors after publication of the 2nd Edition of API RP 16ST, a question was raised as to whether the “Dedicated SBR” needed to replicate the type of cut on the lower end of the CT workstring as the “Standard SBR”. Specifically, the question asked is whether the “Dedicated SBR” needs to:

- 1. provide an opening in the lower cut end of at least 30% of the original ID cross-sectional area to facilitate subsequent through-tubing pumping and well killing operations.*
- 2. The geometry of the SBR cut should also enable fishing operations.*

The logic applied to this issue follows that the “Standard SBR” is used within the “working” well control stack arrangement to conduct well control circulation kill operations where time and conditions permit. Where these operations fail to return control of the well or emergency response requires immediate closure of the wellbore (10 seconds or less), the “Dedicated SBR” is to be closed to safely secure the well.

As the “Dedicated SBR” is installed as close to the wellhead as possible, there is no logical need for the lower cut end of the CT workstring to have a given opening or geometry as it will likely fall into the wellbore (no support rams installed below) and a circulation kill is not attempted below this closed SBR.

Sections 8, and 9: During the initial development of **Section 8 (Choke Manifolds and Choke Lines)** and **Section 9 (Kill Lines)**, the Task Group worked to assess the typical plumbing sizes for the 2" 15M piping offered in swing joint, loops and swivels. In this review, the reported ID for the typical service piping was 1.875" and the discussion moved to adopting the minimum ID of 1.875" to minimize the chance for plugging at the throat immediately beyond the 2" valve where the flow path enters into the piping.

It was recently brought to our attention that there is a 2" 15M standard piping as having a minimum ID of 1.750" (plug valves and service piping). As such, the recommendation of a minimum ID of 1.875" is inappropriate as a prescribed size for use.

Date of Issue: XXXX 2022

Affected Publication: API Recommended Practice 16ST, Coiled Tubing Well Control Equipment Systems, Second Edition, February 2021.

Addendum 1

3.1.83: *The definition shall be changed as indicated by the red text:*

3.1.83

shear-blind ram (dedicated)

The combination ram assembly in the well control stack which is designed to shear the coiled tubing and any spoolable components inside the coiled tubing (including wire, tubing, and/or cable) and seal the wellbore in a single operation. The combination shear-blind ram assembly in the well control stack is installed as close to the wellhead as possible and operated through the dedicated accumulator circuit on the well control closing unit.

NOTE The dedicated shear-blind ram blade design may or may not provide an opening or specific geometry of the lower cut end of the CT workstring.

4.3.5.2: *Shall be changed as indicated by the red text:*

4.3.5.2 The **standard** SBR shall be capable of a minimum of two shear and seal operations for the CT workstring OD size, wall thickness and grade in service. The SBR cut shall provide an opening in the lower cut end of at least 30% of the original ID cross-sectional area to facilitate subsequent through-tubing pumping and well killing operations. The geometry of the SBR cut should also enable fishing operations.

4.3.5.3: *Shall be added with subsequent subsections renumbered:*

4.3.5.3 The dedicated SBR shall be capable of a minimum of two shear and seal operations for the CT workstring OD size, wall thickness and grade in service. The condition of the lower cut end of the CT workstring does not require an opening or special geometry when cut with the dedicated SBR.

4.3.5.3: *Shall be changed as indicated by the red text:*

4.3.5.4 The **standard SBR and dedicated SBR** shall be capable of shearing the CT when the tubing is secured within a slip or pipe-slip ram located below the SBR.

4.4.4.1: *Shall be changed as indicated by the red text:*

4.4.4.1 The spacer spools, adapter spools, and lubricators shall meet or exceed all requirements stipulated in API 6A, as well as 4.2.3 and 4.2.5, with fasteners and bolting conforming with the requirements of 4.2.5.4.

4.4.5: *Shall be changed as indicated by the red text:*

4.4.5 The flow tee (seen in API Spec 6A) or flow cross (seen in API Spec 16A) is typically located below the standard well control stack configuration. If a flow tee or flow cross is installed, the flanged flow tee or flanged flow cross shall be in accordance with API 6A and fasteners/bolting shall be in conformance with the requirements of 4.2.5.4.

E.1.3: Shall add item j) as indicated by the red text:

E.1.3 j) Dimensions and description of the lower cut end on the CT specimen to confirm that the ID opening is greater than or equal to 30% of the original opening of the tube.

E.2.8: Shall add item k) and item l) as indicated by the red text:

E.2.8 k) Dimensions and description of the lower cut end on the CT specimen to confirm that the ID opening is greater than or equal to 30% of the original opening of the tube for the “Standard SBR”.

E.2.8 l) Dimensions and description of the lower cut end on the CT specimen for the dedicated SBR.

8.2 f): Shall be changed as indicated by the red strikethrough:

8.2 Choke Line Installation

f) The minimum recommended size for choke lines is 2-inch nominal diameter., ~~with an ID not less than 1.875 inches.~~

9.2 e): Shall be changed as indicated by the red strikethrough:

9.2 Kill Line Installation

e) The minimum recommended size for kill lines is 2-inch nominal diameter., ~~with an ID not less than 1.875 inches.~~