

Date of Issue: May 2018

Affected Publication: API Specification 16A, *Specification for Drill-through Equipment*, Fourth Edition, April 2017

Errata 3

Section 4.3.4.3, Table 12:

- The third row of the table should read:

79 (3 ¹ / ₈)	79.40 (3.125)	160.32 (6.312)	29.60 (1.166)	125.40 (4.938)	59.9 (2.36)	BX-154	4
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Section 4.3.4.3, Table 13:

- The fourth row of the table should read:

78 (3 ¹ / ₁₆)	77.80 (3.063)	193.68 (7.625)	30.40 (1.197)	158.75 (6.250)	60.4 (2.38)	BX-154	5
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Section D.2.2:

- The second paragraph should read:

The manufacturer shall communicate any design changes resulting from a malfunction, or failure history, to every known equipment owner of the affected equipment. That notice shall be within 30 days after the design change.

Date of Issue: November 2017

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Errata 2

Section 5.3.5.4:

- In the newly inserted section 5.3.5.4 from Errata 1, replace

1 mm ($\frac{1}{4}$ in.)

with

3 mm ($\frac{1}{8}$ in.)

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Errata 1

Section 4.3.4.2, Table 8:

- The left-most cell in the fourth row should read:

Tolerance

mm

- The right-most cell in the fourth row should read:

-1.52

Section 4.3.4.2, Table 9:

- The right-most cell in the fourth row should read:

-1.52

Section 4.3.4.2, Table 9:

- Remove stray vertical line on bottom right.

Section 4.3.4.2, notes below Figure 4:

- The notes below the figure should read as follows:

NOTE 1 For 13.8 MPa (2000 psi) and 20.7 MPa (3000 psi) type 16B blind hubs, refer to Table 8 and Table 9 for hub dimensions, ring groove dimensions, and tolerances. If corrosion-resistant inlay is used in ring grooves, refer to Table 10 for rough machining detail.

NOTE 2 For 34.5 MPa (5000 psi), 69.0 MPa (10,000 psi), 103.5 MPa (15,000 psi), and 138.0 MPa (20,000 psi) type 16BX blind hubs, refer to Table 12, Table 13, Table 14, or Table 15 for hub dimensions, ring groove dimensions, and tolerances. If corrosion-resistant inlay is used in ring grooves, refer to [API 6A](#) for rough machining details.

NOTE 3 The counterbore of a type 16B or type 16BX blind hub is optional. If the counterbore is used, the depth of the counterbore cannot exceed the dimension and tolerance of E or C as shown in the appropriate ring groove dimension table.

^alength of chamfer on optional counterbore "B"

Section 4.3.4.2, Figure 5:

- The following footnote should be added below the figure:

^a Allow 3.2 mm (¹/₈ in.) or greater for final machining of overlay.

Section 4.3.4.2:

- Delete the existing NOTE 2 and renumber NOTE 3 to NOTE 2 to read:

NOTE 2 Other weld preparations may be employed when the strength of the overlay alloy equals or exceeds the strength of the base metal.

Section 4.3.4.3, Table 13:

- The right-most cell in the second-from-bottom row should read:

-1.52

Section 4.3.4.3, Table 15:

- The right-most cell in the second-from-bottom row should read:

-1.52

Section 4.4.2.1:

- NOTE 1 should read:

NOTE 1 Validation testing may be performed with test fixtures.

Section 4.4.3:

- Equations 2 and 3 should read:

$$S_a \leq 0.83 S_y \text{ and}$$
$$S_b \leq 1.0 S_y$$

Section 4.4.3:

- Replace the last line in the section with the following:

S_y is the bolting material's specified minimum yield strength.

Section 4.4.5:

- Replace the sixth paragraph with the following:

The capacity chart shall be based on the capabilities of the connector assembly and the test wellhead, mandrel, or test stump; the end connection may be excluded.

Section 4.7.2.2.3:

- Replace the first paragraph with the following:

Blind shear rams shall be tested in accordance with Table 22. The indicated tests shall be performed and the minimum performance criteria for the applied PR level shall be achieved.

Section 4.7.3.3.2:

- Delete Step “f.”

Section 4.7.3.5.2:

- Delete Step “h.”

Section 4.7.3.7.2:

- Change Step “d” to NOTE 1 under Step “c” and re-letter the subsequent steps “d,” “e,” “f,” and “g,” respectively.

Section 4.7.3.7.2:

- The new Step “g” (re-lettered from Step “h”) should read as follows:

Repeat the above steps for two additional samples of drill pipe. Ram packers may be replaced as necessary.

Section 4.7.3.7.2:

- Reassign the NOTE under Step “g” as NOTE 2.

Section 4.7.3.9.2:

- Delete Step “g.”

Section 4.7.3.9.3:

- The third bullet should read as follows:
 - Load at which the leak developed or 600,000 lb for 5 in. and larger pipe, or 450,000 lb for pipe smaller than 5 in., whichever is less;

Section 4.7.3.9.3:

- Add a new bullet to the list as follows:
 - Document any wear or deformation of the ram blocks, simulated tool-joint, and the metal inserts of the ram packer.

Section 4.7.3.10.2:

- Step “d” should read as follows:
 - d) Bleed the wellbore pressure to zero psi, increase the hang-off load incrementally, and repeat Step b through Step c for each load increment until the minimum performance criteria of tables 20 and 21 are met.

Section 4.7.3.18.4:

- The third bullet should read as follows:
 - The number of flexing cycles required to achieve full closure at room temperature for the Open Hole pressure test;

Section 4.7.3.19.4:

- The third bullet should read as follows:
 - The number of flexing cycles required to achieve full closure at room temperature for the Open Hole pressure test;

Section 4.7.3.21.3:

- Add a blank line between the last two bullets.

Section 4.7.3.24.2:

- The second paragraph should read as follows:

For 279 mm (11 in.) and larger BOPs, install a 127 mm (5 in.) OD test mandrel with a simulated 18° API 6 ⁵/₈-inch tool-joint profile; for 228 mm (9 in.) and smaller, install an 88.9 mm (3 ¹/₂ in.) OD test mandrel with a simulated 18° API 5-inch tool-joint profile.

Section 4.7.3.29.2:

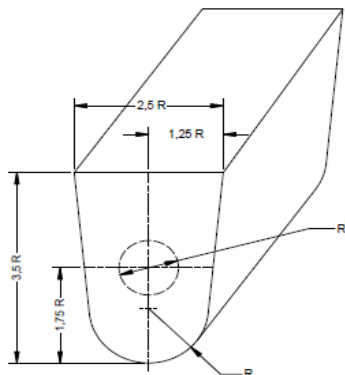
- Step “c” should read as follows:
 - c) Close the BOP with the manufacturer’s recommended closing pressure. Apply the full rated working pressure of the BOP and hold for a minimum of 60 minutes after pressure stabilization.

Section 4.7.3.31.2:

- Step “g” should read as follows:
 - g) Repeat Steps b through f using only the secondary unlock system.

Section 5.3.5.2.3, Figure 9c:

- Insert new right-most figure:



Section 5.3.5.4:

- Insert new section 5.3.5.4:

5.3.5.4 Tensile and Impact Testing

When tensile and/or impact test specimens are required, they shall be removed from a QTC after the final QTC heat-treatment cycle. It is allowable to remove tensile and impact specimens from multiple QTCs as long as the multiple QTCs have had the same heat-treatment cycle(s).

Tensile and impact specimens shall be removed from the QTC such that their longitudinal centerline axis is wholly within the center core $\frac{1}{4}T$ envelope for a solid QTC or within 1 mm ($\frac{1}{4}$ in) of the mid-thickness of the thickest section of a hollow QTC (see Figure 9).

For QTCs larger than the dimensions specified in 5.3.5.2.3, the test specimens need not be removed from a location farther from the QTC surface than would be required if the specified QTC dimensions were used.

When a sacrificial production part is used as the QTC, the test specimens shall be removed from a section of the part meeting the dimensional requirements of the QTC for that production part as described in 5.3.5.2.

- Renumber the section title from the existing “5.3.5.4 Hardness Testing” to “5.3.5.5 Hardness Testing.”

Section 7.5.1.8.3:

- Replace the second paragraph with the following:

Surfaces not wetted by well fluids and non-sealing surfaces shall be examined in accordance with the manufacturer's written specification.

Section 7.5.1.9.2:

- Replace with the following:

All accessible surfaces wetted by the well fluid and all accessible sealing surfaces of each finished part shall be inspected after final heat treatment and after final machining operations by either magnetic particle (MP) or liquid penetrant (LP) methods.

Section 7.5.1.9.3:

- Replace with the following:

All accessible surfaces wetted by the well fluid of each finished part shall be inspected after final heat treatment and after final machining operations by the LP method.

Section 7.5.1.9.4:

- Change the first sentence to read:

All accessible surfaces wetted by the well fluid of each finished part shall be inspected after final heat treatment.

Section 7.5.1.9.5.1:

- Replace the first paragraph with the following:

MP examination shall be in accordance with procedures specified in [ASTM E709](#). Prods are not permitted on surfaces wetted by the well fluid or sealing surfaces.

Section 7.5.1.13.2:

- Replace the first paragraph with the following:

Methods and acceptance criteria for MP and LP examinations shall be the same as in 7.5.1.9.5, except:

Section 7.5.1.17, Table 38:

- Change the title of the table to:

Table 38— Inclusion Criteria

Section 7.5.6:

- Change the section title to read:

7.5.6 All Other Drill-through Equipment Not Covered in 7.5.1 Through 7.5.5

Section 7.5.7.8.5:

- Replace the fourth paragraph with the following:

Lock and unlock the hydraulic connector at least six times to the full stroke length using the manufacturer's recommended operation pressure. Repeat six locking and unlocking cycles using the secondary unlock system (using the manufacturer's recommended operating pressure). This test is to determine if any hydraulic seals were damaged during installation.

Section 8.3.2, Table 41:

- Replace footnote "c" with the following:

^c If the ring groove is overlaid with corrosion-resistant material, it is marked in accordance with Section 8.2.1.3.

Section B.2:

- Replace $\pm 13\text{ }^{\circ}\text{C}$ with $\pm 14\text{ }^{\circ}\text{C}$.

Section B.3.3, seventh paragraph:

- Replace $\pm 13\text{ }^{\circ}\text{C}$ with $\pm 14\text{ }^{\circ}\text{C}$.

Section G.3, Table G.1:

- The following row was added to the table:

1,000	1,005	6.894757	6.929231	0.01	6.89	6.92
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- The bottom two rows of the table should read as follows:

25,000	25,125	172.368925	173.230770	0.05	172.35	173.20
30,000	30,150	206.842710	207.876924	0.05	206.85	207.85

Section G.4, Table G.2:

- The bottom two rows of the table should read as follows:

26 ³ / ₄	26.750	26.781	679.450	680.2374	0.05	679.45	680.20
30	30.000	30.031	762.000	762.7874	0.05	762.00	762.75

Section G.5:

- Add:

G.5.6 Mass

1 pound-mass (lb) = 0.4535924 kilograms (kg).

Specification for Drill-through Equipment

API SPECIFICATION 16A
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ERRATA 3, MAY 2018
ERRATA 2, NOVEMBER 2017
ERRATA 1, AUGUST 2017
ADDENDUM 1, OCTOBER 2017



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