

Specification for Drill-through Equipment

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**ISO 13533:2001 (Modified), Petroleum and
natural gas industries—Drilling and production
equipment—Drill-through equipment**



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API Foreword

This standard shall become effective on the date printed on the cover but may be used voluntarily from the date of distribution.

Standards referenced herein may be replaced by other international or national standards that can be shown to meet or exceed the requirements of the referenced standard. Manufacturers electing to use another standard in lieu of a referenced standard are responsible for documenting equivalency.

This American National Standard is under the jurisdiction of the API Subcommittee on Drilling Well Control Systems. This standard is a modified adoption of the English version of ISO 13533:2001. ISO 13533:2001 was prepared by Technical Committee ISO/TC 67, Materials, equipment and offshore structures for petroleum and natural gas industries, SC 4, Drilling and production equipment.

In this American National Standard certain technical modifications and corrections to misprints in the ISO document have been made. These technical modifications and corrections have been incorporated directly into this API adopt-back version. The modifications to the text of the ISO standard are shown with dashed underline. A complete list of these modifications and corrections can be found in Annex J.

In this American National Standard the following editorial changes have been made throughout the document: substitution of "American National Standard" for "International Standard".

Please note that because of the nature and number of changes between the 2nd and 3rd editions it was not possible to mark the changes between the editions.

This version of the 3rd edition contains supplement/errata items that are noted in Annex J. Please note that Annex I, API Monogram, has been amended to clarify what equipment is eligible for the repair/remanufacture monogram.

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Suggested revisions are invited and should be submitted to the API, Standards Department, 1220 L Street, NW, Washington, DC 20005, or by email to standards@api.org.

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ISO Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 13533 was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum and natural gas industries*, Subcommittee SC 4, *Drilling and production equipment*.

Annexes A and B form a normative part of ISO 13533. Annexes C, D, E, F, G and H are for information only.

Petroleum and natural gas industries — Drilling and production equipment — Drill-through equipment

1 Scope

This American National Standard specifies requirements for performance, design, materials, testing and inspection, welding, marking, handling, storing and shipping of drill-through equipment used for drilling for oil and gas. It also defines service conditions in terms of pressure, temperature and wellbore fluids for which the equipment will be designed.

This American National Standard is applicable to and establishes requirements for the following specific equipment:

- a) ram blowout preventers;
- b) ram blocks, packers and top seals;
- c) annular blowout preventers;
- d) annular packing units;
- e) hydraulic connectors;
- f) drilling spools;
- g) adapters;
- h) loose connections;
- i) clamps.

Dimensional interchangeability is limited to end and outlet connections.

Typical equipment defined by this American National Standard is shown in Figures 1 and 2; recommendations for failure reporting are outlined in annex F.

This American National Standard does not apply to field use or field testing of drill-through equipment.