



SLOVENSKI STANDARD
SIST EN ISO 13533:2004

01-maj-2004

Industrija za predelavo nafte in zemeljskega plina - Vrtalna in proizvodna oprema - Oprema za prevrtavanje (ISO 13533:2001)

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

Erdöl- und Erdgasindustrie - Bohr- und Fördereinrichtungen - Drill-through equipment (ISO 13533:2001)

Industries du pétrole et du gaz naturel - Equipements de forage et de production - Equipements a travers lesquels s'effectue le forage (ISO 13533:2001)

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Ta slovenski standard je istoveten z: EN ISO 13533:2001

ICS:

75.180.10	Oprema za raziskovanje in odkopavanje	Exploratory and extraction equipment
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 13533

December 2001

ICS 75.180.10

English version

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

Industries du pétrole et du gaz naturel - Equipements de
forage et de production - Equipements à travers lesquels
s'effectue le forage (ISO 13533:2001)

Erdöl- und Erdgasindustrie - Bohr- und Förderanlagen
- Drill-through equipment (ISO 13533:2001)

This European Standard was approved by CEN on 17 November 2001.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This document (EN ISO 13533:2001) has been prepared by Technical Committee ISO/TC 67 "Materials, equipment and offshore structures for petroleum and natural gas industries" in collaboration with Technical Committee CEN/TC 12 "Materials, equipment and offshore structures for petroleum and natural gas industries", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 13533:2001 has been approved by CEN as EN ISO 13533:2001 without any modifications.

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NOTE Normative references to International Standards are listed in Annex ZA (normative).

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Annex ZA (normative)

Normative references to international publications with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 6506-1	1999	Metallic materials - Brinell hardness test - Part 1: Test method	EN ISO 6506-1	1999
ISO 6507-1	1997	Metallic materials - Vickers hardness test - Part 1: Test method	EN ISO 6507-1	1997
ISO 6508-1	1999	Metallic materials - Rockwell hardness test - Part 1: Test method (scales A, B, C, D, E, F, G, H, K, N, T)	EN ISO 6508-1	1999
ISO 10423	2001	Petroleum and natural gas industries - Drilling and production equipment - Wellhead and christmas tree equipment	EN ISO 10423	2001
ISO 11961	1996	Petroleum and natural gas industries - Steel pipes for use as drill pipe - Specification	EN ISO 11961	1996

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INTERNATIONAL
STANDARD

ISO
13533

First edition
2001-12-01

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

*Industries du pétrole et du gaz naturel — Équipements de forage et de
production — Équipements à travers lesquels s'effectue le forage*

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Reference number
ISO 13533:2001(E)

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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 this International Standard. Annexes C, D, E, F, G and H are for information only.

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ISO 13533:2001(E)**Introduction**

This International Standard is based on API Specification 16A, second edition, 1 June 1998.

This International Standard is intended to provide for the availability of safe and functionally interchangeable drill-through equipment utilized in the petroleum and natural gas industry.

Users of this International Standard should be aware that further or differing requirements may be needed for individual applications. This International Standard is not intended to inhibit a vendor from offering, or the purchaser from accepting, alternative equipment or engineering solutions for the individual application. This may be particularly applicable where there is innovative or developing technology. Where an alternative is offered, the vendor should identify any variations from this International Standard and provide details.

For the convenience of users of this International Standard, annex H provides a list of those normative International Standards cited in clause 2 with national or regional standards which have been found mutually applicable in the context of the requirements in the text. The user may optionally apply the national or regional standard in the context of the requirement for which the International Standard is cited.

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

1 Scope

This International 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 International 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.

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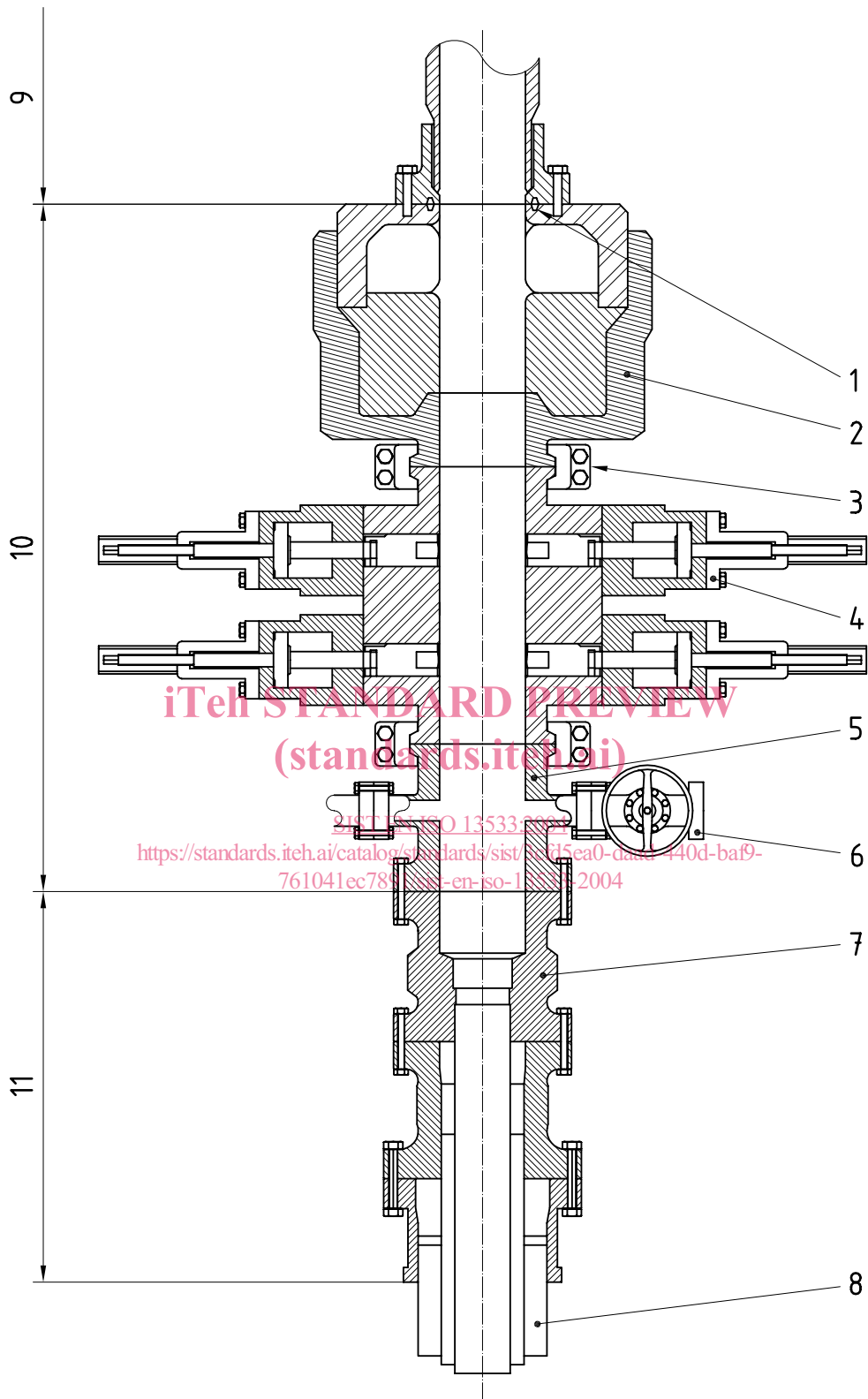
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Dimensional interchangeability is limited to end and outlet connections.

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

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

**Key**

- | | | | |
|---|------------------------|----|-----------------------------------|
| 1 | Ring gaskets ISO 10423 | 7 | Wellhead |
| 2 | Annular BOP | 8 | Casing |
| 3 | Clamp | 9 | End and outlet connections |
| 4 | Ram BOP | 10 | Drill-through equipment ISO 13533 |
| 5 | Drilling spool | 11 | Wellhead equipment ISO 10423 |
| 6 | Valve ISO 10423 | | |

Figure 1 — Typical surface drill-through equipment

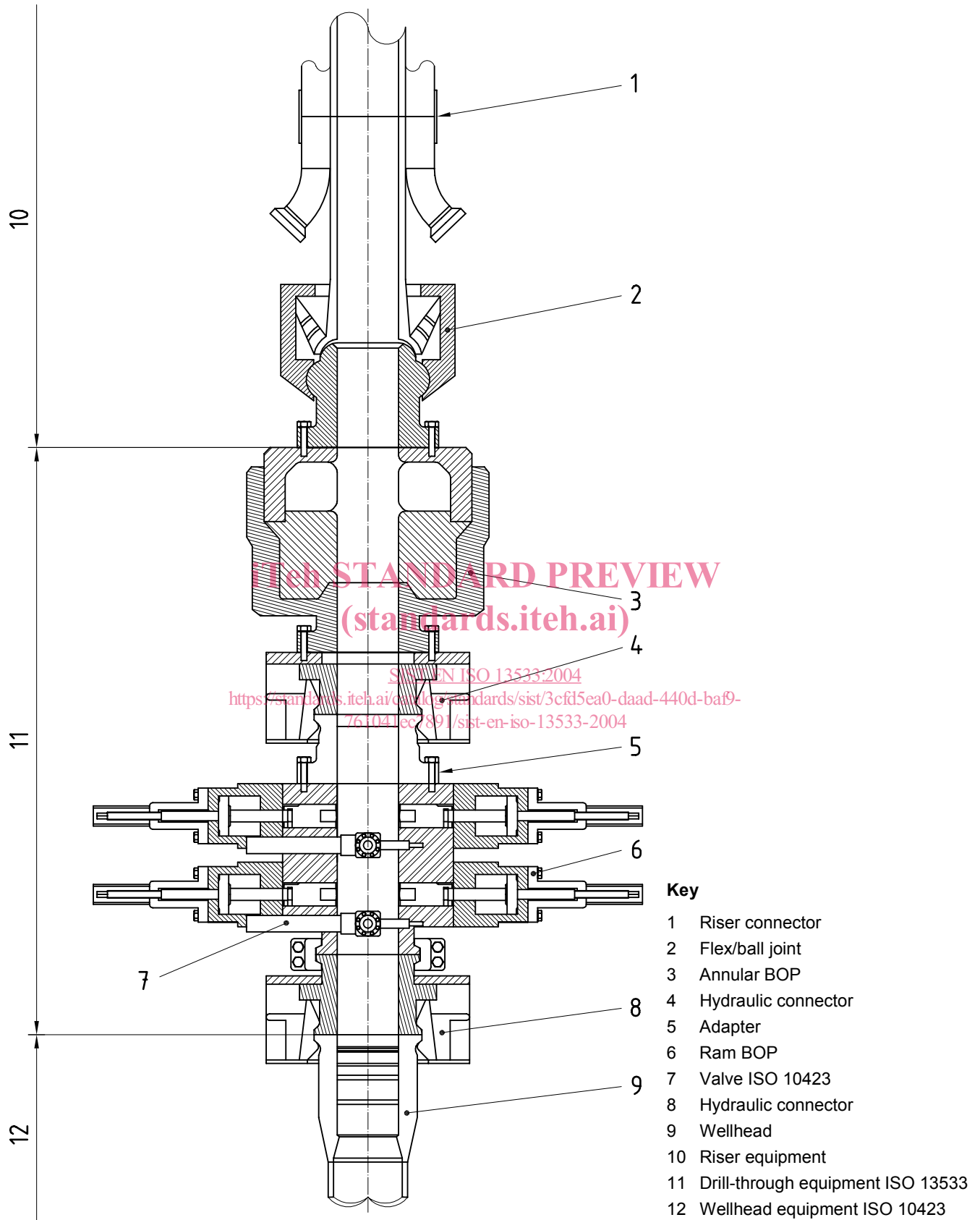


Figure 2 — Typical subsea drill-through equipment