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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 22513-2023

Replacing GB/T 22513-2013

**Petroleum and natural gas drilling and production equipment -
Wellhead and tree equipment**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1. Structure and Drafting Rules of Standardization Documents"

Drafting.

This document replaces GB/T 22513-2013 "Wellhead devices and Christmas trees for drilling and production equipment in the oil and gas industry" and is consistent with

Compared with GB/T 22513-2013, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) Added some definitions (see Chapter 3);
- b) Added material code 95K (see Chapter 7);
- c) Changed the content of quality control, and compiled the factory acceptance test into a separate chapter (see Chapter 11, Chapter 12, 2013 version of Chapter 7);
- d) Added some flange and valve specifications (see 15.2);
- e) Added requirements for valve stems (see 15.12.2.1);
- f) Added requirements for hardening process of valve sealing mechanism (see 15.12.3.4);

- g) The fracturing head multi-pass is added (see 15.20);
- h) The content of repair and remanufacturing has been deleted (see Chapter 11, Appendix N of the 2013 edition).

Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents.

1 Scope

This document specifies the performance, design, materials, welding, bolting, isolation mechanisms,

Accessories, pressure boundary penetrations and end connections, quality control, factory acceptance testing, marking, storage and transportation, installation special requirements and records

Require.

This document applies to the specific equipment listed below.

- a) Pipe plugs, connectors and gaskets as defined in this document.
 - 1) Flanged end and outlet connections (see 15.2);
 - 2) Gasket ring (see 15.3);
 - 3) Threaded end and outlet connections (see 15.4);
 - 4) tee, four-way and fracturing head multi-way (see 15.5, 15.20);
 - 5) Pipe blockage (see 15.6);
 - 6) Disassemble and plug the valve (see 15.7);
 - 7) Top connection device of Christmas tree (see 15.8).
- b) Non-standard pipe plugging and connecting devices.
 - 1) Non-standard Christmas tree top connection device (see 15.8);
 - 2) Conversion connection device (single stud or multi-stud, single-stage or multi-stage) (see 15.9);
 - 3) Other end connection devices (see 15.10);
 - 4) Reducing connecting cross and transition cross (see 15.11).
- c) Valve.
 - 1) Single valve (see 15.12);
 - 2) Multi-pipe valve (see 15.12);

- 3) Drive valve (see 15.12);
- 4) Driver preparation valve (see 15.12);
- 5) Check valve (see 15.12);
- 6) Back pressure valve (see 15.13).
- d) Casing hanger and tubing hanger.
 - 1) Spindle type hanger (see 15.14);
 - 2) Slip type hanger (see 15.14).
- e) Casing head shell and oil (casing) pipe head cross (see 15.15).
- f) Throttle valve (see 15.16).
- g) Drive (see 15.17).
- h) Safety valves, landing shut-off valves and their drivers (see 15.18).
 - 1) Ground safety valve assembly, driver preparation valve, driver;
 - 2) Underwater safety valve assembly, driver preparation valve, driver;
 - 3) Log in the shut-off valve assembly, driver preparation valve, and driver.
- i) Christmas trees (see 15.19).