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

GB/T 13922-2011

Replacing GB/T 13922.1-1992

Performance testing of water treatment equipment

水处理设备性能试验

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Quarantine;
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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 13922.1-1992 "General Performance Test water treatment equipment", GB/T 13922.2-1992 "Water is provided Preparation of the ion exchange performance test equipment ", GB/T 13922.3-1992" water treatment equipment filter performance test equipment ", GB/T 13922.4- 1992 "water treatment equipment performance test deaerator." This standard GB/T 13922.1-1992, GB/T 13922.2-1992, GB/T 13922.3-1992, GB/T 13922.4- 1992 were integrated, compared with the 1992 version, the main changes are as follows:

- Additions and modifications to some normative references;
- Additions and modifications to the terms and definitions;
- Chemical modification of some measure;
- Increased device performance test by the ion exchange "test conditions";
- Increase in device performance test by the ion-exchange in the exchange capacity, regenerant consumption, water consumption from renewable rate, in addition to carbon is carbon removal efficiency Determination of rate requests and calculation formulas;
- Filtration equipment test subjects increased efficiency fiber filters and iron removal filtration equipment;
- Increased backwash filtration equipment measuring intensity;
- Oxygen equipment test objects defined as thermal deaerator;
- DO direct reference measurement method GB/T 12157, remove the GB/T 13922.4-1992 in Chapters 6 and 7 of content;
- Oxygen equipment test requirements specified in a variety of hydrophobic not participating in the trial, simplifying the deaerator heat and fluid performance measurement and meter Calculation formula. This standard by the National Standardization Technical Committee of the boiler pressure vessel (SAC/TC262) and focal points. This standard is

drafted by: China Association boiler water treatment. Participated in the drafting of this Standard. China Special Equipment Inspection and Research Institute, Ningbo Special Equipment Inspection and Research Institute, located in Guangzhou City special pressure Preparation and Testing Institute, Wuxi Lianhua State Optical Station Engineering Co., Ltd., Jiangsu Institute of Special Equipment Safety Supervision and Inspection Branch, Changzhou, Wenzhou City Run New Machinery Manufacturing Co., Ltd. The main drafters of this standard. Wang Jiao Ling, Zhou Ying, Yang Lin, Xu Moon Lake, Hu Yue new, Wu Xiaorong, Wang Ting. This standard replaces the standard for the previous editions.

--- GB/T 13922.1-1992, GB/T 13922.2-1992, GB/T 13922.3-1992, GB/T 13922.4-1992.
Water treatment equipment performance test

1 Scope

China's national standard for the performance testing of water treatment equipment - the filters, ion exchange plant, thermal deaerators and related equipment used to prepare water for boilers and for industrial processes. It specifies the requirements for the performance testing of that equipment, the measurements to be made and the content of the test report. The document exists because water treatment plant is bought on guarantees that are unusually hard to verify. A supplier undertakes that a plant will produce water of a stated quality, at a stated flow, for a stated run length between regenerations, at a stated consumption of chemicals - and every one of those depends on the raw water, which varies, on the operating conditions, which drift, and on the state of the media, which changes as the plant is used. Without a prescribed test method a performance dispute has no resolution, because the two parties are not measuring the same thing. The standard therefore fixes the test conditions and the state the plant must be in before a test begins, the raw water characterisation, the duration and the operating point, and the measurements: the treated water quality and the parameters by which it is judged, the throughput and the run length to breakthrough, the pressure drop, the consumption of regenerant and of wash water, and the losses. For the thermal equipment it fixes the deaeration performance - the residual oxygen in the treated water - which is the guarantee a boiler plant actually cares about, since dissolved oxygen is what pits a boiler from the inside. The test report clause is what makes the whole thing usable: it sets what must be recorded, so that a result can be compared with a guarantee written before the plant was built. Issued on 30 December 2011 and in force since 1 June 2012.

This standard specifies the requirements for equipment, filtration equipment, water treatment equipment and other thermal oxygen ion-exchange performance test, measurement and test The inspection report. This standard applies to the above-described water treatment equipment product qualification test, after new installation or after transformation with equipment testing and commissioning When the performance test, performance test also applies to the use of economic assessment carried out in a water

treatment device.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 209 hydroxide for industrial use

GB 320 industrial synthetic hydrochloric acid

GB/T 534 industrial sulfuric acid

GB/T 1226 General Pressure Gauge

GB/T 1227 Precision pressure gauge

GB/T 1576-2008 industrial boiler water quality

GB/T 5462 industrial salt Resin Determination for water

GB/T 5757 ion exchange Determination of the resin particle size, effective size and uniformity coefficient of

GB/T 5758 ion exchange Resin Determination for water

GB/T 5759 OH anion exchange Determination of exchange capacity of the resin

GB/T 5760 OH anion exchange Determination of

GB/T 6904 Industrial circulating cooling water and boiler water of pH

GB/T 6907 boiler water and cooling water analysis water sample collection methods
Determination of