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

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Replacing GB/T 1921-2004

Specification for industrial boilers

工业锅炉技术规范

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 1921-2004 "Industrial Steam Boiler Parameter Series" and GB/T 3166-2004 "Hot Water Boiler Parameter Series".

Compared with GB/T 1921-2004 and GB/T 3166-2004, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- Changed the scope (see Chapter 1, Chapter 1 of GB/T 1921-2004 edition and Chapter 1 of GB/T 3166-2004 edition);
- Changed the steam boiler parameter series (see 4.1.1, Chapter 2 of GB/T 1921-2004 edition);

- Changed the hot water boiler parameter series (see 4.1.2, Chapter 2 of GB/T 3166-2004 edition);
- Added organic heat carrier boiler parameter series (see 4.1.3);
- Added product model compilation method (see 4.2);
- Increased product performance requirements (see Chapter 5);
- Increased material requirements (see Chapter 6);
- Added design requirements (see Chapter 7);
- Added manufacturing requirements (see Chapter 8);
- Increased inspection and test requirements (see Chapter 9);
- Added requirements for painting, packaging, nameplates, markings and accompanying documents (see Chapter 10);
- Added requirements for installation, commissioning, acceptance and operation (see Chapter 11).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the National Technical Committee for Standardization of Boilers and Pressure Vessels (SAC/TC262).

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The previous versions of this document and the documents it replaces are as follows.

- First issued as GB 1921-1980 in 1980, first revised in 1988, second revised in 2004;
- In this third revision, the contents of GB/T 3166-2004 "Hot Water Boiler Parameter Series" were incorporated (GB/T 3166-2004 The previous versions are: GB 3166-1982, GB/T 3166-1988).

Introduction

Industrial boilers are the main thermal power equipment in China. They are widely used and in high demand. They play an important role in industrial production and military and civilian life.

With the adjustment of national energy development strategy and the promotion of national policy on air pollution control, the utilization of new energy and renewable energy has driven the industrial Under the background that China's economy has entered a new era, industrial boiler enterprises have actively adapted to the In line with the needs of market and economic development, we have continuously adjusted our product structure, increased our investment in research and development of new products, and accelerated the development of large coal-fired boilers and fuel-fired The development of gas boilers,

biomass boilers, pulverized coal industrial boilers, waste heat boilers, electric heating boilers, etc. has accelerated.

According to the requirements of the Technical Committee's boiler standard system optimization plan, GB/T 1921-2004 "Industrial Steam Boiler Parameter Series", The two national standards GB/T 3166-2004 "Hot Water Boiler Parameter Series" were integrated and revised into GB/T 1921 "Technical Specifications for Industrial Boilers".

This document proposes the performance, design, manufacture, inspection and testing, installation, commissioning, acceptance and use of industrial boilers.

TSG11 "Boiler Safety Technical Regulations" and TSG91 "Boiler Energy Saving and Environmental Protection Technical Regulations" have basic requirements for safety, energy saving and environmental protection, and are consistent with boiler This document is the core construction standard and other boiler product standards.

It is one of the important standards of the "Standard for Specific Boiler Construction Methods", which will lead the technological innovation of industrial boilers and provide a basis for further improving the production of industrial boilers.

It plays an important role in product quality and high-quality development of the industry.

1 Scope

This document specifies the parameter series and model compilation, performance, materials, design, manufacturing, inspection and testing, painting, packaging, nameplate, etc. of industrial boilers.

Brands, signs and random documents as well as installation, commissioning, acceptance and operation.

This document applies to industrial boilers. Non-power station boilers with rated steam pressure greater than or equal to 3.8 MPa and rated working pressure less than Hot water boilers and organic heat carrier boilers with a rated thermal power of 0.1MPa or greater and equal to 0.1MW shall be used for reference.

Note. The pressure values mentioned in this document refer to gauge pressure.

2 Normative references

GB/T 1576

GB 2894

GB/T 2900.48

GB 3096