

ICS 27.060.30

CCS J 98



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

GB/T 45542-2025

**Specification for integrated energy efficiency evaluation of
industrial boilers**

工业锅炉综合能效评价技术规范

Issued on: March 28, 2025

Implemented on: October 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

Preface	III
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 General requirements	2
5 Evaluation Method	2
6 Comprehensive energy efficiency classification	5
7 Evaluation Report	6

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.

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).

This document was drafted by: China Special Equipment Testing and Research Institute, Fangkuai Boiler Co., Ltd., Guangzhou Special Equipment Testing and Research Institute, China Standards Institute of Standardization, Harbin Institute of Technology, Huairou Laboratory Shanxi Research Institute, Xi'an Jiaotong University, Machinery Industry Technology Development Foundation, Shaanxi Provincial Special Equipment Inspection and Testing Institute, Jiangsu Sifang Clean Energy Equipment Manufacturing Co., Ltd., Borite Thermal Energy Equipment Co., Ltd., Zhejiang Liju Thermal Equipment Co., Ltd., Taishan Group Co., Ltd., Kleden Thermal Equipment (Zhejiang) Co., Ltd., Shanghai Te Special Equipment Supervision and Inspection Technology Research Institute, China Electronics Technology Standardization Institute, Zhejiang Special Equipment Science Research Institute, Anhui Special Equipment Equipment Testing Institute, Zhejiang Tefu Development Co., Ltd., and Hunan Jijingyuan Energy Saving and Environmental Protection Technology Co., Ltd.

The main drafters of this document are: Liu Xuemin, Da Yaodong, Lu Haigang, Ma Kuo, Liu Ren, Gao Jianmin, Ke Xiwei, Du Yongbo, Hou Rui, Xu Ran, Yao Huanle, Dong Kai, Wang Yongqiang, Li Changzheng, Sheng Yijun, Wang Huanan, Yu Jiming, Zhao Lihua, Cheng

Defang, Ye Xiangrong, Wang Jing, Chang Yongqiang, Zhang Xiaoming, Xia Hongwei, Qi Guoli, Lu Jie, Zhao Xingang, Li Peng, Wang Weipeng, and Chen Zhengyu.

Technical specification for comprehensive energy efficiency evaluation of industrial boilers

1 Scope

This document specifies the general requirements for the comprehensive energy efficiency evaluation of industrial boilers, describes the evaluation method and comprehensive energy efficiency classification, and gives The contents of the evaluation report were released.

This document is applicable to solid fuel boilers and liquid fuel boilers with a rated pressure less than 3.8MPa and a medium of water or liquid organic heat carrier.

And the comprehensive energy efficiency evaluation of gas fuel boilers. Non-power generation steam boilers with rated steam pressure greater than or equal to 3.8MPa shall be implemented as a reference.

2 Normative references

GB/T 1576

GB/T 2900.48

GB/T 5468

GB/T 10180

GB/T 12145

GB/T 16157

GB 23971

GB/T 24747

3 Terms and definitions

The terms and definitions defined in GB/T 2900.48, GB/T 10180 and NB/T 47034 and the following apply to this document.