

ICS 27.060.30
CCS J 98



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

GB/T 30577-2014

**Specification of heat recovery steam generator for
combined-cycle for gas-steam**

燃气-蒸汽联合循环余热锅炉技术条件

(English Translation)

Issued on: May 6, 2014

Implemented on: December 1, 2014

Issued by: Standardization Administration of China

Table of Contents

Introduction	
Introduction	
1 Scope	
2 Normative references	
3 Terms and definitions	
4 Parameters and type	
5 Technical requirements	
6 Test	
7 To paints, packaging and accompanying documents nameplate	
8 7 Installation and use requirements	
9 7 Test and Acceptance	
8 10 Quality Responsibility	
Appendix A (normative) boiler main parts manufacture and acceptance criteria	

Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard by the National Standardization Technical Committee of the boiler pressure vessel (SAC/TC262) and focal points.

Introduction

The past two decades, gas - steam combined cycle power generation in China has developed rapidly, especially in recent years the construction of a large number of high-capacity, high Efficiency of Gas - steam combined cycle power plants, contributed significantly to the gas - steam combined cycle HRSG technological developments. HRSG is linked Combined cycle system is an important part, but there is no domestic for gas - steam combined cycle HRSG corresponding professional Standard, design and manufacturing units commonly used in cooperation with famous foreign companies or the introduction of technology, standards and norms development and design. To gauge Fan suitable for the development and summarize the experience of a combined cycle power plant waste heat boiler technology, digestion and absorption of foreign advanced technology and specifications, special the final version of the standard, which enhance and guide the domestic gas turbine waste heat boiler design and manufacturing standards, promoting China's technological innovation has a very heavy to sense.

This standard follows the following principles.

- a) adapt the technical characteristics of combined cycle power plant waste heat boiler, regulate the domestic combined cycle power plant waste heat boiler;
- b) optimize the HRSG unit sets designed to absorb the introduction of combined cycle power plant waste heat boiler products of advanced technology;
- c) implement the relevant national energy conservation, environmental protection regulations and policies;
- d) coordination with the relevant standards.

Gas - steam Combined Cycle Heat Recovery Boiler Technical conditions

1 Scope

This standard specifies the gas - steam combined cycle HRSG parameters and performance requirements, as well as the design, manufacture, installation, use, test inspection, acceptance and quality of the responsibility of the technical requirements.

This standard applies to the vapor pressure of not less than 2.4MPa, and water as a medium of gas - steam combined cycle waste heat boiler; suitable for full Burning or non supplementary fired heat recovery boilers. Integrated gasification gas - steam combined cycle (IGCC) system, waste heat boiler can be implemented by reference.

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/T 9222 water tube boiler pressure parts strength calculation Boiler Performance Test procedures GB/T 10184 Power Station GB/T 10863 flue waste heat boiler thermal test methods GB/T 12145 for generating unit and steam power equipment vapor quality GB/T 12348 industrial enterprises of environmental noise emission standard plant boundary GB 13223 Thermal Power Plant Air Pollutant Emission Standards GB 13271 boiler air pollutant emission standards GB/T 28056 flue waste heat boiler General technical requirements GB 50016 architectural design code for fire protection GB 50160 fire protection design of petrochemical enterprises JB/T 1612 boiler hydrostatic test technical conditions JB/T 1613 boiler pressure parts for welding JB/T 1615 boiler paint condition and packaging technology JB/T 3191 boiler drum internal device technology JB/T 3375 boiler materials into the factory acceptance rules JB/T 6511 finned tube box assembly technical conditions JB/T 6512 boiler for producing high-frequency resistance welding spiral fin JB/T 8953.3 Gas - steam Combined Cycle Heat Recovery Boiler Equipment Purchase DL/T 5047 Power Construction and Acceptance of boiler set

3 Terms and Definitions

The following terms and definitions apply to this document.

Combined Cycle Gas turbine cycle and the Rankine cycle steam or other fluids with combined thermodynamic cycle.