Trade Standard of the Power Industry of the People's Republic of China 中华人民共和国电力行业标准

The Code of Erection and Acceptance of Electric Power Construction Section of Steam Boiler Set 电力建设施工及验收技术规范 锅炉机组篇

DL/T 5047-95

Compiled by: The Center of Technical & Economic Consultancy for Electric Power Construction under the Ministry of Electric Power Industry

The Standardization Department of the Federation of Chinese Electric Power Enterprises

Approved by: The Ministry of Electric Power Industry of P.R.C.

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Note

This book is the English translation of The Code of Erection and Acceptance of Electric Power Construction Section of Steam Boiler Set DL/T 5047-95. In the event of any inconsistency between the Chinese-language text of the Code and the present English-language text of the Code, the Chinese-language text shall be taken as ruling.

Preface

Since The Code for Erection and Acceptance of Electric Power Construction (Section of Steam Boiler Set) (SDJ245-88) was issued and implemented, it has played an active role in promoting the electric power industry construction and the quality of the boiler construction of power stations. With the rapid development of socialist market economy in China, the development in electric power industry and improvement in power generation quality have provided essential guarantee for development of social economy. In order to meet the requirements for safe, economical, stable and full" operation of thermal power plant on, adapt to the demand for the construction of large sets and new equipment, we have organized the personnel concerned to modify and supplement the previous Code, and have made large alteration to it, for which, we have organized three seminars and assessments.

The national standards, industrial standards and documents used or cited by this Code are ones currently in use that were issued before Jan. 1996. 36 new standards are issued, and 14 former ones are replaced, one standard, which was numbered 26 in appendix XVI in the former standard, was cancelled. With the introduction of new standards, much modification are made to this Code, such as connection by high-strength bolts, installation of oil tank, welding process and quality, erection of piping, pump mounting, start-up commissioning of the whole set, chemical cleaning, adjustment of relief valve, and steam flushing, etc.

With development of new equipment, technique and materials, more new articles are added to the Code, where 10 articles are added for "3.5 Circulating Pump" under "3 Heating Surface"; and 20 articles are added to "5.5 Smoke Desulfurization Device" under "5 Smoke, Wind, Coal Piping and Attachment"; 10 sub-articles are added to "7.3.5MPS (ZGM) Medium-Speed Coal pulverizer" under "7.3 Coal Pulverizer"; and 6 appendixes are newly added; 4 appendixes are modified and updated; and one appendix is canceled.

This Code is examined and approved by the Ministry of Electric Power Industry, and was issued on Jan. 4, 1996 in form of No. 6 DJ [1996] File, numbered DL/T5047-95, and which will be enforced as May 1st, 1996, the former Standard SDJ245-88 is abolished immediately.

Compiled by: The Consulting Center for Electric Power Construction Technology & Economy of the Ministry of Electricity Industry

The Standardization Department of the Federation of Chinese Electric Power Enterprises

Co-editors: Electric Power Construction Research Institute of the Ministry of Electric Power Industry

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1 General Provisions

1.1 General regulations

- 1.1.1 The Code is applicable to the construction and acceptance of domestic power station boiler set with a capacity of 65~2100t/h, main steam pressure of 3.82~25MPa, and main steam temperature of 450~550°C; as for the construction and acceptance of the machine set with a higher or lower capacity and parameters than the above, this Code may be used for reference; and for the construction & acceptance of sets imported from abroad, specification from the manufacturer shall be followed, and if a manufacturer has not such clear specification, this Code shall be followed.
- 1.1.2 The installation of a boiler set shall be carried out according to the design and technical documents of equipment. In addition to this Code, the documents concerning piping, welding, pump, and thermal measuring instruments shall be used in conjunction with related technical standards under this Code;
- 1.1.2.1 The installation of steam pipe, water supply pipe and industrial water pipe in range of a boiler shall follow The Code of Erection and Acceptance of Electric Power Construction (Section of Piping) (DL5031-94);
- 1.1.2.2 The welding operations during the preparation and installation of pressure-bearing pipes shall follow The Code of Erection and Acceptance of Electric Power Construction (Section of Welding for Thermal Power Plant) (DL5007-92); the welding for not-pressure-bearing parts on important steel structures and pressure-bearing components shall be carried out by qualified and proper welders;
- 1.1.2.3 The installation of pumps shall follow The Code of Erection and Acceptance of Electric Power Construction (Section of Turboset) (DL5011-92);
- 1.1.2.4 The installation of thermal measuring instruments shall follow The Code of Erection and Acceptance of Electric Power Construction (Section of Thermal Instruments and Controlling Devices) (SDJ279-90);
- 1.1.2.5 The anti-corrosion requirement for the heating surface on boiler shell and other concerned piping shall follow The Code of Erection and Acceptance of Electric Power Construction (Section of Chemistry of Thermal Power Plant) (DLJ58-81);
- 1.1.2.6 The installation of such mechanical devices as boiler elevator and hoisting devices shall follow the related regulations of The Code for Erection and Acceptance of Elevator (GB10060-93), The Code for Erection and Acceptance of Installation Engineering for Mechanical Equipment, (I), (IV), (V) and (VI) [TJ231-75 (I), TJ231-78 (IV), TJ231-78 (V) and TJ231-78 (VI)] and Standard for Quality Inspection and Evaluation of Erection Engineering of Elevator (GBJ310-88);
- 1.1.2.7 For the steel structures of a boiler and auxiliary machines and equipment, if the connection by welding and rivets is adopted, the related regulations of The Code for Erection and Acceptance of Steel Structure Engineering (GBJ205-83) shall be followed.
- 1.1.3 Any design alteration can be conducted only after going though the formalities concerned. The technical materials for design alteration shall be sorted timely and kept properly.
- 1.1.4 The technical requirements for construction of new product and equipment, if the manufacturer has provided no clear specification, shall be discussed and jointly



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