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

中华人民共和国电力行业标准

DL/T 439-2006

Replace DL 439-1991

**The technical guide for high-temperature bolt of
fossil-fired power plant**

火力发电厂高温紧固件技术导则

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People's Republic of China**

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Foreword

This standard is a revision of DL439-1991 “The Technical Guide for High-temperature Bolt of Thermal Power Plant” according to the arrangement of “Notice from the National Development and Reform Commission General Office on Issuing 2003 Industrial Standard Project Supplementary Plan” (Fa Gai Ban Gong Ye [2003] No. 873 document).

High-temperature fasteners are main components and parts related to safe operation of thermal power plant. This standard is developed for fasteners design, manufacture, installation, operation, maintenance, overhaul, supervision, etc.

DL439—1991 has played a very positive and effective role for high-temperature fasteners manufacture, operation and supervision from the promulgation and implementation, accumulating a wealth of experience and also raising some new questions.

Compared with DL439—1991, the standard has the following changes:

This standard is instead a recommended industry standard;

——Increasing steel specification of fasteners;

——Substantially revise the original standard style; deleting original standard structure, connection properties, invalidation, preventative measures, etc.; consolidating some chapters.

Annex A, annex B and annex C of the standard are informative annexes.

The standard is proposed by China Electricity Council.

The standard is under the jurisdiction of and interpreted by Electric Power Industry Power Station Metallic Material Technical Committee of Standardization.

Main drafting unit of the standard: Xi'an Thermal Power Research Institute Co., Ltd.

Main drafters: Liu Shutao, Chen Jigang.

This standard is issued in September 16, 1991 for the first time, this is the first revision.

This standard replaces DL 439-1991 from the date of implementation.

The Technical Guide for High-temperature Bolt of Thermal Power Plant

1. Scope

This standard specifies the inspection and method of high-temperature fasteners of thermal power plant and treatment measures and makes requests for the fastening and removal of bolts.

This standard is applicable to the inspection and treatment of bolts, nuts and washers of cylinder, porthole, valve and steam pipe flange at an operating temperature of over 400°C.

2. Normative references

The articles contained in the following documents have become this standard when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this Standard. For the undated documents so quoted, the latest editions shall be applicable to this Standard.

GB/T 2 Fasteners-Ends of parts with external thread

GB/T 3 Run-outs, undercuts and chamfers for general purpose metric screw threads

GB/T 90.1 Fasteners--Acceptance inspection

GB/T 90.2 Fasteners--Marking and packaging

GB/T 98 Specification for tab washer

GB/T 196 General purpose metric screw threads—Basic dimensions

GB/T 197 General purpose metric screw threads—Tolerances

GB/T 231.1 Metallic materials—Brinell hardness test—Part 1:Test method

GB/T 5779.1 Fasteners-Surface discontinuities-Bolts, screws and studs for general requirements

GB/T 5779.2 Fasteners-Surface discontinuities-Nuts

GB/T 6394 Metal-methods for estimating the average grain size

GB/T 17394 Metallic materials--Leeb hardness test

DL/T 441 Supervision code for creep strain of steam pipe in high temperature and high pressure in fossil fuel power plant



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