

**DL**

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

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**Code for design of steam water piping in thermal power plant**

火力发电厂汽水管道设计规范

**(English Translation)**

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### **1.0.1**

This code is formulated with the view to standardizing the design of steam/water piping of fossil-fired power plant and ensuring safe, full-capacity, economical and continuous operation of fossil-fired power plant.

### **1.0.2**

This code is applicable to the design of steam/water metal piping within the scope of fossil-fired power plant, it is not applicable to the design of water supply and drainage piping, fire-fighting water piping and large-caliber thin-wall exhaust piping of direct air-cooled unit.

### **1.0.3**

The design of steam/water piping of fossil-fired power plant shall comply with this code and the requirements of relevant current standards of the nation.

## **2.1.1 Piping**

It consists of piping components and pipe supports and hangers, etc. and is used for conveying, distributing, mixing, separating, discharging, measuring or controlling fluid flow.

## **2.1.2 Piping components**

Elements used to connect or assemble piping, including pipes, pipe fittings, flanges, gaskets, fasteners, valves, filter screen and compensator, etc.

### **2.1.3 Pipe or tube**

The piping component with round cross section and used for conveying fluid.

### **2.1.4 Pipe fittings**

A category of piping components, including bend or elbow, tee, stub tube, reducer and end cap, etc.

### **2.1.5 Pipe supports and hangers**

The generic term of various assemblies or devices bearing piping load, restraining piping displacement and controlling piping vibration, and transferring load to support structures, but excluding the civil structures.

### **2.1.6 Guides**

The device used to guide piping to displace along the predetermined direction instead of other directions. The guiding device used for horizontal piping may also bear the dead load of piping.

### **2.1.7 Restraints**

The device used to restrain or partially restrict the displacement of piping system in a certain or several directions at the hanging and supporting point. Generally, it doesn't bear the dead load of piping.

### **2.1.8 Vibration reducing device brace**

The device used for controlling low-frequency and high-amplitude shaking or high-frequency and low-amplitude vibration of piping, but having certain restriction on thermal expansion or cold shrinkage of piping system.

### **2.1.9 Snubbers**

The device used for bearing seismic load or impact load of piping, controlling high-speed vibration displacement of piping system, meanwhile allowing free expansion and contraction of piping system.

### **2.1.10 Set pressure**

The preset pressure of safety valve started under operating conditions, it is the gauge pressure measured at valve inlet. Under this pressure, the force generated by medium pressure under specified operating conditions to open valve is balanced to the force that keeps valve clack on valve seat.