



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

GB 50235-2010

Replacing GB 50235-1997

Code for construction of industrial metallic piping engineering

工业金属管道工程施工规范

(English Translation)

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1.0.1

This code is formulated with a view to improving the construction level of industrial metallic piping engineering, strengthening the quality control in the industrial metallic piping construction, and guaranteeing the construction quality.

1.0.2

This code is applicable to the construction of industrial metallic piping whose design pressure is not higher than 42MPa and design temperature is not higher than the allowable service temperature of the material hereof.

1.0.3

This code is not applicable to the constructions of the following industrial metallic piping.

- 1 Piping of prospecting and extraction devices used for petroleum, natural gas, terrestrial heat;
- 2 Long-distance piping;
- 3 Piping special for nuclear energy plant;
- 4 Piping for offshore facility and mining shaft;
- 5 Piping for heating ventilation and air conditioning, or non-circular section piping.

1.0.4

The industrial metallic piping construction shall be carried out according to the requirements of the design document and this code.

1.0.5

Where the design document needs be modified or the material needs be substituted, it shall be approved by the original design organization and issued with the written document.

1.0.6

The construction of the piping for field assembly equipment shall comply with the requirements of the manufacturer's technical documentation, and shall not be inferior to the ones specified in this code.

1.0.7

This code shall apply in conjunction with the current national standard "Code for Acceptance of Construction Quality of Industrial Metallic Piping Engineering" GB 50184.

1.0.8

The construction of anticorrosive engineering for industrial metallic piping shall meet the requirements of the national current relevant standard and design document.

1.0.9

The construction of heat insulation engineering for industrial metallic piping shall meet the requirements of the current national standard "Code for Construction of Industrial Equipment and Piping Insulation Engineering" GB 50126 and the design document.

1.0.10

The construction of industrial metallic piping, shall meet the requirements of the national current relevant standards, besides this code.

2.1.1 Nominal pressure (PN) for pipe-work components

A method of indication to express nominal pressure grade of pipework component by using the combination of letters PN and dimensionless numbers.

2.1.2 Nominal size for pipework components

A method of indication to express nominal size of pipework component by using the combination of letters DN and dimensionless numbers.

2.1.3 Industrial metallic piping

Process piping, public engineering piping and other subsidiary piping made by connection or assembling with metallic pipework components, used to convey processing medium in production equipments.

2.1.4 Pressure piping

Piping with maximum working pressure larger than or equal to 0.1MPa (gauge pressure) and nominal size higher than 25mm, used to convey gas, liquefied gas, free steam or combustible, explosive, toxic and corrosive liquid medium with maximum working temperature higher than or equal to the normal boiling point.

2.1.5 D-type fluid piping

Incombustible, nontoxic or negligibly-nontoxic fluid piping with design pressure less than or equal to 1.0MPa and design temperature higher -20°C but not higher than 185°C.

2.1.6 C-type fluid piping

Incombustible, nontoxic or negligibly-nontoxic fluid piping excluding D-type fluid piping.

2.1.7 Pipework components

The generic term of spare parts for forming piping system by connection or assembling, including piping components and pipe-supporting elements.

2.1.8 Piping components

Pipework components used for connecting or assembling piping, including pipe, pipe fittings, flange, sealing element, fastener, valve, safety protection devices, expansion joint,