



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

GB 50316-2000

Design code for industrial metallic piping [2008 revision]

工业金属管道设计规范

(English Translation)

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1.0.1

This code is prepared for improving the design level of industrial metallic pipeworks and ensuring their design quality.

1.0.2

This code is applicable for the design of industrial metallic pipings serving at a nominal pressure below or equal to 42MPa and those with non-metallic lines.

1.0.3

This code is not applicable for the design of:

1.0.3.1

Pipings for a whole set of equipment or machine designed by the manufacturer;

1.0.3.2

Pipings in power sector;

1.0.3.3

Long-distance delivering pipings;

1.0.3.4

Pipings in mine;

1.0.3.5

Pipings for heating, ventilating, and air conditioning, as well as pipings with a noncircular section;

1.0.3.6

Underground or indoor water supply and drainage pipings, and fire extinguishing purpose water supply pipings;

1.0.3.7

Pipings for foam, carbon dioxide, or other type fire extinguishing systems;

1.0.3.8

Urban public pipings.

1.0.4

The pressure used in this code shall be gauge pressure unless otherwise specified.

1.0.5

In addition to this code, the design of any industrial metallic piping shall meet the requirements in national current standards concerned.

2.1.1 category A1 fluid

for the purpose of this code, highly toxic fluid that can seriously poison the individual who absorbs or is exposed to the fluid and cannot be cured even he/she is out of exposure, in case a small amount of the fluid leaks out during transportation. The fluid is corresponding to the (extremely hazardous) Level I toxic substance stipulated in the current national standard GB 5044 Classification of Health Hazard Levels From Occupational Exposure to Toxic Substances

2.1.2 category A2 fluid

toxic fluid that can poison the individual who is exposed to it to different extents, but can be cured after being out of exposure. The fluid is corresponding to the (high, moderately, or