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**National Standard of the People's Republic of China**

GB/T 20801.4-2006

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压力管道规范 工业管道

第 4 部分：制作与安装

**Pressure piping code – Industrial piping – Part 4: Fabrication and  
Assembly**

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## Foreword

This standard corresponds to ISO 15649: 2001 "Petroleum and Natural Gas Industries - Piping", and has an un-equivalent conformance with ISO 15649: 2001.

The standard GB/T 20801 "Pressure Piping Code - Industrial Piping" consists of six parts:

- Part 1: General;
- Part 2: Materials;
- Part 3: Design and calculation
- Part 4: Fabrication and assembly;
- Part 5: Inspection and testing;
- Part 6: Safeguarding

This part is Part 4 of GB/T 20801.

This Part is proposed by the Piping Subcommittee of the National Technical Committee on Boiler Pressure Vessel of Standardization Administration of China (SAC/TC 262/SC 3). This Part is under the jurisdiction of National Technical Committee on Boiler Pressure Vessel of Standardization Administration of China (SAC/TC 262).

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# GB/T 20801.4-2006 Pressure Piping Code - Industrial Piping

## - Part 4: Fabrication and Assembly

### 1 Scope

This part specifies the basic requirements in the fabrication and assembly of pressure piping that GB/T 20801.1 applies. And the basic requirements cover fabrication, welding, pre-heating, heat treatment, assembly, erection and cleaning.

### 2 Normative Reference

The following standards contain provisions which, through reference in this text, constitute provisions of this code. For dated reference, subsequent amendments to (excluding correction contents), any of these publications do not apply. However, parties to agreements based on this Part are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. For undated references, the latest edition of the normative document is applicable to these specifications.

GB/T 17116.1-1997	Pipe supports and hangers - Part 1: Technical specification
GB/T 20801.1-2006	Pressure piping code - Industrial piping - Part 1: General
GB/T 20801.2-2006	pressure piping code - Industrial piping - Part 2: Materials
GB/T 20801.3-2006	Pressure piping code - Industrial piping - Part 3: Design and calculation
GB/T 20801.5-2006	Pressure piping code - Industrial piping - Part 5: Inspection and testing
JB 4708-2005	Welding Procedure Qualification for Pressure Equipment Examination and Administrative Rules for Welders Specializing in Boilers and Pressure Vessels and Pressure Pipes

### 3 Terms and Definitions

#### 3.1 Manufacture

Manufacturing process of products like pipe, piping components or pipe-supporting elements.

#### 3.2 Fabrication

Preparation works before piping erection, including cutting, screw thread processing, grooving, forming, bending, welding and component assembling by elements; the fabrication may be conducted in workshop or on site.

#### 3.3 Assembly

Connecting two or more piping components together with bolt, welding, cementation, screw thread, braze welding, soldering or seal element according to the requirements of the engineering design.

#### 3.4 Erection

Erecting a pipe system on a designated position or support perfectly according to the

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