



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

GB/T 1048-2019

**Pipework components - Definition and selection of nominal
pressure**

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Table of Contents

Foreword...	3
1 Scope...	4
2 Terms and definitions...	4
3 Nominal pressure series and selection...	4

Foreword

This Standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard replaces GB/T 1048-2005, Pipework components. Definition and selection of PN. Compared with GB/T 1048-2005, the main technical changes, except editorial changes, are as follows:

- Add the definition of the nominal pressure that is marked by Class (see Chapter 2);
- Add nominal pressure values PN 160, PN 250, PN 320 and PN 400 (see Table 1);
- Delete PN 20, PN 50, PN 110, PN 150, PN 260 and PN 420; replace with Class 150, Class 300, Class 600, Class 900 and Class 1500 (see Table 1, Chapter 3 of version 2005);
- Add preferred values for the Class series (see Table 1).

This Standard uses the redrafting method to refer to ISO 7268:1983, Pipe components - Definition of nominal pressure, NEQ; its degree of consistency with ISO 7268:1983 is non-equivalent.

This Standard was proposed by China Machinery Industry Federation.

This Standard shall be under the jurisdiction of National Technical Committee

237 on Pipe Fitting of Standardization Administration of China (SAC/TC 237).

The drafting organizations of this Standard: China Productivity Center for

Machinery, Sinopec Engineering Incorporation, Capital Engineering & Research Incorporation Ltd., China Sinogy Electric Engineering Co., Ltd., China Energy Engineering Group Guangdong Electric Power Design Institute Co., Ltd., Chaoda Valves Group Co., Ltd., China Institute of Marine Technology & Economy, Saint Gobain Piping System Co., Ltd.

The drafters of this Standard: Li Junying, Feng Feng, Zhao Yong, Wu Shiming, Li Qilue, Huang Tao, Qiu Xiaolai, Zhang Meiling, He Gen, Zhang Lanzhu.

The previous versions of the standards which are replaced by this Standard are:

-- GB/T 1048-1970, GB/T 1048-1990, GB/T 1048-2005.

Pipework components - Definition and selection of nominal pressure

1 Scope

This Standard gives the definition of nominal pressure of the pipework components, and specifies the nominal pressure series that are used for the pipework components.

This Standard applies to pipework components which use PN or Class to mark nominal pressure.

2 Terms and definitions

The following terms and definitions are applicable to this document.

2.1 Nominal pressure

A marking of combination of letters and numbers that are related to the mechanical properties and dimensional characteristics of pipework system components, which consists of letters PN or Class and following dimensionless numbers.

Note 1: Unless otherwise provided in the relevant standards, dimensionless numbers do not represent measured values and are not used for calculation.

Note 2: Except that they are related to relevant standards of pipework components, the letters PN or Class have no meaning.

Note 3: The maximum allowable working pressure of the pipework components depends on the PN value or Class value of the pipework components, material, component design and maximum allowable operating temperature.

Note 4: Pipework components with the same PN or Class and DN values have the same connection dimensions as the flanges with which they are fitted.

3 Nominal pressure series and selection

The nominal pressure includes two series, namely PN and Class; the nominal pressure values shall be selected from Table 1.

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