

ICS 23.040.60

CCS J15



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

GB/T 9128.2-2023

**Metallic ring joint gaskets for steel pipe flanges - Part 2: Class
designated**

钢制管法兰用金属环垫 第2部分：Class系列

Issued on: September 7, 2023

Implemented on: April 1, 2024

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

1 Scope	1
2 Normative reference documents	1
3 Terms and Definitions	1
4 Type and code	1
4.1 Type	1
4.2 Code 2 5 size	2
6 Materials and Manufacturing	6
6.1 Material	6
6.2 Manufacturing	7
7 Requirements	7
7.2 Dimensional limit deviation	7
7.3 Hardness	8
8 Inspection methods	8
8.2 Dimensional limit deviation	9
8.3 Hardness	9
9 Inspection Rules	9
9.1 Inspection	9
9.2 Sampling and determination rules	9
10.1 Mark	10
10.2 Logo	10
6 Recommended maximum hardness value of commonly used metal ring gasket materials	8

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents" Drafting. This document is Part 2 of GB/T 9128 "Metal Ring Gasket for Steel Pipe Flanges". GB/T 9128 has released the following parts.

---Part 1: PN series;

2. Class Series. This document partially replaces GB/T 9128-2003 "Metal Ring Gasket

Dimensions for Steel Pipe Flanges" and GB/T 9130-2007 "Steel Pipe Flange Dimensions" "Technical Conditions for Metal Ring Gaskets for Flanges", compared with GB/T 9128-2003 and GB/T 9130-2007, except for structural adjustments and editorial changes In addition, the main technical changes are as follows:

- a) The dimensions of the metal ring gasket have been changed (see Table 2, Table 1 of GB/T 9128-2003);
- b) Added the corresponding relationship between the ring number of the metal ring gasket and the nominal size and nominal pressure (see Table 3);
- c) The material name/grade of the metal ring gasket has been changed (see Table 4, Table 1 of GB/T 9130-2007);
- d) Added common materials for metal ring gaskets and recommended maximum operating temperatures (see Table 4);
- e) Changed the dimensional limit deviation of metal ring gaskets (see Table 5, Table 4 of GB/T 9130-2007);
- f) Added manufacturing requirements for metal ring gaskets (see 6.2.1, 6.2.2);
- g) The recommended maximum hardness value of commonly used materials for metal ring gaskets has been changed (see Table 6, Table 3 of GB/T 9130-2007);
- h) Added provisions for selecting metal ring pad hardness test methods (see 8.3.1);
- i) The inspection rules have been changed (see Chapter 9, Chapter 6 of GB/T 9130-2007);
- j) Added the content of signs (see 10.2.1). Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents. This document is proposed by China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Pipe Accessories (SAC/TC237). This document was drafted by: Cixi Hengli Sealing Material Co., Ltd., China Machinery Productivity Promotion Center Co., Ltd., Zhejiang Cathay Xiao Xingmi Sealing Material Co., Ltd., Ningbo Tiansheng Seal Co., Ltd., Wenzhou Huahai Seal Co., Ltd., Wenzhou Yiyu Sealing Material Co., Ltd. Company, Wuxi Xixi Chemical Machinery Parts Co., Ltd., Guangzhou Dongshan Southern Seals Co., Ltd. The main drafters of this document. Xu Shaohuan, Feng Feng, Qiu Kuanheng, Wu Yimin, Lu Wenming, Zhang Jiahong, Zhang Yong, Fang Deyin, Hui Fuming, Wu Kaijun. The previous versions of this document and the documents it replaces are as follows:

1 Scope

GB/T 9128.2-2023 is Part 2 of the Chinese series on metallic ring joint gaskets for steel pipe flanges, covering the Class designated series - the dimensions used with ASME-pattern flanges, which is what most Chinese petrochemical and offshore equipment

built for export or to international licensor designs uses. Keeping the two series in separate parts matters because the ring sizes are not interchangeable and fitting the wrong one into a groove is both possible and dangerous. The standard sets the types and codes, the sizes, the materials and manufacture, the requirements on appearance, dimensional tolerances and hardness, the inspection methods, the inspection rules with their sampling and acceptance provisions, and the marking, packaging and storage provisions. It took effect on 1 April 2024.

This document specifies the type and code, dimensions, materials and manufacturing, requirements, and test methods of metal ring gaskets for Class-marked steel pipe flanges. laws, inspection rules and marking, marking, packaging, storage and transportation. This document is applicable to ring connections with nominal pressures Class150~Class2500 specified in GB/T 9124.2 and GB/T 13402. Metal ring gasket is used for sealing surface steel pipe flange.

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document.

GB/T 230.1 Rockwell hardness test of metallic materials Part

3 Terms and definitions

There are no terms or definitions to be defined in this document.

4 Type and code

4.1 Type Metal ring gaskets for steel pipe flanges (hereinafter referred to as "metal ring gaskets") are divided into oval metal ring gaskets (hereinafter referred to as "elliptical gaskets") and eight-shaped metal ring gaskets (hereinafter referred to as "metal ring gaskets") according to their cross-sectional shapes. There are two types of angular metal ring pads (octagonal pads for short). The structures of the two types of metal ring pads are shown in Figure 1 and Figure 2.