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

**GB/T 4622.3-2007**

Replacing GB/T 4622.3-1993

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**Specification of spiral wound gaskets  
(English Translation)**

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## Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Requirements
- 3.1 Materials

### Foreword

GB/T 4622 "spiral wound gasket" consists of the following three parts.

- Part 1. spiral wound gaskets;
- Part 2. Spiral wound gaskets for pipe flanges spacer size;
- Part 3. spiral wound gaskets technical conditions.

This section GB/T 4622 Part 3.

This Part replaces GB/T 4622.3-1993 "spiral wound gaskets technical conditions." this section compared with the GB/T 4622.3-1993, the main changes are as follows.

- Modify the process described in the claims section, removed the seal member within the outer weld points specified;
- The original metal strip thickness range 0.15mm ~ 0.25mm modified to 0.15mm ~ 0.23mm, the abolition of the hardness of the metal strip Testing requirements, increase the temperature range of the metal strip, modified temperature range with the filling;
- Part 1 of this standard, revised the terminology gasket;
- Increase the technical requirements for filling tape;
- Filled with added "non-asbestos fibers", filled with original thickness range of 0.3mm ~ 1.0mm to 0.4mm ~ modification 0.8mm; the use of asbestos with increased warnings;
- Modified DN650 ~ DN1200 spacer size D3 and D4, size deviation;
- Modify the thickness of 2.5mm ~ 6.5mm gasket sealing element thickness deviation;
- Modify the thickness of 1.6mm ~ 5.0mm inner gasket, retaining ring thickness deviation;
- The inner belt, positioning spacer ring size D2, D3 unidirectional deviation revised to positive and negative two-way deviation;

--- Modified sealing elements, inner and outer diameter measurement and positioning the inner ring;

--- Canceled gasket stress relaxation rate, test conditions and steam sealing performance indicators;

--- Canceled Appendix A "spiral wound gasket compression, rebound and sealing performance test method" Appendix B "spiral wound gasket stress relaxation test Test methods ", in direct reference to the current standard test method standards.

This part is proposed by China Machinery Industry Federation.

This part of the National Standardization Technical Committee pipe accessories.

Drafting this Part. Zhejiang Cathay Pacific sealing materials Co., Ltd., the machine Productivity Promotion Center, Cixi City Hengli sealing material Limited, Ningbo born seals Limited, Ningbo Jinshan Sealing Machinery Co., Ltd., Ningbo-World Technology Co., Ltd. Xinyuan seal, Ci Creek sealing industry associations.

## 1 Scope

This section provides the spiral wound gasket requirements, test methods, inspection rules, marking, packaging and storage.

This section applies to nominal pressure PN10 ~ PN260 pipe flange wound gasket.

## 2 Normative references

The following documents contain provisions which, through GB T 4622 This section references/constitute provisions of this section. For dated references, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encourage the agreement on this section Whether the parties can study the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 912 carbon structural steel and low-alloy structural steel hot-rolled sheets and strips  
GB/T 3280 stainless steel cold-rolled steel  
GB/T 4239 stainless steel cold-rolled steel and heat  
GB/T 4622.1 spiral wound gaskets  
GB/T 11253 carbon steel and low alloy steel cold-rolled sheets and strips  
GB/T 12385 pipe flanges with gaskets sealing performance test method  
GB/T 12622 flange gasket compression and rebound test method  
GB/T 14180 Test Method for spiral wound gasket  
JB/T 6618 PTFE spiral wound gasket with technical conditions  
JB/T 7758.2 flexible graphite sheets technical conditions  
JC/T 69 Cardboard asbestos

### 3.1.1 Metal strip

#### 3.1.1.1

Metal band should be used for the cold-rolled steel strip thickness 0.15mm ~ 0.23mm, the common material grades, see Code and applicable temperature

Table 1. Negotiated according to supply and demand, allowing the use of materials other than 1.

Table 1 metal strip material grades, code and application temperature

| Metal strip material grade | metal strip material code | number applicable standard | temperature/°C  |           |            |
|----------------------------|---------------------------|----------------------------|-----------------|-----------|------------|
| 0Cr18Ni9 304               | GB/T 4239                 | -196 ~ 700                 | 0Cr18Ni10Ti 321 | GB/T 4239 | -196 ~ 700 |
| 0Cr17Ni12Mo2 316           | GB/T 4239                 | -196 ~ 700                 | 0Cr25Ni20 310S  | GB/T 4239 | -196 ~ 810 |
| 00Cr17Ni14Mo2 316L         | GB/T 4239                 | -196 ~ 450                 | 00Cr19Ni10 304L | GB/T 4239 | -196 ~ 450 |

#### 3.1.1.2

Metal belt surface should be smooth, clean, does not allow rough, cracks, delamination, scratches, dents and rust and other defects.

#### 3.1.1.3

chemical composition and mechanical properties of stainless steel strip material shall comply with the provisions of GB/T 4239's.

### 3.1.2 filled with

3.1.2.1 filled with thickness of 0.4mm ~ 0.8mm, commonly used material non-asbestos fibers, asbestos, flexible graphite and PTFE,