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

GB/T 22307-2008

**Standard test method for compressive strength of gaskets at
elevated temperatures**

密封垫片高温抗压强度试验方法

(English Translation)

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Foreword

This standard is equivalent to using the American Society for Testing and Materials ASTM F1574-03a "Standard Test Method for Compressive Strength of the pad at high temperatures." Compared with ASTM F1574-03a, this standard the following modifications.

--- "This test method" be replaced by "this standard";

--- Deleted the last sentence in 1.2 "values given in parentheses are for reference only";

--- Chapter 2, with the title "Normative References" instead of "References"; and an increase in the introductory phrase; document cited by the China National Standard Quasi "GB/T 20671.1", "GB/T 22308" were replaced by the American Society for Testing Materials ASTM standard "F104", "F1315", the standard text accordingly be an alternative;

--- Remove the British units and the value of all given in parentheses.

This standard appendix is informative appendix.

The standard proposed by China Building Materials Federation.

This standard and non-metallic mineral products by the National Standardization Technical Committee.

Participated in the drafting of this standard. Zhoushan seamounts sealed Material Co., Ltd., Chengdu Tianfu Gasket Co., Ltd., Chengdu-Jun Ma secret Feng Products Co., Ltd., Hebei Hengda Sealing Materials Co., Ltd., Jilin Province Haihong seal products.

1 Scope

1.1

standard specifies the compression of gasket materials at high temperatures (resistance to

extrusion deformation) Determination of characteristics.

1.2

Value in International System of Units (SI) units as a standard.

1.3

standard does not address safety issues associated with their use. Users of this standard have a responsibility to consider the safety and health issues, and in Before use to determine the scope of regulatory limitations.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 20671.1 Non-metallic gasket materials Classification system and test methods - Part 1. Non-metallic gasket materials classification system GB/T 22308 Test method for sealing plate material density

3 Methods Summary

At 150 °C, to cut down on the gasket material from the surface of the sample perpendicular to the applied stress is different within the specified time, the measurement sample Before and after the pressure variation in thickness and shape of the surface, draw different deformation under stress percentages graphic sample, and to determine the thickness of the material is no longer decrease (I.e., dimension in the plane) or yield stress is not extrusion. This situation by changing the physical measurement sample size to reflect. The donor both sides need requirements, the need to test at different temperatures to determine the relationship between temperature and compression.

4 Significance and Use

Compressive strength or resistance to extrusion gasket material is the choice of the sealing material under certain conditions an important factor. The importance of the test method is built Once established in that the material is pressed or extruded no longer based on the sealing performance. This assumption is only a guide, it is because the gasket Material (typically an elastomeric material) accurate yield point or the point of failure is difficult to define. Two or more materials may be compared to determine the pressure Intensity differences. For quality assurance purposes, needs and standards of a material sample of the same material or before the original ratio indicators Included. Sample size and

geometry see 6.2.

5 Test device

5.1

Test machine. given stress is applied to the sample to. Test machine should be able to exert maximum stress 520MPa (error of $\pm 5\%$), and the need to configure Stress indicator, digital pressure test to determine the time.

5.2

hardening press kit. Two (Rockwell C35 ~ C40 or equivalent), round, larger than the diameter of the specimen. More appropriate diameter of about 100mm. Surface roughness RMS0.25 μ m ~ 0.5 μ m, steel pressing sleeve and sample layout shown in Figure 1.