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

GB/T 21283.1-2007

**Rotary shaft lip-type seals incorporating thermoplastic sealing
elements -- Part 1: Nominal dimensions and tolerances**

密封件为热塑性材料的旋转轴唇形密封圈第1部分:基本尺寸和公差

(English Translation)

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Foreword

GB/T 21283 "sealing elements for the thermoplastic material rotary shaft lip seals" is divided into six sections.

- Part 1. Basic dimensions and tolerances;
- Part 2. Vocabulary;
- Part 3. Storage, handling and installation;
- Part 4. Performance test procedures;
- Part 5. Identification of visual defects;
- Part 6. thermoplastic and elastomeric properties of the coating material requirements.

This is Part 1 GB/T 21283 of.

The partial modification of the use of ISO 16589-1:2001 "sealing elements for rotary shaft lip thermoplastic material rings - Part 1. Basic Dimensions and tolerances "(in English). This part of ISO 16589-1:2001 main technical differences are as follows.

--- This section 4.1 clearly have fabricated and bonded in two forms seals (increased content BONDED seals), and Given four kinds of the outer edge of the structure type (an increase in bond-type seal Case metal seat structure); and ISO 16589-1:2001 4.1 given only to fit the formula based on three basic types. This is because a bonded seal applications more widely, so that with the effect is relatively good, it is an important type of such seals should be incorporated into the standard.

--- Increase Figure 2 metal pedestal seals, for the same reason.

--- Table 5 adds acrylate rubber seals and silicone rubber sheathed ring diameter tolerance, while the ISO 16589-1.

2001 Table 5 shows the type nitrile rubber seals covering the diameter tolerance of other rubber sheathed sealing ring diameter tolerance Negotiated by the supply and demand sides. This section gives the acrylate rubber sheathed with silicone rubber seal ring outer diameter sheathed public Poor, make the standard more perfect, more applicability.

For ease of use, the ISO 16589-1:2001 This section also made the following editorial changes.

--- Will apply international standards applicable to China to express national standard formulation;

--- With a decimal point instead of a comma as the decimal point, "";

--- Delete international standards foreword.

Appendix A of this section is an informative annex.

This part is proposed by the China Petroleum and Chemical Industry Association.

This part of the National Rubber and rubber products sealing products Standardization Technical Committee Technical Committee (SAC/TC35/SC3) Centralized.

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Introduction

Rotary shaft lip seals are used to seal liquid on the relatively low pressure device. The most typical is the axis of rotation of the stationary chamber, However, in some cases, the shaft is stationary and rotating cavity.

Typically, there is a dynamic seal designed interference fit between the shaft and the flexible seal member.

Similarly, between the outer edge and the body bore seal cavity interference fit can seal liquid and prevents static leakage.

To avoid damage, before installation and during installation, it is necessary to be careful of all seal storage, handling and safety Equipment, improper storage, handling and installation will affect the life.

The sealing element is a thermoplastic material rotary shaft lip Seals - Part 1. Basic dimensions and tolerances

1 Scope

This section GB/T 21283 describes a sealing element is a thermoplastic material rotary shaft lip seal, the sealing element is a thermoplastic Materials such as polytetrafluoroethylene (PTFE) as the base, with a suitably formed.

This section provides the sealing element is a thermoplastic material rotary shaft lip seals, basic dimensions and tolerances of the rotating shaft and the cavity and Size identification code.

This section applies to the sealing element is a thermoplastic material rotary shaft lip seals (hereinafter referred to as the ring).

Note: GB/T 21283 and GB/T 13871 complementary, GB/T 13871 stipulated elastomer seal.

2 Normative references

The following documents contain provisions which, through reference GB/T 21283 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 1800.4-1999 Limits and fits standard tolerance grades and limit deviations for holes and shafts of (eqv ISO 286-2. 1988) Terminology GB/T 3505-2000 Geometrical Product Specifications Surface texture Profile method of surface structure, definitions and parameters (eqv ISO 4287:1997) Rules and methods GB/T 10610-1998 Geometrical Product Specifications Surface texture Profile method assessment of surface texture (eqv ISO 4288:1996) GB/T 17446-1998 fluid power systems and components term (idt ISO 5598. 1985) GB/T 21283.2-2007 sealing element is a thermoplastic material rotary shaft lip seals Part 2. Vocabulary (ISO 16589-2.

2001, IDT)

3 Terms and Definitions

Terms and definitions GB/T 17446-1998 and GB/T 21283.2-2007 established applicable to this section.

4.1 Outer edge seal structure

There are four types of seals the outer edge of the structure. a metal skeleton, rubber-coated metal skeleton semi style, full rubber-coated metal frame type, metal seat formula. See an example to seal fabricated metal skeleton, rubber-coated metal skeleton

semi style, all-rubber-coated metal frame structure of the outer edge of formula

Figure 1, an example of a bonded metal seal seat structure shown in Figure 2.

Note 1: The seal element and the metal skeleton combination mode split ring and have fabricated a bonded seal.

Note 2: Due to some changes in the design, or are due to different manufacturers, so that the structure shown are only representative of the basic types.