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

GB/T 14041.2-2007

Replacing GB/T 14041.2-1993

**Hydraulic fluid power -- Filter elements -- Part 2: Verification of
material compatibility with fluids**

液压滤芯 材料与液体相容性检验方法

(English Translation)

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Foreword

GB/T 14041 "cartridge filtration pressure" includes the following four parts.

- Part 1. Determine the structural integrity and verify the initial bubble point;
- Part 2. Material compatibility with fluids test methods;
- Part 3. Tests for resistance to cracking;
- Part 4. Method for end load test.

This part of GB/T 14041 Part 2.

This section identical with the international standard ISO 2943:1998 "Hydraulic fluid filter material compatibility test" (in English), is the GB/T 14041.2-1993 "hydraulic filter material compatibility with fluid test methods" amendments.

This part of ISO 2943:1998 in technical contents of the same, with the following differences.

- "1" and a chapter, to increase the standard scope is described in;
- "2 Normative references" chapter, instead of the corresponding national standards with international standards;
- Increased 5.3 "Notes." this section instead of the date of implementation of the GB/T 14041.2-1993.

This section compared with the GB/T 14041.2-1993, has the following changes.

--- Test set forth requirements for container (4.2);

--- Increased filter cleaning requirements (5.3);

--- Emphasized in the test should use the new test liquid (5.4);

Material compatibility test method at low temperatures increases necessary --- (5.5);

--- Increase in test results reporting methods (Appendix A).

Appendix A of this part is a normative appendix.

This part is proposed by China Machinery Industry Federation.

This part of the National Standardization Technical Committee of hydraulic and pneumatic (SAC/TC3) centralized.

This section is responsible for drafting unit. Hydraulic Co. dawn.

Participated in the drafting of this section. Xinxiang City-Philippines Filter Co., Ltd., China Shipbuilding Industry Corporation 707 Research Institute of Jiujiang Division.

Introduction

In the hydraulic drive system, the power is pressurized by a liquid in a closed loop cycle to pass and control. Filter by entrapping Insoluble contaminants to maintain the degree of contamination of the liquid within an allowable range.

A porous filter element from the actual filtration.

GB/T 14041.2-2007/ISO 2943:1998 Hydraulic filters - Part 2. Materials liquid Compatibility test methods

1 Scope

GB/T 14041 provisions of this part of the filter with the specified test hydraulic fluid compatibility method used to verify low or high temperature filter Specify the system working fluid under isothermal conditions after the soaking, the ability to maintain the rating rupture.

Filter materials are not included in the filter (upper) seal installation.

This section applies to a hydraulic drive system with a filter.

2 Normative references

The following documents contain provisions which, through reference GB/T 14041 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 14041.1 hydraulic filters - Part 1. Structural integrity verification and initial bubble point determination (GB/T 14041.1-2007, ISO 2942:2004, IDT) GB/T 14041.3 hydraulic filter resistance to cracking test method (GB/T 14041.3-1993, eqv ISO 2941. 1974) GB/T 17446 Fluid power systems and components Terminology (GB/T 17446-1998, idt ISO 5598. 1985)

3 Terms and Definitions

The terms and definitions GB/T 17446 apply established in GB/T 14041 in this section.

4.1 Bath or oven and a cold room

Having a working fluid holding capacity within the temperature range of 5 °C.

4.2 Test container

Suitable for placement test liquid and the test cartridge sealed container, shall be provided with an exhaust port and adequate security considerations.

4.3 Test liquid

Specifies the working fluid.

4.4 Temperature measuring instruments

Suitable for measuring the temperature of the test liquid instrument accuracy should be in the range of ± 1 °C.

5 Test procedure

5.1

according to GB/T 14041.1 verify the structural integrity of the filter.

5.2

If the measured initial filter bubble point pressure value is lower than the minimum specified by the manufacturer of the bubble point pressure, you should remove the filter further Test qualifications.

5.3 5.1 Test liquid rinse after passing the test is the test cartridge until the cartridge from being completely removed the previous test trials soaking liquid body. Rinse with liquid waste.

Note: the complete removal of the filter from the previous tests after soaking liquid, it can be

considered that the filter is clean. If the previous tests using volatile liquid is soaked Test filter, can be air-dried way to clean the filter.

GB/T 14041.2-2007/ISO 2943:1998