

ICS 27.020
CCS J 91



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

GB/T 8243.13-2015

**Methods of test for full flow lubricating oil filters for internal
combustion engine -- Part 13: Static burst pressure test for
composite filter housings**

内燃机全流式机油滤清器试验方法 第13部分：复合材料滤清器的静压耐破度试验
(English Translation)

Issued on: December 10, 2015

Implemented on: July 1, 2016

Issued by: Standardization Administration of China

Table of Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and Definitions

4 Test Bench

Foreword

GB/T 8243 "full-flow oil filters for internal combustion engines Test Method" currently consists of the following parts.

- Part 1. Differential pressure - flow characteristics;
- Part 2. Element by-pass valve characteristics;
- Part 3. Resistance to high differential pressure and high temperature properties;
- Part 4. Original filtration efficiency, life and cumulative efficiency (gravimetric method);
- Part 5. Cold start simulation and hydraulic pulse durability test;
- Part 6. Static burst pressure test;
- Part 7. Vibration fatigue test;
- Part 9. Inlet and outlet valve tests;
- Part 10. life and cumulative efficiency of oil when it contains water;
- Part 11. self-cleaning filter;
- Part 12. Determination of particle counting using filtration efficiency and dust capacity;
- Part 13. Composite filter static pressure bursting test.

This section is GB/T Part of 138,243.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method identical with ISO 4548-13:2013 "full-flow oil filters for internal combustion engines - Test methods - Part 13.

Composite filter static pressure bursting test. " Consistency correspondence between this part of international documents and normative references of our files are as follows.

--- GB/T 8243.1-2003 full flow oil filters for internal combustion engines - Test methods - Part 1. pressure - flow characteristics (ISO 4548-1:1997, IDT).

This part is proposed by China Machinery Industry Federation.

This part of the internal combustion engine by the National Standardization Technical Committee (SAC/TC177) centralized.

Introduction

GB/T 8243 (all parts) provides a uniform testing procedures for determination of the internal combustion engine full-flow oil filter performance. This series of standards an integral part of every part relates to certain performance characteristics are divided.

Complete set of test methods to provide the necessary information required to assess the filter characteristic, but if the user and the vendor agreed set of test methods it can also be used separately.

Static burst pressure properties GB/T 8243 this part of the internal combustion engine suitable for evaluation of composite material full-flow oil filter.

Full-flow oil filters for internal combustion engines Test Method Part 13. static composite filter Bursting test

1 Scope

GB/T 8243 provisions of this part of the determination of the internal combustion engine full-flow oil filter at high and low temperature static pressure capacity, and Test methods for determining the size of the hydrostatic burst strength and determination of failure modes.

This section applies to the manufacture of temperature-sensitive composite spin-on oil filter or other forms.

This section applies to new or after durability test filter.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

ISO 4548-1 combustion engine full-flow oil filters - Test methods - Part 1. pressure - flow characteristics (Methodsoftestfor
ful-flowlubricatingoilfiltersforinternalcombustionengines-Part 1. Differentialpressure/flow characteristics)

3 Terms and Definitions

Terms and definitions as defined in ISO 4548-1 apply to this document.

4 Test Bench

Test bench (see Figure 1) shall include. produce a manual pump or other suitable technical devices desired pressure; high-pressure tubing and valves Door; range is 0kPa ~ 3000kPa pressure or higher in order to meet the requirements of the target [see 6.1g)], and is mounted to the measured downstream of the test filter Pressure; means for connecting the entire filter connector.

To achieve -30 °C ~ 150 °C test temperature conditions, it is recommended to use an environmental chamber.

By default, the filter test temperature of -30 °C ~ 150 °C.

Recording or monitoring pressure reaches the maximum pressure value manner, it should be able to pressure the continuous tracking and determined the value of the leak pressure when.

Test station should be designed to ensure that the test personnel to test the operation safely.