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

GB/T 35363-2017

**Diesel fuel and petrol filters for vehicle engines -- The test
method for filtration efficiency and contaminant retention
capacity -- Method of particle counting
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the redrafted law Amendment to adopt ISO 19438:2003 "Internal combustion diesel filters and gasoline filters - the use of particle meter Number method for the determination of filtration efficiency and dirt holding capacity "(in English).

This standard and ISO 19438:2003 technical differences and the reasons are as follows.

--- Modify the normative references to adapt to China's technical conditions, the concentration of the situation reflected in Chapter 2 "Normative references document ", the specific adjustments are as follows.

- Replaced ISO 1219-1:2006 (see Chapter 4) with GB/T 786.1-2009 equivalent to the international standard;
- Replace ISO 2942 with GB/T 14041.1 equivalent to international standards (see 8.1.2);
- Replace ISO 3968 with GB/T 17486 equivalent to international standards (see 5.1.1.2);
- Replace ISO 4021 with GB/T 17489 equivalent to international standards (see 5.1.1.2);
- Replacing ISO 11171 with modifications GB/T 18854 adopting international standards (see 3.5, 3.6, 7.2);
- Replace ISO 11943 with GB/T 21540 equivalent to international standards (see 7.2);
- Replaced ISO 4405 with modifications GB/T 27613 adopting international standards (see

5.1.1.3 and 10.2.2.1);

- Replace ISO 11841-1:2001 (see Chapter 3) with GB/T 28950.1-2012 which adopts the same international standard;

- Replace ISO 11841-2:2000 (see Chapter 3) with GB/T 28950.2-2012 equivalent to the International Standard;

- Replaced ISO 12103-1:1997 (see 5.2.2.1) with modifications GB/T 28957.1-2012 adopting international standards.

- Modify the structural integrity test solution (see Chapter 8), enhance the operability;

- Modify the test system to verify the calculation of the total system volume requirements (see 7.3.3), to adapt to China's technical conditions conducive to Paul the accuracy of the test results;

- Increased our common test fluid, the appendix A "note" to the footnote form (see Appendix A), more in line with our standard way of expression.

For ease of use, this standard made the following editorial changes.

- According to the main application areas of this standard and jargon usage, the standard name was changed to "car engine diesel filter and gasoline filter filtration efficiency and dirt holding capacity of the determination of particle counting method";

- Removed the international standard information appendix "Appendix D" International Laboratory ISO 19438 Draft Joint Verification Test of the pick want";

- Removed the international standard of information elements "reference";

- International Standard quoted in ISO 19438:2003, with the consistency of their standards in place of the corresponding international standards standard;

- Use non-standard unit "ppm" to "μL/L" (see Chapter 8).

Please note that some of this document may be patentable. The issuing agencies of this document do not bear the responsibility of identifying these patents.

This standard proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This standard by the National Automotive Standardization Technical Committee (SAC/TC114) centralized.

This standard was drafted unit. Aviation Industry Filter Products Quality Supervision and Testing Center (Xinxiang), Zhejiang Global Filter Co., Ltd., Linhai City Jiangnan Filter Co., Ltd., Guangzhou Yi Feng Auto Parts Manufacturing Co., Ltd., Zibo Yonghua Filter Co., Ltd.

Introduction

In automotive engine fuel systems, diesel filters and gasoline filters filter out solid particulate contaminants in the fuel to avoid Blocked fuel nozzle, reducing cylinder liner, piston rings and other wear and tear, to extend engine life.

This standard specifies the standard test rules for measuring the pressure difference, filtration efficiency and dirt holding capacity of diesel engine and gasoline filter of automobile engine Cheng, in order to assess the fuel filter performance provides the necessary reference information.

Automotive engine diesel filters and Gasoline filter efficiency and filtration Determination of containment capacity Particle counting method

1 Scope

This standard specifies the constant flow at a continuous pollutant injection and online particle count evaluation of the car engine fuel filter Performance of the test method through several times, test methods include filter dirt capacity, particle filtration characteristics and pressure drop test.

This standard applies to the rated flow of 50L/h to 800L/h filter. According to the filter manufacturer and customer agreement, the test party the law allows for higher flow fuel filters.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 786.1-2009 Fluid power systems and components Graphical symbols and circuit diagrams Part 1. For general purposes and data points Graphic symbols (ISO 1219-1:2006, IDT) GB/T 14041.1 hydraulic filter - Part 1. Structural integrity verification and determination of the initial bubble point (GB/T 14041.1-2007, ISO 2942:2004, IDT) GB/T 17486 hydraulic filter differential pressure flow characteristics of the assessment (GB/T 17486-2006, ISO 3968:2001, IDT) GB/T 17489 hydraulic particle pollution analysis Pipeline from the working system to extract liquid samples (GB/T 17489-1998, idt ISO 4021:1992) GB/T 18854 Hydraulic fluid automatic particle counter calibration (GB/T 18854-2015, ISO 11171:2010, MOD) GB/T 21540 hydraulic transmission fluid on-line automatic particle counting system calibration and verification methods (GB/T 21540-2008, ISO 11943:1999, IDT) GB/T 27613 hydraulic transmission fluid pollution Determination of particle contamination by weighing method (GB/T 27613-2011, ISO 4405:1991, MOD) GB/T 28950.1-2012 Road vehicles and internal combustion engine Filters Terminology Part 1. Filter and filter components set

Meaning (ISO 11841-1:2001, IDT) GB/T 28950.2-2012 Road vehicles and internal combustion engine Filters Terminology Part 2. Filter and its components performance index
Standard definition (ISO 11841-2:2000, IDT) GB/T 28957.1-2012 Road vehicles - Test dust for filter assessment - Part 1. Silica test dust (ISO 12103-1:1997, MOD)

3 Terms and definitions

GB/T 28950.1-2012 and GB/T 28950.2-2012 and the following terms and definitions apply to this document.