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Methods of test for full-flow lubricating oil filters for internal combustion engines —

Part 14: Cold start simulation and hydraulic pulse durability for composite filter housings

*Méthodes d'essai des filtres à huile de lubrification à passage intégral
pour moteurs à combustion interne —*

*Partie 14: Essais de simulation de démarrage à froid et de résistance
aux impulsions hydrauliques pour les corps de filtre pressurisés à base
de matériaux composites*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The committee responsible for this document is ISO/TC 70, *Internal combustion engines*, Subcommittee SC 7, *Tests for lubricating oil filters*.

ISO 4548 consists of the following parts, under the general title *Methods of test for full-flow lubricating oil filters for internal combustion engines*:

- *Part 1: Differential pressure/flow characteristics*
- *Part 2: Element by-pass valve characteristics*
- *Part 3: Resistance to high differential pressure and to elevated temperature*
- *Part 4: Initial particle retention efficiency, life and cumulative efficiency (gravimetric method)*
- *Part 5: Test for cold start simulation and hydraulic pulse durability*
- *Part 6: Static burst pressure test*
- *Part 7: Vibration fatigue test*
- *Part 9: Inlet and outlet anti-drain valve tests*
- *Part 12: Filtration efficiency using particle counting, and contaminant retention capacity*
- *Part 13: Static burst pressure test for composite filter housings*
- *Part 14: Cold start simulation and hydraulic pulse durability for composite filter housings*
- *Part 15: Vibration fatigue test for composite filter housings*

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Introduction

This part of ISO 4548 establishes standard test procedures for measuring the performance of full-flow lubricating oil filter modules made of composite materials for internal combustion engines in tests of cold start simulation and hydraulic pulse durability.