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Diesel fuel — Assessment of lubricity using the high-frequency reciprocating rig (HFRR) —

Part 1: Test method

*Carburant diesel — Évaluation du pouvoir lubrifiant au banc alternatif à
haute fréquence (HFRR) —*

Partie 1: Méthode d'essai



Reference number
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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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Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 12156-1 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 7, *Injection equipment and filters for use on road vehicles*, in collaboration with ISO/TC 28, *Petroleum products and lubricants*.

This second edition cancels and replaces the first edition (ISO 12156-1:1997), which has been technically revised. It also incorporates the Technical Corrigendum ISO 12156-1:1997/Cor.1:1998.

ISO 12156 consists of the following parts, under the general title *Diesel fuel — Assessment of lubricity using the high-frequency reciprocating rig (HFRR)*:

- *Part 1: Test method*
- *Part 2: Limit*

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Introduction

All diesel fuel injection equipment has some reliance on diesel fuel as a lubricant. Wear due to excessive friction resulting in shortened life of engine components, such as diesel fuel injection pumps and injectors, has sometimes been ascribed to lack of lubricity in the fuel.

The relationship of test results to diesel injection equipment component distress due to wear has been demonstrated for some fuel/hardware combinations where boundary lubrication is a factor in the operation of the component.

Test results from fuels tested to this procedure have been found to correlate to many fuel/hardware combinations and provide an adequate prediction of the lubricating quality of the fuel.