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

**Part 2:  
Limit**

iTeh STANDARD PREVIEW

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

*Partie 2: Limite*

[ISO 12156-2:1998](#)

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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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 12156-2 was prepared jointly by Technical Committees ISO/TC 22, *Road vehicles*, Subcommittee SC 7, *Injection equipment and filters for use on road vehicles* and ISO/TC 28, *Petroleum products and lubricants*.

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

## Part 2: Limit

### 1 Scope

This part of ISO 12156 specifies the performance requirement (limit) necessary to ensure reliable operation of diesel fuel injection equipment with respect to lubrication by fuel of such equipment.

It applies to fuels used in diesel engines.

NOTE — A variety of typical fuels was investigated prior to approval of this part of ISO 12156. However, it is not known whether the performance requirements specified in this part of ISO 12156 is appropriate for all additive/fuel combinations. Additional work is underway to help predict the performance and future revisions of this part of ISO 12156 may be necessary once this work is complete.

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### 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 12156. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 12156 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 12156-1:1997, *Diesel fuel — Assessment of lubricity using the high-frequency reciprocating rig (HFRR) — Part 1: Test method.*

### 3 Test method

The test method for the assessment of diesel fuel lubricity to comply with the limit specified in this part of ISO 12156 shall be the method specified in ISO 12156-1.

### 4 Limit

The performance requirement (limit) for diesel fuel in compliance with this part of ISO 12156 shall be a wear scar diameter corrected to a standardized water vapour pressure of 1,4 kPa (WS<sub>1,4</sub>) not greater than 460 µm.

There may be additive/fuel combinations showing greater WS<sub>1,4</sub> than that specified above which give acceptable performances. Such deviation from the standard, as well as any other non-compliance with the above-specified limit, requires mutual agreement of the fuel supplier and the engine/fuel injection equipment manufacturer in written form.

## 5 Designation

This part of ISO 12156 may be used to specify a lubricity requirement for diesel fuel. This requirement shall be designated as follows:

**Lubricity ISO 12156-2**

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