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**Motorcycles — Measurement method for  
gaseous exhaust emissions and fuel  
consumption —**

Part 2:  
**Test cycles and specific test conditions**

*Motorcycles — Méthode de mesure des émissions de gaz  
d'échappement et de la consommation de carburant —*

*Partie 2: Conditions d'essai spécifiques et cycles d'essai*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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 6460-2 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 22, *Motorcycles*.

ISO 6460-2, together with ISO 6460-1 and ISO 6460-3, cancels and replaces ISO 6460:1981 and ISO 7860:1995, which have been technically revised.

ISO 6460 consists of the following parts, under the general title *Motorcycles — Measurement method for gaseous exhaust emissions and fuel consumption*:

- *Part 1: General test requirements*
- *Part 2: Test cycles and specific test conditions*
- *Part 3: Fuel consumption measurement at a constant speed*

## Introduction

This part of ISO 6460 has been prepared to provide details of the typical test cycles for measurement of exhaust gas and fuel consumption. The measurements can be carried out by referring to this part of ISO 6460 and to ISO 6460-1.

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# Motorcycles — Measurement method for gaseous exhaust emissions and fuel consumption —

## Part 2:

## Test cycles and specific test conditions

### 1 Scope

This part of ISO 6460 defines test cycles for measurement for the gaseous emissions from motorcycles, as well as for determining the fuel consumption of motorcycles as defined in ISO 3833, equipped with a spark ignition engine (four-stroke engine, two-stroke engine or rotary piston engine) or a compression ignition engine.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4106, *Motorcycles — Engine test code — Net power*

ISO 7117, *Motorcycles — Measurement of maximum speed*

### 3 Test cycle

#### 3.1 Introduction

The test cycle is equivalent to the test cycle specified in European Union Commission Directive 2003/77/EC<sup>[7]</sup>.

The motorcycle shall be placed on a chassis dynamometer equipped with a brake and flywheel. The urban driving cycle (UDC) test shall be conducted over six elementary urban cycles lasting a total 1 170 s without interruption. The urban driving cycle (UDC)/extra-urban driving cycle (EUDC) test shall be conducted over six elementary urban cycles plus one extra-urban cycle lasting a total of 1 570 s without interruption.

During the test, the exhaust gases shall be diluted with air so that the flow volume of the mixture remains constant. Throughout the test, a continuous flow of samples of the mixture shall be passed into one or more bags so that concentrations (average test values) of carbon monoxide, unburnt hydrocarbons, oxides of nitrogen and carbon dioxide can be determined.

A selection of other test cycles adopted or to be adopted by several countries is described in Annex C for information purposes.