



**International
Standard**

ISO 21755-3

**Motorcycles — Measurement
method for evaporative
emissions —**

**Part 3:
VT-SHED test procedure**

*Motorcycles — Méthode de mesure pour les émissions par
évaporation —*

Partie 3: Protocole d'essai VT-SHED

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 38, *Motorcycles and mopeds*.

A list of all parts in the ISO 21755 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Recently, exhaust emissions from tailpipes of motorcycles have been dramatically reduced. Accordingly, evaporative emissions have begun to attract attention. Therefore, measurement methods for evaporative emissions are specified as an International Standard for multi-application, for example, certification, research, developments and so on.

For motorcycles, the measurement method based on the sealed housing for evaporative determination (SHED) method was conventionally specified, but not for the variable temperature sealed housing for evaporative determination (VT-SHED) method, which matches the actual usage environment and has a high accuracy of the test system. This document specifies the basic measurement method by using the VT-SHED test procedure for evaporative emissions from motorcycles.

Motorcycles — Measurement method for evaporative emissions —

Part 3: VT-SHED test procedure

1 Scope

This document specifies a basic measurement method by using the variable temperature sealed housing for evaporative determination (VT-SHED) test procedure for evaporative emissions from motorcycles. It is applicable to motorcycles equipped with a spark ignition engine (four-stroke engine, two-stroke engine or rotary piston engine).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 6460-1:2022, *Motorcycles — Measurement method for gaseous exhaust emissions and fuel consumption — Part 1: General test requirements*

ISO 6460-2, *Motorcycles — Measurement method for gaseous exhaust emissions and fuel consumption — Part 2: Test cycles and specific test conditions*

ISO 7117, *Motorcycles — Measurement method for determining maximum speed*

ISO 11486, *Motorcycles — Methods for setting running resistance on a chassis dynamometer*

ISO 21755-1:2019, *Motorcycles — Measurement method for evaporative emissions — Part 1: SHED test procedure*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

evaporative emissions

hydrocarbon vapor lost from the fuel storage and supply system of a motorcycle and not those from tailpipe emissions