### INTERNATIONAL STANDARD

ISO 8644

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION ORGANISATION INTERNATIONALE DE NORMALISATION MEЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Motorcycles — Light-alloy wheels — Test method

Motocycles — Roues en alliages légers — Méthode d'essai

Reference number ISO 8644: 1988 (E)

#### **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 approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8644 was prepared by Technical Committee ISO/TC 22, Road vehicles.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

## Motorcycles — Light-alloy wheels — Test method

#### 1 Scope

This International Standard specifies methods for determining the reliability of light-alloy road wheels for motorcycles under normal use stress.

#### 2 Field of application

This International Standard applies to wheels for motorcycles with two or three wheels (including motorcycles equipped with side-cars) as defined in ISO 3833, of the following types:

- unit construction light-alloy wheels;
- composite construction light-alloy wheels.

#### 3 Reference

ISO 3833, Road vehicles — Types — Terms and definitions.

#### 4 Definitions

For the purposes of this International Standard, the following definitions apply.

**4.1** unit construction light-alloy wheel: Wheel of which the rim and spokes, or the disc, are manufactured as a single unit.

**4.2** composite construction light-alloy wheel: Wheel of which the rim is made of light-alloy, and the spokes or disc of light-alloy or steel, which are then assembled.

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#### 5 Tests

The tests to be carried out are the following:

- a) rotation bending fatigue test (dynamic cornering fatigue test for three-wheelers and motorcycles equipped with side-cars) (see clause 6);
- b) radial load durability test (see clause 7);
- c) radial impact resistance test (see clause 8):
- d) torsion test (see clause 9);
- e) air leak test (applicable only to wheels designed and marked for use with tubeless tyres) (see clause 10).

A different wheel shall be used for each test.

# 6 Rotation bending fatigue test (dynamic cornering fatigue test for three-wheelers and motorcycles fitted with side-cars)

#### 6.1 Test equipment

The test equipment shall be planned to produce a constant bending moment on the centre of the light-alloy wheel which rotates with a constant velocity. An example of such equipment is shown in figure 1.

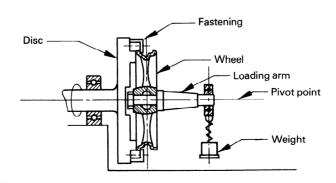


Figure 1 — Model equipment for cornering fatigue test