

STANDARD

3853

Second edition
1994-09-15

**Road vehicles — Towing vehicle coupling
device to tow caravans or light trailers —
Mechanical strength test**

*Véhicules routiers — Dispositifs d'attelage montés sur les véhicules
tractant des caravanes ou des remorques légères — Essai de résistance
mécanique*



Reference number
ISO 3853:1994(E)

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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 3853 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 4, *Caravans and light trailers*.

This second edition cancels and replaces the first edition (ISO 3853:1977), of which it constitutes a technical revision.

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Road vehicles — Towing vehicle coupling device to tow caravans or light trailers — Mechanical strength test

1 Scope

This International Standard specifies a simplified procedure for testing the mechanical strength of coupling devices fitted to towing vehicles for towing caravans or light trailers of categories O₁ and O₂.¹⁾

2 Normative references

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

ISO 1103:1976, *Road vehicles — Caravans and light trailers — Coupling ball — Dimensional characteristics*.

ISO 1176:1990, *Road vehicles — Masses — Vocabulary and codes*.

ISO 7237:1993, *Caravans — Masses and dimensions — Vocabulary*.

3 Definitions

For the purposes of this International Standard, the definitions given in ISO 1176 for towing vehicles and ISO 7237 for caravans, and the following definitions apply.

3.1 coupling device: Device including towing bracket and ball.

NOTE 1 Current terms are shown in figure 1.

3.2 static load, F_{stat} : Permissible load on the coupling device transmitted by the coupling ball.

3.3 reference line: Approximately horizontal line through the centre of the coupling device, given by the car manufacturer for the laden car, and within set limits.

1) Definitions in accordance with UN-ECE classification of road vehicles:

Category O₁: single-axled trailers, other than semi-trailers, with a maximum mass not exceeding 750 kg.

Category O₂: trailers with a maximum mass not exceeding 3 500 kg, other than trailers of category O₁.