### **INTERNATIONAL** STANDARD

ISO 1726

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# Road vehicles — Mechanical coupling between tractors and semi-trailers - Interchangeability

jis - Liais. Véhicules routiers — Liaisons mécaniques entre tracteurs et semi-remorques — Interchangeabilité



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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 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 1726 was prepared by Technical Committee ISO/TC 22, Road vehicles.

This second edition cancels and replaces the first edition (ISO 1726 : 1973): the values in 2.1 have altered, 2.2 is new, and clauses 3 and 4, and the figures have all been revised and extended.

Annex A of this International Standard is given for information only.

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## Road vehicles – Mechanical coupling between tractors and semi-trailers – Interchangeability

#### 1 Scope

This International Standard specifies the various elements and dimensions of a tractor vehicle and a coupled semi-trailer which together constitute an articulated vehicle, in order to ensure interchangeability.

It specifies certain interchangeability dimensions of the gooseneck contour and operating dimensions relating to some angle values.

The requirements of this International Standard permit use of the same semi-trailer with two-axle or three-axle tractors.

NOTE – The dimensions of the 50 mm and 90 mm fifth-wheel coupling pins are specified in ISO  $337^{[1]}$  and ISO  $4086^{[2]}$  respectively. Mounting zones for pneumatic braking couplings are specified in ISO  $1728^{[3]}$ .

The articulated vehicles are intended for commercial transport of cargo of the greatest possible variety: this International Standard does not necessarily cover special combination types (e.g. high-cube vehicles, low-bed vehicles, tipper vehicles).

Limitations of maximum gross mass and overall dimensions are generally laid down by legislative requirements.

#### 2 Interchangeability dimensions

#### 2.1 Height of fifth wheel of laden tractor

The height of the fifth wheel of a laden tractor above GRP, h (see figure 1), in millimetres, shall be 1 200 mm $^{+100}_{-50}$  mm.

To establish conformity, the height of the fifth wheel of the laden tractor, h, in millimetres, may be determined according to the following formula (see figures 1, 2 and 3):

$$h \ge 0,137 l_1 + 0,095 b + r + r_1 - 143,5$$

where

 $l_1$  is the distance between the coupling axis and the axis of the rearmost axle of the tractor;

*b* is the total width of the tyres at the rearmost axle of the tractor;

- r is the radius of the tyres, unladen;
- $r_1$  is the radius of the tyres, laden.

#### 2.2 Height of fifth wheel of unladen tractor

The height of the fifth wheel of an unladen tractor above GRP, h (see figure 1) shall be 1 400 mm max.

#### 2.3 Forward clearance zone radius of semi-trailer

The forward clearance zone radius of the semi-trailer, d (see figure 4), shall be 2 040 mm max.