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

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

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ISO 1726-1:2000

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 734 10 79
E-mail copyright@iso.ch
Web www.iso.ch

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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 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 1726 was prepared by Technical Committee ISO/TC 22, *Road Vehicles*, Subcommittee SC 15, *Interchangeability of components of commercial vehicles and buses*.

This third edition cancels and replaces the second edition (ISO 1726:1989), which has been technically revised.

Annex A forms a normative part of this International Standard.

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

1 Scope

This International Standard specifies dimensions to ensure interchangeability between a tractor vehicle and a coupled semi-trailer, the two together constituting an articulated vehicle. It specifies certain interchangeability dimensions, including those of the gooseneck contour, as well as operating dimensions related to angle values. The specifications permit the same semi-trailer to be used with either two- or three-axle tractors.

Annex A gives interface technical specifications for tractors designed for towing high-cube semi-trailers, including ISO containers having an external height of 2,9 m.

This International Standard covers articulated vehicles used in commercial cargo transport of the greatest possible variety. However, it may not be applicable to special combination types such as low-bed or tipper vehicles.

This International Standard does not provide limitations of maximum gross mass and overall dimensions, which are generally laid down by legislative requirements.

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2 Normative reference

ISO 1726-1:2000

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The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, this publication do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 337, *Road vehicles — 50 semi-trailer fifth wheel coupling pin — Basic and mounting/interchangeability dimensions*.

3 Interchangeability dimensions

3.1 Height of fifth wheel of laden tractor

The height, h , of the fifth wheel of a laden tractor above the ground reference plane, GRP (see Figure 1), shall be in the range 1 150 mm to 1 300 mm.

3.2 Height of fifth wheel of uncoupled tractor

The height h above GRP of the fifth wheel of an uncoupled tractor shall not exceed 1 400 mm.

3.3 Forward-clearance-zone radius of semi-trailer

The semi-trailer's forward-clearance-zone radius, d (see Figure 2), shall not exceed 2 040 mm.

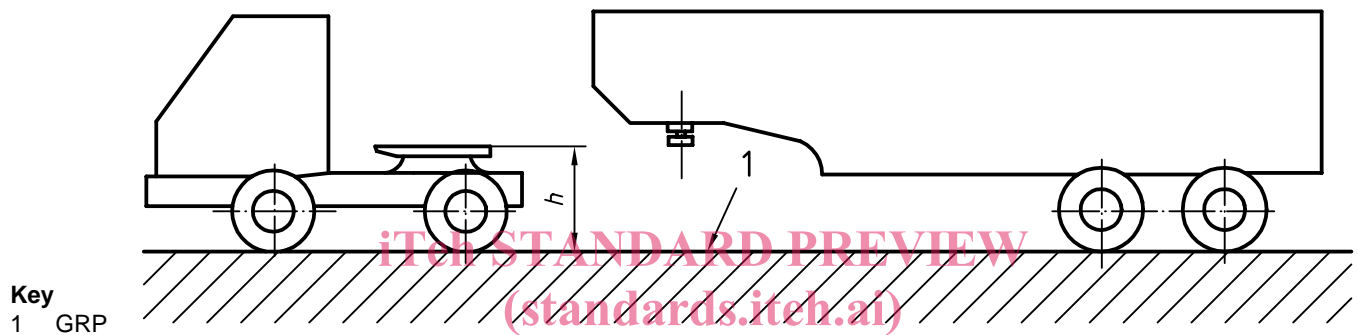
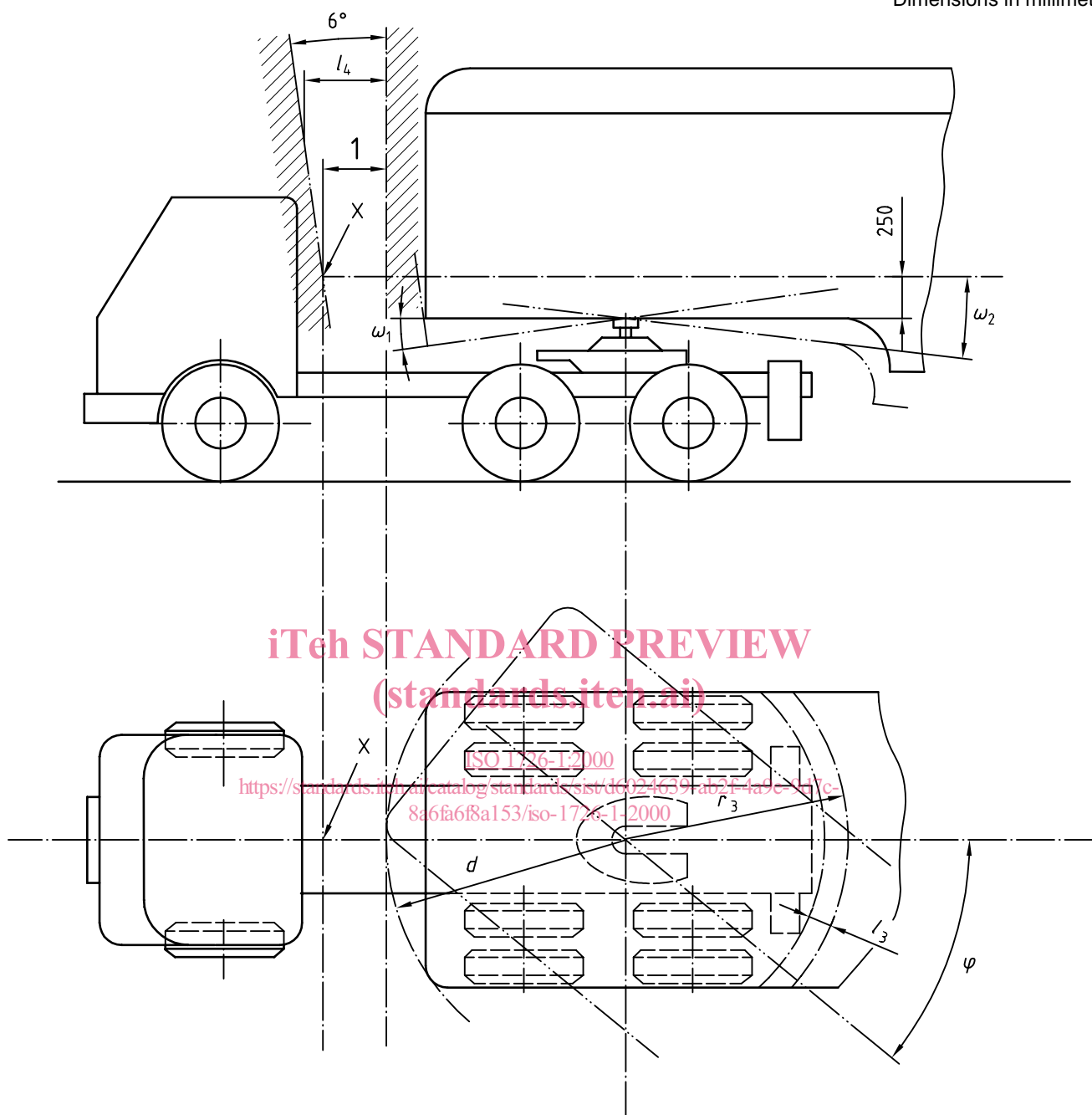


Figure 1 — Height of fifth wheel

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Dimensions in millimetres



Key

1 l_4 at point X = 80 mm min

Figure 2 — Free space between tractor and semi-trailer

3.4 Gooseneck contour

The gooseneck shall be located on the outside of a surface consisting of two planes and one surface of revolution interconnected without forming a step. These three parts of the total surface are shown in Figure 3 and defined as follows:

- a plane horizontal and perpendicular to the axis of the coupling pin with a length of l_2 (AB) and a width of that of the semi-trailer, limited by the intersection of
- a second plane of the same width, making an angle γ with the first plane, limited by the intersection of

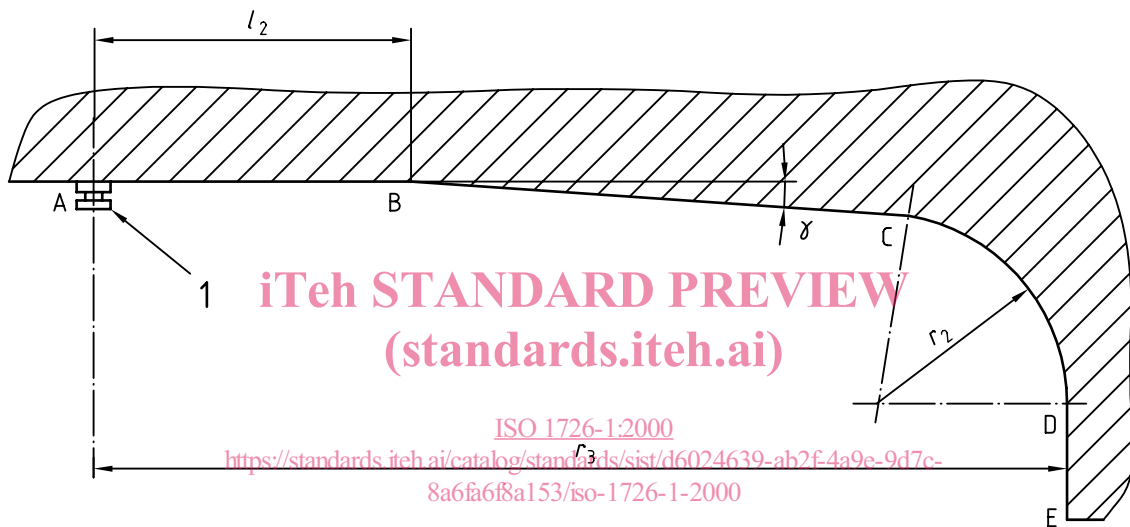
ISO 1726:2000(E)

- a surface of revolution generated by rotating the vertical portion DE, situated at a radius, r_3 , from the axis of the coupling pin, and an arc of a circle of radius r_2 (CD – C'D'), between the second plane and DE, such that no discontinuity arises.

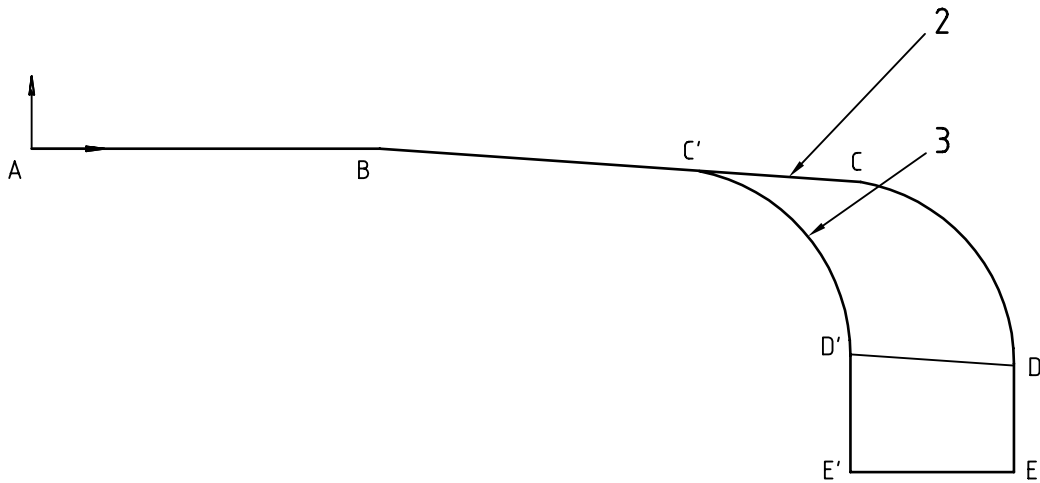
The values adopted for these generator elements:

- $l_2 = 750$ mm
- $\gamma = 4^\circ$
- $r_2 = 450$ mm
- $r_3 = 2300$ mm

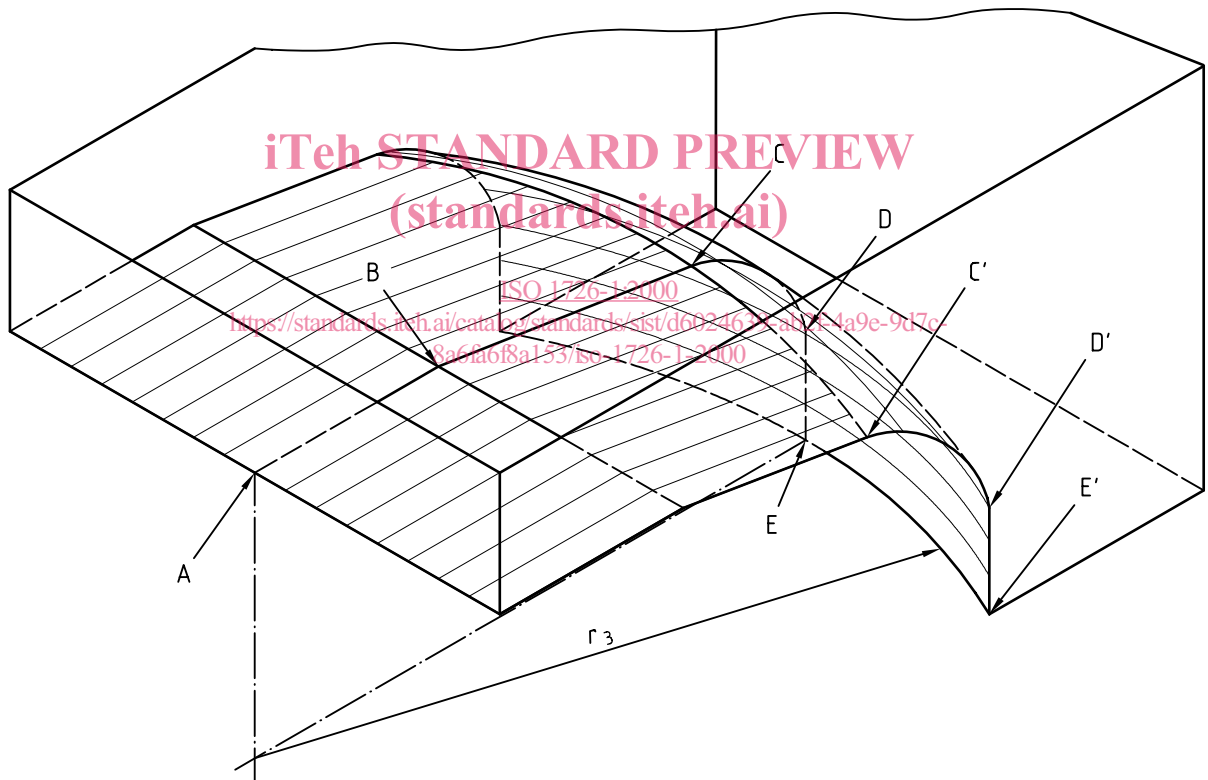
The above dimensions allow the determination of the centre of the circle of radius r_2 .



a) Gooseneck contour: generator elements



b) Gooseneck contour: centre and outer profiles



c) Gooseneck contour: three-dimensional view

Key

- 1 Coupling pin (in accordance with ISO 337)
- 2 Centre profile
- 3 Outer profile

Figure 3 — Gooseneck contour