

---

---

**Commercial road vehicles — Coupling  
equipment between vehicles in  
multiple vehicle combinations —  
Strength requirements**

*Véhicules routiers utilitaires — Équipement de couplage entre  
véhicules dans des combinaisons de véhicules multiples — Exigences  
de résistance*

*iteh standards*  
(<https://standards.iteh.ai>)  
Document Preview

ISO 18868:2013

<https://standards.iteh.ai/catalog/standards/iso/6ba18cb6-7fd0-43b6-89bf-b9bd6f988b53/iso-18868-2013>



iTeh Standards  
(<https://standards.iteh.ai>)  
Document Preview

ISO 18868:2013

<https://standards.iteh.ai/catalog/standards/iso/6ba18cb6-7fd0-43b6-89bf-b9bd6f988b53/iso-18868-2013>



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Terms and definitions</b> .....	<b>1</b>
<b>3 Symbols</b> .....	<b>2</b>
<b>4 ISO vehicle combinations definition</b> .....	<b>4</b>
4.1 ISO vehicle combination 1.....	4
4.2 ISO vehicle combination 2.....	4
4.3 ISO vehicle combination 3.....	4
4.4 ISO vehicle combination 4.....	4
4.5 ISO vehicle combination 5.....	4
<b>5 General requirements</b> .....	<b>5</b>
5.1 Vehicle combination handling .....	5
5.2 Determination of minimum coupling equipment performance capability required for a specific vehicle combination.....	5
<b>6 Worked numerical examples</b> .....	<b>8</b>
6.1 ISO combination 1: truck + dolly + A-semi (numerical example) .....	8
6.2 ISO combination 2: tractor + A-semi + centre-axle trailer (numerical example) .....	9
6.3 ISO combination 3: tractor + A-semi + dolly + A-semi (numerical example).....	9
6.4 ISO combination 4: truck + centre-axle trailer + centre-axle trailer (numerical example).....	10
6.5 ISO combination 5: tractor + link-trailer + A-semi (B-train) (numerical example).....	10
<b>Bibliography</b> .....	<b>11</b>

Document Preview

ISO 18868:2013

<https://standards.iteh.ai/catalog/standards/iso/6ba18cb6-7fd0-43b6-89bf-b9bd6f988b53/iso-18868-2013>

## 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.

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 documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. [www.iso.org/directives](http://www.iso.org/directives)

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received. [www.iso.org/patents](http://www.iso.org/patents)

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The committee responsible for this document is ISO/TC 22, *Road vehicles*, Subcommittee SC 15, *Interchangeability of components of commercial vehicles and buses*.

(<https://standards.iteh.ai>)  
Document Preview

ISO 18868:2013

<https://standards.iteh.ai/catalog/standards/iso/6ba18cb6-7fd0-43b6-89bf-b9bd6f988b53/iso-18868-2013>

## Introduction

This International Standard specifies general requirements and definitions to secure the safe operation of mechanical couplings between individual vehicles in a multiple-vehicle combination.

The expanded application of multiple-vehicle combinations brings new perspectives and needs into the area of trailer couplings. This has made evident the need for a consolidated method to handle the dimensioning of mechanical couplings applied in multiple-vehicle combinations. This International Standard is meant to facilitate the interaction between International Standards and relevant regulations.

The drivers for the introduction of this International Standard are

- the development of the European modular system making multiple-vehicle combinations (road trains) more of a global application, and
- the lack of rules for the dimensions of couplings used together with converter dolly. Those applications are already very common on the roads today.

The limited number of types of multiple-vehicle combinations addressed in this International Standard is the result of a voting process among the nations. Other types may be added in later editions as experience is gained.

**iTeh Standards**  
(<https://standards.iteh.ai>)  
**Document Preview**

[ISO 18868:2013](https://standards.iteh.ai/catalog/standards/iso/6ba18cb6-7fd0-43b6-89bf-b9bd6f988b53/iso-18868-2013)

<https://standards.iteh.ai/catalog/standards/iso/6ba18cb6-7fd0-43b6-89bf-b9bd6f988b53/iso-18868-2013>

