

Teknisk rapport

SIS-ISO/TR 12349-1:2015

Publicerad/Published: 2015-10-07
Utgåva/Edition: 1
Språk/Language: engelska/English
ICS: 43.180

Vägfordon – Dockor för provning av skyddssystem för åkande – Del 1: Vuxendockor

Road vehicles – Dummies for restraint system testing – Part 1: Adult dummies

This preview is downloaded from www.sis.se. Buy the entire standard via <https://www.sis.se/std-8016301>

Standarder får världen att fungera

SIS (Swedish Standards Institute) är en fristående ideell förening med medlemmar från både privat och offentlig sektor. Vi är en del av det europeiska och globala nätverk som utarbetar internationella standarder. Standarder är dokumenterad kunskap utvecklad av framstående aktörer inom industri, näringsliv och samhälle och befrämjar handel över gränser, bidrar till att processer och produkter blir säkrare samt effektiviserar din verksamhet.

Delta och påverka

Som medlem i SIS har du möjlighet att påverka framtida standarder inom ditt område på nationell, europeisk och global nivå. Du får samtidigt tillgång till tidig information om utvecklingen inom din bransch.

Ta del av det färdiga arbetet

Vi erbjuder våra kunder allt som rör standarder och deras tillämpning. Hos oss kan du köpa alla publikationer du behöver – allt från enskilda standarder, tekniska rapporter och standardpaket till handböcker och onlinetjänster. Genom vår webbtjänst e-nav får du tillgång till ett lättnavigerat bibliotek där alla standarder som är aktuella för ditt företag finns tillgängliga. Standarder och handböcker är källor till kunskap. Vi säljer dem.

Utveckla din kompetens och lyckas bättre i ditt arbete

Hos SIS kan du gå öppna eller företagsinterna utbildningar kring innehåll och tillämpning av standarder. Genom vår närhet till den internationella utvecklingen och ISO får du rätt kunskap i rätt tid, direkt från källan. Med vår kunskap om standarders möjligheter hjälper vi våra kunder att skapa verklig nytta och lönsamhet i sina verksamheter.

Vill du veta mer om SIS eller hur standarder kan effektivisera din verksamhet är du välkommen in på www.sis.se eller ta kontakt med oss på tel 08-555 523 00.



Standards make the world go round

SIS (Swedish Standards Institute) is an independent non-profit organisation with members from both the private and public sectors. We are part of the European and global network that draws up international standards. Standards consist of documented knowledge developed by prominent actors within the industry, business world and society. They promote cross-border trade, they help to make processes and products safer and they streamline your organisation.

Take part and have influence

As a member of SIS you will have the possibility to participate in standardization activities on national, European and global level. The membership in SIS will give you the opportunity to influence future standards and gain access to early stage information about developments within your field.

Get to know the finished work

We offer our customers everything in connection with standards and their application. You can purchase all the publications you need from us - everything from individual standards, technical reports and standard packages through to manuals and online services. Our web service e-nav gives you access to an easy-to-navigate library where all standards that are relevant to your company are available. Standards and manuals are sources of knowledge. We sell them.

Increase understanding and improve perception

With SIS you can undergo either shared or in-house training in the content and application of standards. Thanks to our proximity to international development and ISO you receive the right knowledge at the right time, direct from the source. With our knowledge about the potential of standards, we assist our customers in creating tangible benefit and profitability in their organisations.

If you want to know more about SIS, or how standards can streamline your organisation, please visit www.sis.se or contact us on phone +46 (0)8-555 523 00



Denna tekniska rapport är inte en svensk standard. Detta dokument innehåller den engelska språkversionen av ISO/TR 12349-1:2015.

This Technical Report is not a Swedish Standard. This document contains the English version of ISO/TR 12349-1:2015.

© Copyright/Upphovsrätten till denna produkt tillhör SIS, Swedish Standards Institute, Stockholm, Sverige. Användningen av denna produkt regleras av slutanvändarlicensen som återfinns i denna produkt, se standardens sista sidor.

© Copyright SIS, Swedish Standards Institute, Stockholm, Sweden. All rights reserved. The use of this product is governed by the end-user licence for this product. You will find the licence in the end of this document.

Uppllysningar om sakinnehållet i detta dokument lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna uppllysningar om nationell och internationell standard.

Information about the content of this document is available from the SIS, Swedish Standards Institute, telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about national and international standards.

Dokumentet är framtaget av kommittén för Fordonssäkerhet, SIS/TK 237.

Har du synpunkter på innehållet i det här dokumentet, vill du delta i ett kommande revideringsarbete eller vara med och ta fram standarder inom området? Gå in på www.sis.se - där hittar du mer information.

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Symbols and abbreviated terms	1
2.1 Symbols	1
2.2 Abbreviated terms	1
3 Recommended dummies	1
3.1 Adult dummies recommended for frontal impact tests	1
3.2 Adult dummies recommended for side impact tests	2
3.3 Adult dummy recommended for high-severity rear impact tests	2
3.4 Adult dummies recommended for out-of-position airbag tests.....	2
3.4.1 OOP tests with frontal impact airbags	2
3.4.2 OOP tests with side torso or curtain airbags	2
4 Recommended dummy instrumentation	2
4.1 Instrumentation recommended for adult dummies in frontal impact tests or OOP tests with frontal impact airbags	2
4.2 Instrumentation recommended for adult dummies in side impact tests or OOP tests with side torso or curtain airbags	3
4.3 Instrumentation recommended for adult dummy in high-severity rear impact tests.....	4
4.4 Instrumentation recommended for adult upper extremities for arm-airbag interaction tests	5
Bibliography	6

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 (see 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 (see 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.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#).

The committee responsible for this document is ISO/TC 22, *Road vehicles*, Subcommittee SC 36, *Safety aspects and impact test*.

This second edition cancels and replaces the first edition (ISO/TR 12349-1:1999), of which it constitutes a minor revision.

ISO/TR 12349 consists of the following parts, under the general title *Road vehicles — Dummies for restraint system tests*:

- *Part 1: Adult dummies*
- *Part 2: Child dummies*

Introduction

Some experts of ISO/TC 22/SC 36 reviewed the widely available adult crash test dummies on the basis of biofidelity, repeatability and reproducibility, durability, instrumentation capabilities, and ease of use. Implementation of a crash test dummy in a regulation or consumers' test is not a basis for recommendation in this Technical Report. Adult dummies whose designs were protected intellectual property at the time of review were not considered. Crash test dummies are continually being evaluated and those that are not currently recommended may be recommended in the next update of this Technical Report. This Technical Report represents the best recommendation of widely available adult crash test dummies at the time of publication.

The dummy instrumentation specified as required or optional in ISO test procedures for crash, sled, and OOP tests were reviewed. Adult dummy instrumentation recommended in this Technical Report consists of all instrumentation that are required by at least one test procedure. Some optional instrumentation and some instrumentation not specified in any ISO test procedure are also recommended in this Technical Report.

