

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Electrostatics –

Part 4-6: Standard test methods for specific applications – Wrist straps

Electrostatique –

**Partie 4-6: Méthodes d'essai normalisées pour des applications spécifiques –
Bracelets de conduction dissipative**



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ELECTROSTATICS –

Part 4-6: Standard test methods for specific applications – Wrist straps

FOREWORD

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International Standard IEC 61340-4-6 has been prepared by IEC technical committee 101: Electrostatics.

The text of this standard is based on ANSI/ESD S1.1-2006. It was submitted to the National Committees for voting under the Fast Track Procedure.

This bilingual version (2011-04) replaces the English version.

The text of this standard is also based on the following documents:

FDIS	Report on voting
101/291/FDIS	101/296/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

The French version of this standard has not been voted upon.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61340 series, under the general title *Electrostatics*, can be found on the IEC website.

Le comité a décidé que le contenu de cette publication ne sera pas modifié avant la date de stabilité indiquée sur le site web de la CEI sous "<http://webstore.iec.ch>" dans les données relatives à la publication recherchée. A cette date, la publication sera

- reconduite,
- supprimée,
- remplacée par une édition révisée, ou
- amendée.

INTRODUCTION

This part of IEC 61340 has been developed to establish test methods for evaluating the electrical and mechanical attributes of wrist straps used in an electrostatic control program. Wrist straps are intended to connect the user to electrical ground, thus preventing electrostatic charge on a user's body from attaining a level that may damage ESD susceptible devices or assemblies.

Test methods and performance limits for evaluation, acceptance, and functional testing are provided. Application and construction guidance is included in the annexes.

ELECTROSTATICS –

Part 4-6: Standard test methods for specific applications – Wrist straps

1 Scope

This part of IEC 61340 provides electrical and mechanical test methods and performance limits for evaluation, acceptance and functional testing of wrist straps.

This standard is intended for testing wrist straps and wrist strap systems used for the grounding of personnel engaged in working with ESD sensitive assemblies and devices.

It does not address constant monitoring systems.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ESD ADV1.0, *Glossary of terms*¹

3 Terms and definitions

For the purposes of this document, the following terms and definitions, in addition to those specified in the ESD association glossary of terms, shall apply.

3.1

wrist strap

assembled device consisting of a wrist cuff and ground cord that provides electrical connection of a person's skin to ground

3.2

wrist strap system

wrist strap when properly worn by a person, where the electrical path includes the person, the cuff and the ground cord

3.3

cuff

portion of the wrist strap worn on the wrist

NOTE The cuff maintains electrical contact with a person's skin.

3.4

ground cord

portion of the wrist strap that provides flexibility of movement while completing the electrical circuit between the cuff and ground

¹ ESD Association, 7900 Turin Rd, Bldg. 3, Ste. 2, Rome, NY 13440-2069, 315-339-6937, www.esda.org