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Belt drives — Electrical conductivity of antistatic endless synchronous belts — Characteristics and test method

Transmissions par courroies — Conductibilité électrique des courroies synchrones sans fin, anti-électrostatiques — Spécification et méthode d'essai

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Foreword

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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).

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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 41, *Pulleys and belts (including veebelts)*, Subcommittee SC 4, *Synchronous belt drives*.

This second edition cancels and replaces the first edition (ISO 9563:1990), which has been technically revised.

Belt drives — Electrical conductivity of antistatic endless synchronous belts — Characteristics and test method

1 Scope

This International Standard specifies the maximum and minimum electrical resistance of antistatic endless and open ended synchronous belts. This International Standard provides guidelines to allow testing of synchronous belts to prove their static conductive (dissipative) properties as well as a corresponding production control test method.

The application of this International Standard is limited to new belts intended to be used in an explosive atmosphere or in situations where there is a fire risk. The test is intended to ensure that the belt is sufficiently conductive to dissipate charges of electricity which may form on it in service.

In the case of a production control test, the decision is left to national standards or agreement between interested parties as to whether the test shall be carried out on each belt in a batch or on only a percentage of belts in a batch.

For each proof test, the belt manufacturer shall determine which type of electrode and conductive coating material shall be used.

2 Normative references

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

ISO 23529, *Rubber — General procedures for preparing and conditioning test pieces for physical test methods*

3 Electrical resistance — specification

3.1 General

In general, the resistance of new antistatic belts should not exceed the maximum value as calculated in 3.2.