## Kerged konveierilindid. Teimimeetod elektrostaatilise välja, mis tekib kerge konveierilindi liikumisel, mõõtmiseks

Light conveyor belts - Determination of the electrostatic field generated by a running light conveyor belt



#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO
21179:2006 sisaldab Euroopa standardi
EN ISO 21179:2006 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 21179:2006 consists of the English text of the European standard EN ISO 21179:2006.

Käesolev dokument on jõustatud 21.12.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 21.12.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

# This International Standard specifies a test method for the determination of the electrostatic field generated by a running light conveyor belt according to ISO 21183-1. This dynamic procedure is required because the antistatic behaviour of light conveyor belts cannot in many cases be sufficiently described by measurement of the electrical resistances in accordance with ISO 21178.

#### Scope:

This International Standard specifies a test method for the determination of the electrostatic field generated by a running light conveyor belt according to ISO 21183-1. This dynamic procedure is required because the antistatic behaviour of light conveyor belts cannot in many cases be sufficiently described by measurement of the electrical resistances in accordance with ISO 21178.

**ICS** 53.040.10

**Võtmesõnad:** belts, conveyor belts, electrostatic protection, electrostatics, measurements, tests

## EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

## **EN ISO 21179**

November 2006

ICS 53.040.10

Supersedes EN 1718:1999

#### **English Version**

# Light conveyor belts - Determination of the electrostatic field generated by a running light conveyor belt (ISO 21179:2005)

Courroies transporteuses légères - Détermination du champ électrostatique engendré par une courroie transporteuse légère en marche (ISO 21179:2005)

Leichte Fördergurte - Bestimmung des elektrostatischen Feldes von laufenden, leichten Fördergurten (ISO 21179:2005)

This European Standard was approved by CEN on 21 October 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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#### **Foreword**

The text of ISO 21179:2005 has been prepared by Technical Committee ISO/TC 41 "Pulleys and belts (including veebelts)" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 21179:2006 by Technical Committee CEN/TC 188 "Conveyor belts", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2007, and conflicting national standards shall be withdrawn at the latest by May 2007.

This document supersedes EN 1718:1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

#### **Endorsement notice**

The text of ISO 21179:2005 has been approved by CEN as EN ISO 21179:2006 without any modifications.

## INTERNATIONAL **STANDARD**

ISO 21179

> First edition 2005-11-01

## Light conveyor belts — Determination of the electrostatic field generated by a running light conveyor belt

Courroies transporteuses légères — Détermination du champ s tatiqu. électrostatique engendré par une courroie transporteuse légère en



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Published in Switzerland

### **Foreword**

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 21179 was prepared by Technical Committee ISO/TC 41, Pulleys and belts (including veebelts), Subcommittee SC 3, Conveyor belts. ,1999, p

This International Standard is based on EN 1718:1999, prepared by CEN/TC 188.

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# Light conveyor belts — Determination of the electrostatic field generated by a running light conveyor belt

#### 1 Scope

This International Standard specifies a test method for the determination of the electrostatic field generated by a running light conveyor belt according to ISO 21183-1.

This dynamic procedure is required because the antistatic behaviour of light conveyor belts cannot in many cases be sufficiently described by measurement of the electrical resistances in accordance with ISO 21178.

#### 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.

ISO 22, Belt drives — Flat transmission belts and corresponding pulleys — Dimensions and tolerances

ISO 4287, Geometrical Product Specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters

ISO 18573:2003, Conveyor belts — Test atmospheres and conditioning periods

ISO 21178, Light conveyor belts — Determination of electrical resistances

ISO 21181, Light conveyor belts — Determination of the relaxed elastic modulus

ISO 21183-1, Light conveyor belts — Part 1: Principal characteristics and applications

#### 3 Principle

The test piece is run under specified conditions and produces an electrostatic field, the variation of which with time is recorded.

The test is carried out successively with both sides of the belt in contact with the pulleys.

- **4 Apparatus** (see Figure 1)
- 4.1 Pair of pulleys, as follows:
- a) electrically connected and earthed;
- b) made of steel;
- c) diameter 200 mm or larger, rim width 120 mm;

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