ICS 27.160 SLOVENSKÁ TECHNICKÁ NORMA Apríl 2017

STN	**Solárna energia. Komponenty a materiály kolektorov. Časť 2: Tepelné trubice pre tepelné solárne aplikácie. Trvanlivosť a výkonnosť (ISO 22975-2:2016).**	**STN EN ISO 22975-2** 74 7201

Solar energy - Collector components and materials - Part 2: Heat-pipes for solar thermal application - Durability and performance (ISO 22975-2:2016)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/17

Obsahuje: EN ISO 22975-2:2016, ISO 22975-2:2016

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 22975-2

October 2016

ICS 27.160

English Version

Solar energy - Collector components and materials - Part 2: Heat-pipes for solar thermal application - Durability and performance (ISO 22975-2:2016)

Énergie solaire - Composants et matériaux du collecteur - Partie 2: Caloduc pour application thermique solaire - Durabilité et performance (ISO 22975-2:2016)

Solarenergie - Kollektorbauteile und -materialien - Teil 2: Wärmerohre für solarthermische Anwendungen - Beständigkeit und Leistungsfähigkeit (ISO 22975-2:2016)

This European Standard was approved by CEN on 12 September 2016.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN ISO 22975-2:2016 E

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European foreword

This document (EN ISO 22975-2:2016) has been prepared by Technical Committee ISO/TC 180 "Solar energy" in collaboration with Technical Committee CEN/TC 312 “Thermal solar systems and components” the secretariat of which is held by ELOT.

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of an identical text or by endorsement, at the latest by April 2017, and conflicting national standards shall be withdrawn at the latest by April 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 22975-2:2016 has been approved by CEN as EN ISO 22975-2:2016 without any modification.

STN EN ISO 22975-2: 2017

INTERNATIONAL STANDARD

ISO 22975-2

First edition
2016-10-01

Solar energy — Collector components and materials —

Part 2: Heat-pipes for solar thermal application — Durability and performance

Énergie solaire — Composants et matériaux du collecteur —

Partie 2: Caloduc pour application thermique solaire — Durabilité et performance

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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).

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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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 180, *Solar energy*.

ISO 22975 consists of the following parts, under the general title *Solar energy — Collector components and materials*:

— *Part 1: Evacuated tube — Durability and performance*

— *Part 2: Heat-pipes for solar thermal application — Durability and performance*

— *Part 3: Absorber surface durability*

The following parts are under preparation:

— *Part 5: Insulation material durability and performance*

Introduction

This part of ISO 22975 specifies test methods for durability and performance of heat-pipes for solar thermal application.

This part of ISO 22975 is applicable to all heat-pipes for use with both evacuated tubes and flat plate collectors.

For each durability and performance test, its objective, principle, test condition, apparatus, procedure and test results are specified.

For all the tests specified in this part of ISO 22975, a complete heat-pipe is required.

INTERNATIONAL STANDARD **ISO 22975-2:2016(E)**

Solar energy — Collector components and materials —

Part 2: Heat-pipes for solar thermal application — Durability and performance

1 Scope

This part of ISO 22975 specifies definitions and test methods for durability and performance of heat-pipes for solar thermal application.

This part of ISO 22975 is applicable to heat-pipes for use with evacuated tubes, including glass-metal sealed evacuated tubes and double-glass evacuated tubes, as well as with flat plate collectors.

This part of ISO 22975 provides test methods for determining durability of the heat-pipe, including high temperature resistance and freeze resistance.

This part of ISO 22975 also provides test methods for measuring performance of the heat-pipe, including starting temperature, temperature uniformity and heat transfer power of the heat-pipe.

This part of ISO 22975 is only applicable to gravity heat-pipes.

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 9488, *Solar energy — Vocabulary*

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

