

SLOVENSKI STANDARD

SIST EN ISO 17864:2008

01-julij-2008

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Corrosion of metals and alloys - Determination of the critical pitting temperature under potentiostatic control (ISO 17864:2005)

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Corrosion des métaux et alliages - Determination de la température critique de piqûration
des aciers inoxydables sous contrôle potentiostatique (ISO 17864:2005)

[SIST EN ISO 17864:2008](#)

Ta slovenski standard je istoveten z: [EN ISO 17864:2008](https://standards.iteh.ai/catalog/standards/sist/d63af058-7b07-4f9d-9bbb-040946c569fe/sist-en-iso-17864-2008)

ICS:

77.060

Korozija kovin

Corrosion of metals

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en

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April 2008

ICS 77.060

English Version

Corrosion of metals and alloys - Determination of the critical
pitting temperature under potentiostatic control (ISO
17864:2005)

Corrosion des métaux et alliages - Determination de la
température critique de piqûration des aciers inoxydables
sous contrôle potentiostatique (ISO 17864:2005)

Korrosion von Metallen und Legierungen - Bestimmung der
kritischen Lochkorrosionstemperatur bei potentiostatischer
Belastung (ISO 17864:2005)

This European Standard was approved by CEN on 21 March 2008.

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 CEN Management Centre 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 CEN Management Centre has the same status as the official versions.
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COMITÉ EUROPÉEN DE NORMALISATION
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Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

The text of ISO 17864:2005 has been prepared by Technical Committee ISO/TC 156 "Corrosion of metals and alloys" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 17864:2008 by Technical Committee CEN/TC 262 "Metallic and other inorganic coatings" 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 October 2008, and conflicting national standards shall be withdrawn at the latest by October 2008.

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.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, 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 the United Kingdom.

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The text of ISO 17864:2005 has been approved by CEN as a EN ISO 17864:2008 without any modification.

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INTERNATIONAL
STANDARD

ISO
17864

First edition
2005-08-01

**Corrosion of metals and alloys —
Determination of the critical pitting
temperature under potentiostatic control**

*Corrosion des métaux et alliages — Determination de la température
critique de piqûration des aciers inoxydables sous contrôle
potentiostatique*

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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
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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.

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 17864 was prepared by Technical Committee ISO/TC 156, *Corrosion of metals and alloys*.

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Introduction

Stainless steel is susceptible to pitting corrosion, crevice corrosion, and stress-corrosion cracking, etc., although it is used as generally a corrosion-resistant material. Pitting phenomenon is generally of a random nature, therefore its measurement requires at least a couple of values. Critical pitting temperature defines the lowest potential-independent temperature, below which pitting does not occur.

The basic methodology was first standardized in ASTM G150, *Standard test method for electrochemical critical pitting temperature testing of stainless steels*.

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