Corrosion of metals and alloys - Corrosion and fouling in industrial cooling water systems - Part 2: Evaluation of the performance of cooling water treatment programmes using a pilot-scale test rig

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 16784-2:2008 sisaldab Euroopa standardi EN ISO 16784-2:2008 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 16784-2:2008 consists of the English text of the European standard EN ISO 16784-2:2008.
Standard on kinnitatud Eesti Standardikeskuse 20.06.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 20.06.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 23.04.2008.	Date of Availability of the European standard text 23.04.2008.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

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EUROPEAN STANDARD

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English Version

Corrosion of metals and alloys - Corrosion and fouling in industrial cooling water systems - Part 2: Evaluation of the performance of cooling water treatment programmes using a pilot-scale test rig (ISO 16784-2:2006)

Corrosion des métaux et alliages - Corrosion et entartrage des circuits de refroidissement à eau industriels - Partie 2: Évaluation des performances des programmes de traitement d'eau de refroidissement sur banc d'essai pilote (ISO 16784-2:2006)

Korrosion von Metallen und Legierungen - Korrosion und Fouling in industriellen Kühlwassersystemen - Teil 2: Bewertung der Leistung von Kühlwasser-Behandlungsprogrammen unter Anwendung eines Modell-Prüfstands (ISO 16784-2:2006)

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

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Foreword

The text of ISO 16784-2:2006 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 16784-2:2008 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.

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Endorsement notice

The text of ISO 16784-2:2006 has been approved by CEN as a EN ISO 16784-2:2008 without any modification.

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Introduction

Due to more stringent environmental requirements and escalating costs of water, there is an industrial need to improve the safety, reliability and cost-effectiveness of open recirculating cooling water systems. Correspondingly, it is important to establish a standard framework for evaluating the performance of cooling water treatment programmes. The aim is to provide users of cooling systems and vendors of treatment materials for those systems with a procedure to make consistent evaluations of cooling water treatment programmes on a pilot scale.

Corrosion of metals and alloys — Corrosion and fouling in industrial cooling water systems —

Part 2: Evaluation of the performance of cooling water treatment programmes using a pilot-scale test rig

1 Scope

This part of ISO 16784 applies to corrosion and fouling in industrial cooling water systems

This part of ISO 16784 describes a method for preliminary evaluation of the performance of treatment programmes for open recirculating cooling water systems. It is based primarily on laboratory testing but the heat exchanger testing facility can also be used for on-site evaluation. This part of ISO 16784 does not include heat exchangers with cooling water on the shell-side (i.e. external to the tubes).

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 3696:1987, *Water for analytical laboratory use — Specification and test methods*

ISO 8407:1991, *Corrosion of metals and alloys — Removal of corrosion products from corrosion test specimens*

ISO 8501-1:1988, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*

ISO 11463:1995, *Corrosion of metals and alloys — Evaluation of pitting corrosion*

3 Terms, abbreviations and definitions

For the purposes of this document, the following terms, abbreviations and definitions apply.

3.1
ATP
adenosine tri-phosphate, an active chemical present in living bacteria

NOTE ATP concentrations can be indirectly measured and are used as an indicator for the presence of biology in cooling water