Aerospace series - Titanium and titanium alloys - Test method - Chemical analysis for the determination of hydrogen content

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EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 3976:2007 sisaldab Euroopa standardi EN 3976:2006 ingliskeelset teksti. Käesolev dokument on jõustatud 29.01.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 3976:2007 consists of the English text of the European standard EN 3976:2006. This document is endorsed on 29.01.2007 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This standard is part of the series of EN metallic material standards for aerospace applications. The general organization of this series is described in EN 4258.	**Scope:** This standard is part of the series of EN metallic material standards for aerospace applications. The general organization of this series is described in EN 4258.

ICS 49.025.30

Võtmesõnad:

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 3976

December 2006

ICS 49.025.30

English Version

Aerospace series - Titanium and titanium alloys - Test method - Chemical analysis for the determination of hydrogen content

Série aérospatiale - Titane et alliages de titane - Méthode d'essai - Analyse chimique pour détermination de la teneur en hydrogène

Luft- und Raumfahrt - Titan und Titanlegierungen - Versuchsmethode - Chemische Analyse zur Bestimmung des Wasserstoffanteils

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Ref. No. EN 3976:2006: E

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Foreword

This document (EN 3976:2006) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

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of an identical text or by endorsement, at the latest by June 2007, and conflicting national standards shall be withdrawn at the latest by June 2007.

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Introduction

This standard is part of the series of EN metallic material standards for aerospace applications. The general organization of this series is described in EN 4258.

1 Scope

This standard specifies the requirements for chemical analysis using Inert Gas Fusion Thermal Conductivity Method for the determination of the hydrogen content of titanium and titanium alloys for aerospace applications.

The method applies to hydrogen contents ranging from several micrograms per gram to several hundreds of micrograms per gram.

It shall be applied when referred to in the EN technical specification or material standard unless otherwise specified on the drawing, order or inspection schedule.

NOTE The absolute method not used in routine inspection is solid state hot extraction under vacuum followed by measurement of volume and pressure. Due to its complexity, it is only summarized in Annex A.

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 Guide 30:1992, *Terms and definitions used in connection with reference materials.*

ISO Guide 31, *Reference materials — Contents of certificates and labels.*

ISO Guide 35, *Reference materials — General and statistical principles for certification.*

EN 2003-10, *Aerospace series — Titanium and titanium alloys — Test methods — Part 10: Sampling for determination of hydrogen content.* 1)

EN 4258, *Aerospace series — Metallic materials — General organization of standardization — Links between types of EN standards and their use.*

EN 4259, *Aerospace series — Metallic materials — Definition of general terms.* 1)

1) Published as ASD Prestandard at the date of publication of this standard.