EESTI STANDARD

EVS-EN 61400-13:2016

Wind turbines - Part 13: Measurement of mechanical loads

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA | NATIONAL FOREWORD

See Eesti standard EVS-EN 61400-13:2016 sisaldab Euroopa standardi EN 61400-13:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 61400-13:2016 consists of the English text of the European standard EN 61400-13:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 08.04.2016.	Date of Availability of the European standard is 08.04.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 27.180

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61400-13

April 2016

ICS 27.180

English Version

Wind turbines - Part 13: Measurement of mechanical loads (IEC 61400-13:2015)

Éoliennes - Partie 13: Mesurage des charges mécaniques (IEC 61400-13:2015)

Windenergieanlagen - Teil 13: Messung von mechanischen Lasten (IEC 61400-13:2015)

This European Standard was approved by CENELEC on 2016-01-25. CENELEC 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-CENELEC Management Centre or to any CENELEC 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 CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

Ref. No. EN 61400-13:2016 E

European foreword

The text of document 88/511/CDV, future edition 1 of IEC 61400-13, prepared by IEC/TC 88 "Wind turbines" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61400-13:2016.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2016-10-25
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2019-01-25

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Endorsement notice

The text of the International Standard IEC 61400-13:2015 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61400-12-2	NOTE	Harmonized as EN 61400-12-2.
IEC 61400-22	NOTE	Harmonized as EN 61400-22.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu

Publication	Year	Title	EN/HD	Year
IEC 60050	Series	International Electrotechnical Vocabulary	-	-
IEC 61400-1	2005	Wind turbines - Part 1: Design requirements	EN 61400-1	2005
IEC 61400-12-1	-	Wind turbines - Part 12-1: Power performance measurements of electricity producing wind turbines	EN 61400-12-1	-
ISO/IEC Guide 98-3	-	Uncertainty of measurement - Part 3: Guide to the expression of uncertainty in measurement	-	-

CONTENTS

INTRODUCTION

In the process of structural design of a wind turbine, thorough understanding about, and accurate quantification of, the loading is of utmost importance.

In the design stage, loads can be predicted with aeroelastic models and codes. However, such models have their shortcomings and uncertainties, and they always need to be validated by measurement.

Mechanical load measurements can be used both as the basis for design and as the basis for certification. Design aspects for wind turbines are covered by IEC 61400-1 whilst certification procedures are described in IEC 61400-22. This standard is aimed at the test institute, the turbine manufacturer and the certifying body and clearly defines the minimum requirements for a mechanical loads test resulting in consistent, high quality reproducible test results.