

Wind turbines - Part 13: Measurement of mechanical loads

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

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(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)

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European foreword

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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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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	-	-

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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.