

Paragliding equipment - Paragliders - Part 1:
Requirements and test methods for structural strength

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 926-1:2015 sisaldab Euroopa standardi EN 926-1:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 926-1:2015 consists of the English text of the European standard EN 926-1:2015.
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 18.11.2015.	Date of Availability of the European standard is 18.11.2015.
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 97.220.40

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:

Aru 10, 10317 Tallinn, Eesti; koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Aru 10, 10317 Tallinn, Estonia; homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

English Version

Paragliding equipment - Paragliders - Part 1: Requirements and test methods for structural strength

Équipement pour le parapente - Parapentes - Partie 1:
Exigences et méthodes d'essai concernant la résistance
de la structure

Ausrüstung für das Gleitschirmfliegen - Gleitschirme -
Teil 1: Anforderungen und Prüfverfahren an die
Baufestigkeit

This European Standard was approved by CEN on 26 September 2015.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

Contents	Page
European foreword	3
Introduction	4
1 Scope	5
2 Terms and definitions	5
3 Requirements	5
3.1 Shock loading.....	5
3.2 Sustained loading.....	5
3.3 Breaking strength of the suspension lines.....	5
3.4 Breaking strength of the main control lines.....	6
4 Test methods	7
4.1 Apparatus.....	7
4.2 Test specimen.....	8
4.3 Test conditions.....	8
4.4 Shock loading test	8
4.5 Sustained loading test	9
4.6 Line bending test.....	9
5 Test files	10
5.1 Test file information	10
5.2 Items accompanying the test files.....	11
6 Manufacturing record	11
7 Marking	12
Annex A (informative) Suspension lines	13

European foreword

This document (EN 926-1:2015) has been prepared by Technical Committee CEN/TC 136 “Sports, playground and recreational equipment”, the secretariat of which is held by DIN.

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 May 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

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.

This document supersedes EN 926-1:2006.

In comparison with the previous edition, the following significant changes have been made:

- a) editorial revision;
- b) revision of line strength calculation method;
- c) revision of the definition of the same model and test specimen selection;
- d) deletion of Shock Loading Test Procedure B;
- e) clarification of measurement interval in the sustained loading test;
- f) addition of Manufacturing Record and Marking requirements.

This European Standard is one of a series of standards on equipment for paragliding as follows:

- EN 926-1, *Paragliding equipment — Paragliders — Part 1: Requirements and test methods for structural strength*
- EN 926-2, *Paragliding equipment — Paragliders — Part 2: Requirements and test methods for classifying flight safety characteristics*

Other relevant standards on equipment for paragliding are:

- EN 1651, *Paragliding equipment — Harnesses — Safety requirements and strength tests*
- EN 12491, *Paragliding equipment — Emergency parachutes — Safety requirements and test methods*

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The EN 926 series consists of two parts: EN 926-1 details paraglider structural strength requirements and EN 926-2 details paraglider flight tests requirements. Paragliders that have been tested and found to be compliant with both EN 926-1 and EN 926-2 are therefore compliant with the EN 926 series.

The aim of these standards is to enhance safety thus eliminating paragliders which display unacceptable behaviour in given situations on the basis of recognized tests set in these two standards.

1 Scope

This European Standard is applicable to paragliders as defined in 2.1.

This part of EN 926 specifies requirements and test methods for the resistance of a paraglider to static and dynamic loads and sets the minimum strength threshold for its qualification.

2 Terms and definitions

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

2.1

paraglider

ultra-light glider with no primary rigid structure, for which take-off and landing are on foot, with the pilot (and potentially one passenger) carried in a harness (or harnesses) connected to the wing

2.2

model of paraglider

paragliders of different sizes of a given design are considered to be the same model when fulfilling the following criteria:

- a) the different sizes have been obtained by using a uniform scale factor;
- b) for all sizes identical materials are used;
- c) the way materials are processed is identical for all sizes

2.3

identically constructed lines

lines where the only elements that differ are the finished line length and/or cosmetic colour

2.4

main control lines

entire line systems that terminate at the two primary control handles

2.5

significant damage

rupture of any of main load bearing component of the structure

3 Requirements

3.1 Shock loading

When tested according to 4.4, a visual inspection of the wing shall not show significant damage.

3.2 Sustained loading

When tested according to 4.5 the wing shall sustain 4.5.2. 1) or 4.5.2 2).

3.3 Breaking strength of the suspension lines

The lines shall be tested according to 4.6. If identically constructed lines have already been tested, then the result may be used.

The minimum breaking strength of any line shall be greater than 200 N. The first level is defined as the lines attached to the risers.