

Aerospace series - Cables, electrical, aircraft use - Test methods - Part 505: Tensile test on conductors and strands

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 3475-505:2012 sisaldab Euroopa standardi EN 3475-505:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 3475-505:2012 consists of the English text of the European standard EN 3475-505:2012.
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 07.03.2012.	Date of Availability of the European standard is 07.03.2012.
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ICS 49.060

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English Version

**Aerospace series - Cables, electrical, aircraft use - Test
methods - Part 505: Tensile test on conductors and strands**

Série aérospatiale - Câbles électriques à usage
aéronautique - Méthodes d'essais - Partie 505: Résistance
à la traction des conducteurs et des brins

Luft- und Raumfahrt - Elektrische Leitungen für
Luftfahrtverwendung - Prüfverfahren - Teil 505:
Zugfestigkeit der Einzeldrähte und Leiterseile

This European Standard was approved by CEN on 20 August 2011.

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.

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Foreword

This document (EN 3475-505:2012) 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 September 2012, and conflicting national standards shall be withdrawn at the latest by September 2012.

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 will supersede EN 3475-505:2007.

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, 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.

1 Scope

This European Standard specifies a method of measuring the tensile properties of strands, conductors and braids.

When required, it can be used also on cables.

It should be used together with EN 3475-100.

2 Normative references

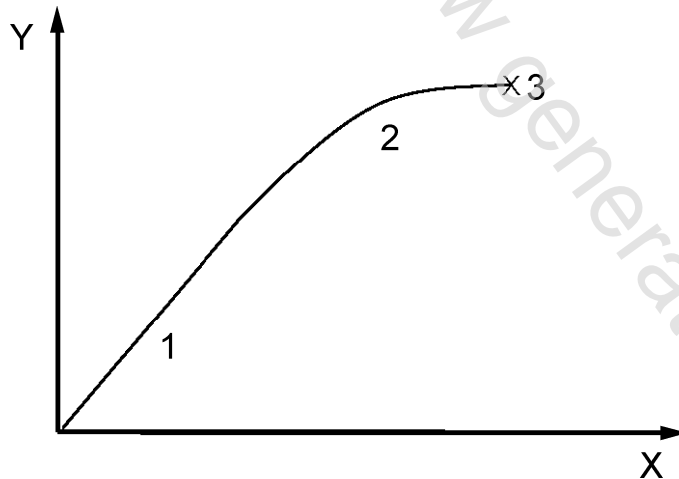
The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 3475-100, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 100: General*

3 Terms and definitions

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

3.1 ultimate tensile strength or tensile strength at break
the *ultimate tensile strength* also called the *tensile strength at break* of a material is the limit stress at which the material actually breaks, with sudden release of the stored elastic energy (released as noise and/or heat and/or more cracks e.g. for brittle materials). This point is the fracture marked X on the curve below. (see Figure 1).



Key

- 1 Elastic region
- 2 Plastic region
- 3 Fracture
- X Strain
- Y Stress

Figure 1