

# Fibres and cables, optical, aircraft use — Test methods —

## Part 701: Strippability

The European Standard EN 3745-701:2002 has the status of a British Standard

ICS 49.060

## National foreword

This British Standard is the official English language version of EN 3745-701:2002.

The UK participation in its preparation was entrusted by Technical Committee ACE/6, Aerospace avionic electrical and fibre optic technology, to Subcommittee ACE/6/10, Aerospace – fibre optic systems and equipment, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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This British Standard, having been prepared under the direction of the Engineering Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 25 June 2002

### Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 4, an inside back cover and a back cover.

The BSI copyright date displayed in this document indicates when the document was last issued.

### Amendments issued since publication

Amd. No.	Date	Comments

ICS 49.060

English version

**Aerospace series - Fibres and cables, optical, aircraft use - Test methods - Part 701: Strippability**

Série aérospatiale - Fibres et câbles optiques à usage  
aéronautique - Méthodes d'essais - Partie 701:  
Dénudabilité

Luft- und Raumfahrt - Faseroptische Leitungen für  
Luftfahrzeuge - Prüfverfahren - Teil 701: Abmantelung

This European Standard was approved by CEN on 1 March 2002.

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

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### **Foreword**

This document (EN 3745-701:2002) has been prepared by the European Association of Aerospace Manufacturers (AECMA).

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 AECMA, 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 December 2002, and conflicting national standards shall be withdrawn at the latest by December 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This standard specifies a method of measuring the mechanical strippability of an optical fibre or cable.

## 2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 3745-100	Aerospace series – Fibres and cables, optical, aircraft use – Test methods – Part 100: General <sup>1)</sup>
EN 3745-201	Aerospace series – Fibres and cables, optical, aircraft use – Test methods – Part 201: Visual examination

## 3 Preparation of specimens

**3.1** The specimens shall be prepared according to the product standard.

If not yet at standard test conditions, the specimens shall be subjected to standard test conditions and stabilized at these conditions for 24 h as defined in EN 3745-100.

**3.2** Unless specified in the technical specification, the following details shall be stated:

- number of specimens to be tested;
- type and length of specimen;
- blade design or tool specification;
- load ( $F$ ) defined in relation to the layer of the cable to be stripped;
- length ( $L$ ) of the element to be stripped;
- speed of application of the load, if different from (100 ± 10) mm / min;
- maximum permitted change in the stripped length after relaxation of the stripped layer.

## 4 Apparatus

The apparatus shall comprise:

- a test fixture capable of keeping the blade closed perpendicular to the axis of the cable;
- a suitable device which can apply and measure the stripping force along the axis of the specimen at the specified uniform rate;
- a typical arrangement is shown in figure 1 (fixed or moving blade).



1) In preparation at the date of publication of this standard

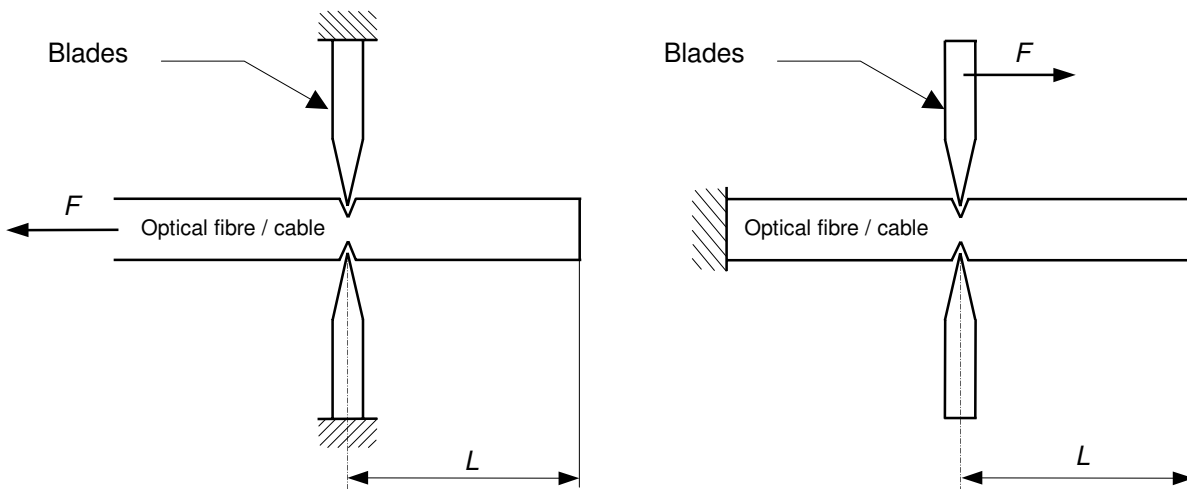


Figure 1

## 5 Method

### 5.1 Procedure

- Mark length ( $L$ ) on the layer to be stripped.
- Close the blades on the desired layer of the specimen.
- Securely fix either the cable or the blade.
- Increase the force on the blade/cable (whichever is not fixed).
- Measure the maximum force applied before the layer to be stripped slides.

### 5.2 Final measurements and requirements

The maximum force shall be no greater than the value specified in the product standard.

Examine the stripped cable/fibre for damage in accordance with EN 3745-201.



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