

Fibre-reinforced plastic composites — Determination of flexural properties

ICS 83.120

National foreword

This British Standard is the UK implementation of EN ISO 14125:1998+A1:2011, incorporating corrigendum July 2002. It is identical with ISO 14125:1998, incorporating amendment 1:2011 and corrigendum July 2001. It supersedes BS EN ISO 14215:1998, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to ISO text carry the number of the ISO amendment. For example, text altered by ISO amendment 1 is indicated by **A1** **A1**.

The UK participation in its preparation was entrusted to Technical Committee PRI/42, Fibre reinforced thermosetting plastics and prepregs.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for its correct application.

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This British Standard, having been prepared under the direction of the Sector Board for Materials and Chemicals, was published under the authority of the Standards Board and comes into effect on 15 June 1998

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English version

Fibre-reinforced plastic composites — Determination of flexural properties

(ISO 14125:1998)

Composites plastiques renforcés de fibres —
Détermination des propriétés de flexion
(ISO 14125:1998)

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CEN

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

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Foreword

The text of the International Standard ISO 14125:1998 has been prepared by Technical Committee ISO/TC 61 “Plastics” in collaboration with Technical Committee CEN/TC 249 “Plastics”, the Secretariat of which is held by IBN.

This European Standard supersedes EN 63:1977.

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of an identical text or by endorsement, at the latest by September 1998, and conflicting national standards shall be withdrawn at the latest by September 1998.

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Endorsement notice

The text of ISO 14125:1998/Cor. 1:2001 has been approved by CEN as a European Corrigendum without any modifications.

Foreword to amendment A1

This document (EN ISO 14125:1998/A1:2011) has been prepared by Technical Committee ISO/TC 61 “Plastics” in collaboration with Technical Committee CEN/TC 249 “Plastics” the secretariat of which is held by NBN.

This Amendment to the European Standard EN ISO 14125:1998 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2011, and conflicting national standards shall be withdrawn at the latest by August 2011.

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INTERNATIONAL STANDARD

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Fibre-reinforced plastic composites — Determination of flexural properties

*Composites plastiques renforcés de fibres — Détermination des propriétés
de flexion*



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Contents

	Page
Foreword	iii
Introduction	iv
1 Scope	1
2 Normative references	1
3 Principle	2
4 Definitions	2
5 Apparatus	3
6 Test specimens	4
7 Number of test specimens	6
8 Conditioning	6
9 Procedure	6
10 Calculation and expression of results	7
11 Precision	9
12 Test report	10
Annex A (normative) Other test specimens	11
Annex B (normative) Large-deflection corrections — Calculation and expression of results	11

Descriptors: Plastics, reinforced plastics, tests, bend tests, determination, flexural strength, test specimens.

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 14125 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 13, *Composites and reinforcement fibres*.

Annex A and Annex B form an integral part of this International Standard.

Introduction

This standard is based on ISO 178 but deals with fibre-reinforced plastic composites. As such it retains the test conditions relevant for glass-fibre-reinforced systems. The test conditions are extended from ISO 178 to include both three-point (Method A) and four-point (Method B) loading geometries, and to include conditions for composites based on newer fibres such as carbon and aramid fibres.

Other source documents consulted include ASTM D 790 (four-point loading), prEN 2562 (test conditions), CRAG 200 and JIS K 7074 (use of shims for four-point loading, Figure 6). The overall specimen length for four-point loading is the same as for three-point loading.

The scope of ISO 178 will be revised and limited to unreinforced and filled plastics.

EN 63:1977, *Glass-reinforced plastics — Determination of flexural properties — Three-point test*, will be withdrawn.