INTERNATIONAL STANDARD

ISO 1268-9

First edition
2003-03-15

Fibre-reinforced plastics — Methods of producing test plates —

Part 9: Moulding of GMT/STC

Plastiques renforcés de fibres — Méthodes de fabrication de plaques d'essai —

Partie 9: Moulage des GMT/STC

Reference number
ISO 1268-9:2003(E)

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 1268-9 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 13, *Composites and reinforcement fibres*.

Together with the other parts (see below), this part of ISO 1268 cancels and replaces ISO 1268:1974, which has been technically revised.

ISO 1268 consists of the following parts, under the general title *Fibre-reinforced plastics — Methods of producing test plates*:

— *Part 1: General conditions*

— *Part 2: Contact and spray-up moulding*

— *Part 3: Wet compression moulding*

— *Part 4: Moulding of prepregs*

— *Part 5: Filament winding*

— *Part 6: Pultrusion moulding*

— *Part 7: Resin transfer moulding*

— *Part 8: Compression moulding of SMC and BMC*

— *Part 9: Moulding of GMT/STC*

— *Part 10: Injection moulding of BMC and other long-fibre moulding compounds — General principles and moulding of multipurpose test specimens*

— *Part 11: Injection moulding of BMC and other long-fibre moulding compounds — Small plates*

Fibre-reinforced plastics — Methods of producing test plates —

Part 9: Moulding of GMT/STC

1 Scope

This part of ISO 1268 specifies a method for preparing test plates by compression moulding of reinforced thermoplastic sheet (GMT/STC) to be used for the preparation of test specimens to determine the mechanical and physical properties of the laminate. The proposed method is applicable to laminates made from a thermoplastic matrix reinforced with glass, carbon, aramid or other reinforcing fibres, alone or in combination and in any form suitable for compression moulding.

This part of ISO 1268 is intended to be read in conjunction with ISO 1268-1.

2 Normative references

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

ISO 527-4, *Plastics — Determination of tensile properties — Part 4: Test conditions for isotropic and orthotropic fibre-reinforced plastic composites*

ISO 1172, *Textile-glass-reinforced plastics — Prepregs, moulding compounds and laminates — Determination of the textile-glass and mineral-filler content — Calcination methods*

ISO 1268-1, *Fibre-reinforced plastics — Methods of producing test plates — Part 1: General conditions*

ISO 1268-4, *Fibre-reinforced plastics — Methods of producing test plates — Part 4: Moulding of prepregs*

3 Terms and definitions

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

3.1
GMT
the abbreviation generally accepted within the industry for Glass-fibre Mat reinforced Thermoplastic sheet, in which the thermoplastic is generally polypropylene

3.2
STC
the accepted abbreviation for any kind of Sheet Thermoplastic Composite, irrespective of the type of the polymer or the nature or form of the reinforcement