First edition 2013-03-15

Fibre-reinforced plastic composites — Determination of open-hole compression strength

Composites plastiques renforcés de fibres — Détermination de la résistance à la compression avec trou nu



Reference number ISO 12817:2013(E)

ISO 12817:2013(E)

This is a preview of "ISO 12817:2013". Click here to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

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
Fore	eword	iv
Intro	oduction	v
1	Scope	1
2	Normative references	
3	Terms and definitions	
4	Principle	
5	Apparatus	3
6	Test specimens	
	6.1 Shape and dimensions	
	6.2 Alternative specimen	
	6.3 Preparation of test plates and specimens	
	6.4 Inspection of test specimens	
_	•	
7	Conditioning	
8	Procedure	
	8.1 Test atmosphere	
	8.2 Measurement of dimensions of the test specimens	
	8.3 Mounting of the test specimens	
	8.4 Test speed	
	8.5 Preliminary loading 8.6 Recording	
	8.7 Failure mode	
•		
9	Calculation	
	9.1 Open-hole compressive strength	
	9.2 Expression of results	
10	Precision	
11	Test report	16
Bibliography		17

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 12817 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 13, *Composites and reinforcement fibres*.

Introduction

In preparing this (harmonized) International Standard, reference has been made to other similar openhole compression methods (JIS K 7093, [1] ASTM D6484/D6484M-09[2]) and related methods, i.e. openhole tension in ASTM D5766/D5766M6[3] and pin-bearing in ISO 12815.[4]

The scope covers all current and future fibre-reinforced plastic composites meeting the requirements of this International Standard. This International Standard incorporates three methods that have different suitability and do not necessarily yield identical properties. All the methods use the maximum load to define the open-hole compressive strength.