

1. Record Nr.	UNINA9910831027503321
Titolo	Testing adhesive joints [[electronic resource]] : best practices // edited by Lucas F.M. da Silva ... [et al.]
Pubbl/distr/stampa	Weinheim, : Wiley-VCH, 2012
ISBN	1-299-44870-4 3-527-64705-8 3-527-64704-X
Descrizione fisica	1 online resource (470 p.)
Altri autori (Persone)	Da SilvaLucas F. M
Disciplina	668.3
Soggetti	Adhesive joints
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Testing Adhesive Joints; Contents; About the Editors; List of Contributors; 1 Manufacture of Quality Specimens; 1.1 Preparing Bulk Specimens by Hydrostatic Pressure; 1.1.1 Introduction; 1.1.2 Principle; 1.1.3 Metallic Mold; 1.1.4 Silicone Frame; 1.1.5 Adhesive Application; 1.1.6 Cure; 1.1.7 Specimen Machining; 1.1.8 Results; 1.2 Preparing Bulk Specimens by Injection; 1.2.1 Introduction; 1.2.2 Mold; 1.2.3 Centrifuge; 1.2.4 Cure; 1.2.5 Final Specimen Preparation and Testing; 1.3 Preparing Bulk Specimens by Pouring; 1.3.1 Introduction; 1.3.2 Nature of Adhesives Supplied; 1.3.3 Mixing 1.3.4 Pouring1.3.5 Effect of Size; 1.3.6 Specimen Production; 1.4 Preparing Lap Joints with Flat Adherends; 1.4.1 Introduction; 1.4.2 Mold; 1.4.3 Substrate Preparation and Mounting; 1.4.4 Adhesive Application and Assembly; 1.4.5 Cure; 1.4.6 Specimen Cleaning; 1.5 SimpleMethods for the Preparation of Single Lap Joints Specimens; 1.5.1 Introduction; 1.5.2 Single Lap Joint (SLJ) Specimens; 1.5.3 Traditional Methods for SLJ Bonding; 1.5.4 The Idea for a New Fixture for SLJ Bonding; 1.5.5 The Fixture; 1.6 Preparing Thick Adherend Shear Test Specimens; 1.6.1 Introduction; 1.6.2 Mold 1.6.3 Substrate Preparation1.6.4 Adhesive Application and Assembly; 1.6.5 Cure; 1.6.6 Specimen Cleaning; 1.7 Modified Thick Adherend Shear Test; 1.7.1 Specimen Geometry; 1.7.2 Bonded Specimen Geometry; 1.7.3 Machining of the Samples with Beaks; 1.8 Preparing

Butt Joints; 1.8.1 Introduction; 1.8.2 Mold; 1.8.3 Substrate Preparation; 1.8.4 Adhesive Application and Assembly; 1.8.5 Cure; 1.8.6 Specimen Cleaning; 1.8.7 Alternative Manufacturing Method; 1.9 Preparing Napkin Ring Specimens; 1.9.1 Introduction; 1.9.2 Adherends; 1.9.3 Joint Manufacture-Alignment Jig; 1.9.4 Introduction of the Adhesive 1.9.5 Final Specimen Preparation 1.10 Preparing T Joint Specimens; 1.10.1 Introduction; 1.10.2 Mold; 1.10.3 Substrates Preparation; 1.10.4 Adhesive Application and Assembly; 1.10.5 Cure; 1.10.6 Specimens Cleaning; 1.10.7 Results; 1.11 Preparing Flexible-to-Rigid Peel Specimens; 1.11.1 Introduction; 1.11.2 Mold; 1.11.3 Adherend Preparation; 1.11.4 Adhesive Application and Assembly; 1.11.5 Cure; 1.11.6 Final Specimen Preparation; 1.12 Preparing Specimens for Fracture Properties: Double Cantilever Beam and Tapered Double Cantilever Beam; 1.12.1 Introduction; 1.12.2 Bonding Jigs 1.12.3 Specimen Dimensions 1.12.3.1 DCB Specimens; 1.12.3.2 TDCB Specimens; 1.12.4 Substrate Conditioning and Preparation; 1.12.4.1 Storage and Substrate Conditioning; 1.12.4.2 Surface Pretreatment; 1.12.5 Adhesive Application and Forming the Joint; 1.12.5.1 Adhesive Handling and Application; 1.12.5.2 Control of Bondline Thickness; 1.12.5.3 Introduction of the Initial Crack; 1.12.6 Cure; 1.12.7 Final Specimen Preparation; 1.13 Preparing Bonded Wood Double Cantilever Beam (DCB) Specimens; 1.13.1 Introduction; 1.13.2 Aspects of Wood Bonding; 1.13.3 Sample Preparation; 1.13.3.1 Wood Preparation 1.13.3.2 Adhesive Types

Sommario/riassunto

Joining techniques such as welding, brazing, riveting and screwing are used by industry all over the world on a daily basis. A further method of joining has also proven to be highly successful: adhesive bonding. Adhesive bonding technology has an extremely broad range of applications. And it is difficult to imagine a product - in the home, in industry, in transportation, or anywhere else for that matter - that does not use adhesives or sealants in some manner. The book focuses on the methodology used for fabricating and testing adhesive and bonded joint specimens. The text covers a w
