

1. Record Nr.	UNINA9911006680303321
Titolo	General knowledge, application techniques, new curing techniques // series editor, Philippe Cognard
Pubbl/distr/stampa	Amsterdam ; ; San Diego, CA, : Elsevier, 2006
ISBN	1-280-62170-2 9786610621705 0-08-046059-3
Edizione	[1st ed.]
Descrizione fisica	1 online resource (532 p.)
Collana	Handbook of adhesives and sealants ; ; 2
Altri autori (Persone)	CognardPhilippe
Disciplina	668/.3
Soggetti	Adhesives Adhesives - Industrial applications Sealing compounds Sealing compounds - Industrial applications
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	ADHESIVES AND SEALANTS; Adhesives and Sealants; Contents; Preface to Volume 2; Scope of the Handbook; How to use the Handbook; The Twelve Steps for the Selection of Adhesives and Sealants; List of Contents of Volume 1; Presentation of Volume 2; Forthcoming Volumes; Color Plates; Theories of Adhesion; Introduction; Adhesion by Chemical Bonding; Adhesion by Physical Adsorption; The Electrostatic Theory of Adhesion; Mechanical Interlocking; Adhesion by Interdiffusion; Weak Boundary Layers; Pressure Sensitive Adhesion; References Equipment for the Application of Adhesives and Sealants: Mixing, Metering, Coating or Applying the Adhesives Methods of Application of Adhesives, Sealants and Related Products; Preparation Before Bonding; Adhesive Coating, General Rules; Hand Application Techniques; Spraying; Application of Adhesives and Sealants by Extrusion Techniques; Coating on Roll Stocks, Roll Application, Knife Application; Disc and Wheels Applicators; Stencil or Stereotyped Application and Techniques Issued from Printing; Curtain Coaters; Dip Coating; Gravity Fed Adhesives, Ball Valves, Tampons

Electro-pneumatic Guns for Cold Adhesives Metering and Mixing of Two-Component Adhesives and Sealants; Automatic or Robotic Application with Syringes; Application of Powders; Application of Dry Adhesives, Film Adhesives; Special Techniques; List and addresses of Suppliers of Equipment for the Application of Adhesives and Sealants; Design and Stress Calculations for Bonded Joints; Adhesives O Stress Matters; Lap Joints O Stress Distribution; Joint Designs for Bonding; Stress Mathematics; Practical Testing; Software for the Design and Calculation of Bonded Joints; Heat-Resistant Adhesives Introduction Polymer Properties; Polymer Chemistry; Resin Characterisation; Adhesive Properties; Applications; References; Heat Stable Adhesives; UV-Radiation Curing of Adhesives; Introduction; Different Types of UV-Curable Adhesive Resins; Applications of Radiation-Curable Adhesives; Conclusion; Acknowledgements; References; Note of the Editor;; List of Suppliers for UV Curing Techniques, Adhesives and UV Equipment; Formulated UV curing and EB curing adhesives; Equipment, UV light; Consultants, Laboratories; Elastic Bonding and Sealing in Industry; Introduction Principal Advantages and Limits of Elastic Bonding Long-Term Durability and Ageing Tests; Joint Design and Calculation for Elastic Bonding Applications; Basics; Curing of Reactive Adhesive Systems; Process and Application Technology; Elastic Bonding in Practice; The Future of Elastic Bonding; Glossary; References; The Company Behind this Chapter; Acknowledgements; Index

Sommario/riassunto

Contributions from more than 60 authors, each a well-known specialist in their field, have been co-ordinated to produce the most comprehensive Handbook of Adhesives and Sealants ever published. The handbook will be published as 8 volumes, over a period of 4 years and will contain over 2800 pages, rich with case studies, industrial applications and the latest research. It is a work in progress, enabling the latest new and important applications to be included as they happen. Volume 2 of Elsevier's Handbook of Adhesives & Sealants Series, General knowledge, application of adhes
