Record Nr. UNINA9911006533603321 Adhesive bonding: science, technology and applications / / edited by **Titolo** R.D. Adams Pubbl/distr/stampa Boca Raton, FL, : CRC Press Cambridge,: Woodhead Publishing, 2005 **ISBN** 1-62870-366-0 1-280-36162-X 9786610361625 1-84569-075-3 Descrizione fisica 1 online resource (559 p.) Altri autori (Persone) AdamsRobert D 668.3 Disciplina Soggetti Adhesives Binders (Materials) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia CRC Press order no. WP2584. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Contents; Contributor contact details; 1 History of adhesive bonding; 2 What are adhesives and sealants and how do they work?; 3 Surfaces: how to assess; 4 Surfaces: how to treat; 5 Stress analysis; 6 Environmental (durability) effects; 7 Non-destructive testing; 8 Impact behaviour of adhesively bonded joints; 9 Fracture mechanics of adhesive bonds; 10 Fatigue; 11 Vibration damping; 12 Joining similar and dissimilar materials; 13 Bonding of composites; 14 Building and construction - steel and aluminium; 15 Building and construction timber; 16 Automobiles; 17 Boats and marine 18 Shoe industry19 Electrical; 20 Aerospace; Index Sommario/riassunto This important collection reviews key research on adhesive behaviour and applications in sectors as diverse as construction and automotive engineering. The book is divided into three main parts: fundamentals, mechanical properties and applications. Part 1 focuses on the basic properties of adhesives, surface assessment and treatment. Part 2 concentrates on understanding how adhesives perform under stress

and the factors affecting fatigue and failure. The final part of the book reviews industry specific applications in areas such as building and

construction, transport and electrical engineerin