Record Nr. UNISALENTO991003242549707536 Autore Campbell, Flake C. Titolo Manufacturing technology for aerospace structural materials [e-book] / F.C. Campbell Pubbl/distr/stampa Amsterdam: Kidlington: Elsevier, 2006 **ISBN** 9781856174954 1856174956 Descrizione fisica xv, 600 p.: ill.; 24 cm Collana Aerospace engineering materials science Disciplina 629.1342 Soggetti Aerospace engineering - Materials Manufacturing processes Electronic books. Lingua di pubblicazione Inglese **Formato** Risorsa elettronica Livello bibliografico Monografia Includes bibliographical references and index Nota di bibliografia Nota di contenuto Introduction: Aluminium: Magnesium & Beryllium: Titanium: High Strength Steels; Superalloys; Polymer Matrix Composites; Adhesive Bonding and Integrally Cocured Structure; Metal Matrix Composites; Ceramic Matrix Composites; Structural Assembly; Appendix A: Metric Conversions: Appendix B: Brief Review of Materials Fundamentals Sommario/riassunto The rapidly-expanding aerospace industry is a prime developer and user of advanced metallic and composite materials in its many products. This book concentrates on the manufacturing technology necessary to fabricate and assemble these materials into useful and effective structural components. Detailed chapters are dedicated to each key metal or alloy used in the industry, including aluminum, magnesium, beryllium, titanium, high strength steels, and superalloys. In addition the book deals with composites, adhesive bonding and presents the essentials of structural assembly. This book will be an important resource for all those involved in aerospace design and construction, materials science and engineering, as well as for metallurgists and those working in related sectors such as the automotive and mass transport industries. Flake Campbell Jr has over thirty seven years experience in the aerospace industry and is currently

Senior Technical Fellow at the Boeing Phantom Works in Missouri, USA.

\* All major aerospace structural materials covered: metals and composites \* Focus on details of manufacture and use \* Author has huge experience in aerospace industry \* A must-have book for materials engineers, design and structural engineers, metallurgical engineers and manufacturers for the aerospace industry