Record Nr. UNISALENTO991003237169707536 Autore Brown, Jason C. **Titolo** Motor vehicle structures [e-book]: concepts and fundamentals / Jason C. Brown, A. John Robertson, Stan T. Serpento Oxford; Boston: Butterworth-Heinemann, 2002 Pubbl/distr/stampa **ISBN** 9780750651349 0750651342 Descrizione fisica xiv, 285 p.: ill.; 25 cm Altri autori (Persone) Robertson, A. Johnauthor Serpento, Stan T. Disciplina 629.26 Motor vehicles - Bodies - Design and construction Soggetti Automobiles - Bodies - Design and construction Motor vehicles - Bodies - Testing Electronic books. Lingua di pubblicazione Inglese **Formato** Risorsa elettronica Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index Nota di contenuto Introduction / Terminology and overview of vehicle structure types / Simple structural surfaces (SSS) method / Standard sedan - baseline load paths / Alternative constructions, model variants, range integration / Planar structures / Case study - application of the SSS method to an existing vehicle structure / Vehicle structure preliminary design using the SSS method / Preliminary design and analysis of body sub-assemblies using the SSS method / Fundamentals and preliminary sizing of sections and joints Sommario/riassunto Motor Vehicle Structures has been written as a unified textbook dealing with the structural mechanics of the mass produced integral passenger car body. It provides a clear and concise explanation of load paths in the vehicle body-in-white (BIW), based on engineering first principles. This is then used as a basis for an in-depth discussion of the conceptual design of car structures, using case studies directly related to real-life design problems. The book is based on a short course designed for industry which has been well received and is used to train

body engineers worldwide. The authors have extensive experience of analysis and design of vehicle structures in the automobile industry,

and of teaching the subject both in-company and academia. Focuses on the conceptual rather than the quantitative aspect of design Provides several practical examples and applications