Record Nr. UNISALENTO991003239679707536 Autore Poli, C., 1935-Titolo Design for manufacturing [e-book]: a structured approach / Corrado Poli Pubbl/distr/stampa Boston: Butterworth-Heinemann, c2001 **ISBN** 9780750673419 0750673419 Descrizione fisica xxxi, 375 p.: ill.; 27 cm. + 1 CD-ROM (4 3/4 in.) Disciplina 620.0042 Soggetti Engineering design Design, Industrial Electronic books. Lingua di pubblicazione Inglese **Formato** Risorsa elettronica Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references and index Nota di contenuto Introduction; Tolerances, Mechanical Properties, Physical Properties; Polymer Processing; Injection Molding: Relative Tooling Cost; Injection Molding: Total Relative Part Cost; Metal Casting Processes; Die Casting: Total Relative Part Cost; Sheet-Metal Forming; Stamping: Relative Tooling Cost; Stamping: Total Relative Part Cost; Other Metal Shaping Processes: Assembly: Selecting Materials and Processes for Special Purpose Parts; Communications Design for Manufacturing assists anyone not familiar with various Sommario/riassunto manufacturing processes in better visualizing and understanding the relationship between part design and the ease or difficulty of producing the part. Decisions made during the early conceptual stages of design have a great effect on subsequent stages. In fact, quite often more than 70% of the manufacturing cost of a product is determined at this conceptual stage, yet manufacturing is not involved. Through this book, designers will gain insight that will allow them to assess the impact of their proposed design on manufacturing difficulty. The vast

majority of components found in commercial batch-manufactured products, such as appliances, computers and office automation equipment are either injection molded, stamped, die cast, or

(occasionally) forged. This book emphasizes these particular, most

commonly implemented processes. In addition to chapters on these processes, the book touches upon material process selection, general guidelines for determining whether several components should be combined into a single component or not, communications, the physical and mechanical properties of materials, tolerances, and inspection and quality control. In developing the DFM methods presented in this book, he has worked with over 30 firms specializing in injection molding, die-casting, forging and stamping. A set of Power Point slides, containing animations of the various processes, drawings, and photographs of various parts are included. There is also a specially developed website, featuring specific tutorials on each process and its practical applications. Implements a philosophy which allows for easier and more economic production of designs Educates designers about manufacturing Emphasizes the four major manufacturing processes