

reader in understanding the basic concepts, so that more difficult problems can be attempted. The intent is to guide the reader into computer-aided design. Extensive bibliographies are included at the end of each chapter. The book would be of greatest interest to those involved in CAD applications and would be suitable for use as a text for introductory CAD courses.

**Plastics Products Design Handbook, Part A.** Edited by Edward Miller, Marcel Dekker, New York, 1981. Pages xv-597.

**Reviewed by S. W. Zewari<sup>3</sup>**

Due to the large variety of polymeric materials and varying formulations, a comprehensive coverage of each of these materials seems to be difficult at best. This book contains discussions of a large segment of design considerations

dealing with these materials. Fifteen chapters in all provide an excellent understanding of the properties and potential problems associated with these materials. The scope varies from one chapter to the next and the reader, depending on his/her background might need to consult references provided at the end of each chapter or beyond. Inclusion of a series of tables indicating chemical, physical, and mechanical properties of common polymeric materials (including optical and electrical; the coefficient of friction, colorability, flame retardancy, processing techniques, machinability, recommended adhesives, available forms, common usage, trade names, approximate prices, and manufacturers) would have proved extremely valuable for comparison purposes. I hope that these will be included in the next printing and/or in Part B.

This is the kind of book which is easy to read and stimulates an awareness of potentially costly design mistakes. I therefore recommend that graduating mechanical design students read this book. It would definitely prove to be a valuable reference for mechanical designers in electrical/electronic and similar industries.

<sup>3</sup> Assistant Prof. of Mechanical Engineering, Virginia Polytechnic Institute and State University, Blacksburg, Va. 24061

Plumbing Engineering Design Handbook - A Plumbing Engineer's Guide to System Design and Specifications, Volume 1 - Fundamentals of Plumbing Engineering. 396 Pages • 2009 • 11.34 MB • 12,688 Downloads • New! will benefit engineers, plumbing system designers, plumbing officials, architects, plant engineers

Design for Manufacturability: How to Use Concurrent Engineering to Rapidly Develop Low-Cost, High-Quality Products for Lean Production. 472 Pages • 2014 • 3.53 MB • 6,201 Downloads • New! • Plastic Injection Molding, Volume II - Material Selection and Product Design Fundamentals. 409 Pages • 1997 • 6.59 MB • 3,141 Downloads • New! and product design phases of the thermoplastic injection molding process. Like the first, it is intention The design guide focuses primarily on Plastic part and Mold design. It is intended to give the product designer the basic guideline to design a product that is of high quality and easy to manufacture plastic parts. It includes chapters on the Plastic materials, Part Design Considerations, Design for Assembly and some topics on Painting, Plating, and Decorating. This document is intended to be a guide and not an absolute specification. The intent is to design and build a tool that will produce a part as close to specification as possible, require the minimum of correction, and to achieve this g This book provides useful and necessary information on how to comprehend plastics' and composites' extreme range of properties, structural responses, product-performance characteristics, part shapes, manufacturing processes, and their influence on product performance, the simplifying of designs, as guides on selecting plastics and processes as well as on how to keep up-to- date on important information and understand the econc

1 2 designing with plastics and composites: a handbook. I Receive and review product I. 1 I I Develop design approach I \ 1 1- Material} Study approach Process t- II J Cost I- I Complete preliminary appraisal : IReject approach I J~ /I' I I Make final evaluation I I J/ I Assign deSign priority I ,L, I Produce product I Figure 1 • 1.