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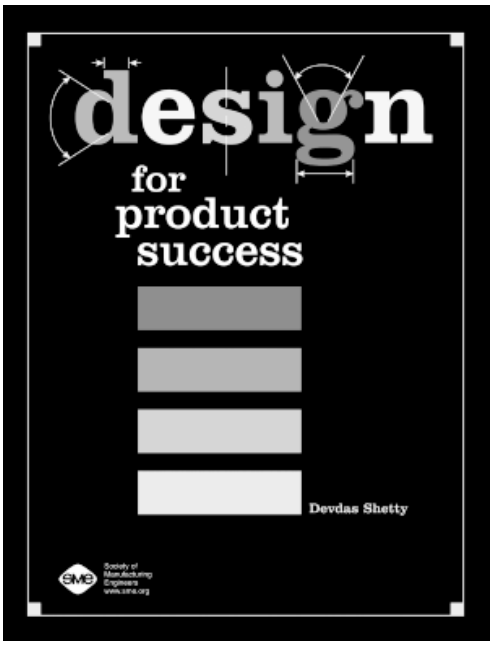

Published by the Society of Manufacturing Engineers, 2002, by Devdas Shetty, Ph.D, 298 pp, ISBN: 0-87263-5279
Order Code: PI-2984-4508
Price: $95/Members: $80

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Design For Product Success

The design phase. It is not an isolated step. It's the manufacturing process's moment of truth.

Many factors determine the success or failure of a product. Arguably the most important determinant is also the most controllable— the design phase. Written by international-known expert, Devdas Shetty, Ph.D. P.E., this book shows you how world-class companies are developing high quality products at this critical juncture, in a step-by-step manner using analytical tools.

Some of the topics covered in this book are:

- how to build a product team
- characteristics of self-directed product team
- new product creation strategy and process
- creative design techniques
- principles of design for manufacturing
- design for disassembly
- optimization and ergonomics
- a section on value stream mapping[SM] and its influence on product development are included, along with information on creating virtual prototypes with computer-assisted design.

At front and center of this comprehensive book is an integrated strategy that governs the whole process, which is systematic, organized, and "lean" conscious. Learn the procedures necessary in smart product design starting from the concept to production and marketing. Research findings and case studies will help you make decisions with confidence, construct solid business cases, and avoid the repercussions of poor planning and overlooked variables. Your product will meet the needs and expectations of your customers down the road.

Who benefits?

Design Engineers and Product Designers. A step-by-step procedure based on the latest design tools and techniques, used by world-class companies, will increase the likelihood that successful product designs will be created and selected.

Production Managers get a handle on the key components of success or failure of a product and grasp the production team's role in the design process.

College Professors, Instructors. The book's emphasis on interdisciplinary integration makes it the only product design book in synch with the current trend in undergraduate curriculums across the country. Its ideal for courses in design related areas in the mechanical, industrial, and manufacturing engineering fields. Its flexible layout allows educators to pick and choose topics for a more customized approach. It contains end-of-chapter questions and end-of-book problems and a solutions manual is available for instructors.

Industrial Engineers, Managers, CEOs. Each member of an integrated team can use this book to determine strategies for a new product launch. They learn to create a self-directed product team "where the right hand knows what the left hand is doing", and facilitate the interplay between design and production, and design and marketing.

Other SME Products

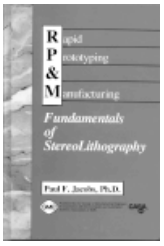
Books

NEW! Handbook of Laser Materials Processing

This 715-page handbook includes the work of more than 170 contributors and provides comprehensive information about laser techniques such as cutting, drilling, welding, brazing, hardening, cleaning, and making of metals, ceramics and other materials. It also includes information about laser-related instruments, safety procedures, as well as laser applications in the aerospace, automotive, computer and electronic industries. An outstanding chapter on **rapid prototyping** contains a multi-page table relating each RP method to the materials it will process, the application each is best suited for, the process characteristics and post processing requirements.

Published by the Laser Institute of America-Magnolia Publishing Inc.., 2001, Editor in Chief; John F. Ready,
ISBN: 0-912035-15-3, 715 pages, hardcover

Order code: PI-2968-4508
Price: $240/Members: $216

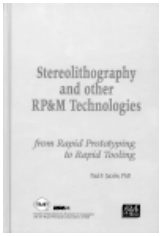


Rapid Prototyping & Manufacturing: Fundamentals of Stereolithography

This turnkey technology source provides an introduction to rapid prototyping and manufacturing (RP&M) with an emphasis on stereolithography which represents the majority of all rapid prototyping systems currently in place. The content is based on theory, analysis and experiment with extensive test data, including select case studies from the automotive, simultaneous engineering, and medical sectors.

Published by Society of Manufacturing Engineers, 1992,
By P. Jacobs, Ph.D. , ISBN: 0-87263-425-6, 420 pages, hardcover

Order code: PI-1973-4508
Price: $82/Members: $69



Stereolithography and Other RP&M Technologies From Rapid Prototyping to Rapid Tooling

Whether you're a designer, a mechanical or manufacturing engineer, member of a concurrent engineering team, a manager or a manufacturing educator, this book will quickly become your primary source for rapid prototyping information. RP material selection is addressed so manufacturers understand which process/material will produce the best model for their use.

Published by Society of Manufacturing Engineers, 1995
By P. Jacobs (including 30 contributors), ISBN: 0-87263-467-1
450 pages, hardcover

Order code: PI-2441-4508
Price: $93/Members: $79

NEW! Collaborative Engineering for Product Design Development

Integrating leading edge research concepts in collaborative product development with current practices in the real world, this new book provides an in-depth analysis of the collaborative technologies, processes and methodologies to support the product design and development process. An excellent text and a perfect reference for upper-level undergraduate and graduate students, researchers, engineers and practitioners in the field of collaborative product design, development and engineering, industrial engineering, manufacturing engineering and computer integrated manufacturing. Topics include; Fundamental Concepts in Collaborative Product Design and Development; Groupware and Decision Making; Multi-criteria Decision Making; Distributed Concurrent Engineering Design; Computer-Aided Design and Visualization on the World Wide Web; Integrating Quality, Reliability and Durability Engineering in Product Development; and much more!

Published by American Scientific Publishers, 2001
Edited by Leslie Monplaisir and Nanua Singh
ISBN: 1-58883-007-1, 154 pages, casebound

Order code: PI-2978-4500
Price: $125/Members: $112.50

Videos

Rapid Tooling, Rapid Parts

Learn how CAD/CAM advancements in rapid prototyping (RP) let you move quickly from CAD/CAM concepts to hard tooling, via rapid prototyping methods, to make "ready-to-test" parts. You'll witness RP's acceleration beyond fragile plastic constructions that show form and only mimic function, to actual metal or engineered plastic parts from RP tooling. This best selling video shows you step-by-step techniques and actual benefits.

Society of Manufacturing Engineers, 1994, 40 min.
Order code: PI-VT513-4508, Price: $110/Members: $99

Rapid Prototyping for DFM

Detailed case studies explore the topic: Micro-Cut Corp. uses rapid prototyping (RP) for advanced medical applications. At Laserform, actual test parts are made from molds produced from RP parts. At DTM Corp., the Selective Laser Sintering system uses powder materials to produce a wide variety of prototype parts. At Metro Plastics, a Quandrax system is used to make an extensive range of parts to produce initial molds for tryout of injection molding dies. Also see different RP systems at Ford Motor.

Society of Manufacturing Engineers, 1991, 45 minutes
Order code: PI-VT419-4508, Price: $255/Members: $229

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