



# Materials and Design, Second Edition: The Art and Science of Material Selection in Product Design

*By Michael F. Ashby, Kara Johnson*

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## **Materials and Design, Second Edition: The Art and Science of Material Selection in Product Design** By Michael F. Ashby, Kara Johnson

Materials and Design: The Art and Science of Material Selection in Product Design, Second Edition, discusses the role of materials and processes in product design. The book focuses on the materials that designers need, as well as on how and why they use them. The book's 10 chapters cover topics such as function and personality, factors influencing product design, the design process, materials selection, and case studies in materials and design. Appendices for each chapter provide exercises for readers, along with detailed charts of technical attributes of different materials for reference.

This book will be particularly useful to both students and working designers. Students are introduced to the role of materials in manufacturing and design, with the help of familiar language and concepts. Working designers can use the book as a reference source for materials and manufacturing.

\* The best guide ever published on the on the role of materials, past and present, in product development, by noted materials authority Mike Ashby and professional designer Kara Johnson--now with even better photos and drawings on the Design Process

\* Significant new section on the use of re-cycled materials in products, and the importance of sustainable design for manufactured goods and services

\* Enhanced materials profiles, with addition of new materials types like nanomaterials, advanced plastics and bio-based materials

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*"Both interesting and intriguing, this book should prove a valuable resource for those starting out in design or engineering...it is also fun to browse through."* - Science Magazine, June 2003 *"It is not often that I find it difficult to stop reading a book ... the word inspirational is used in various parts of (this) book -- and how appropriate this word is to this textbook ... For both students and designers, Materials & Design is a gold mine. In short, I thoroughly recommend this book"* - Building Engineer, May 2003

#### **About the Author**

Royal Society Research Professor Emeritus at Cambridge University and Former Visiting Professor of Design at the Royal College of Art, London, UK

Mike Ashby is sole or lead author of several of Elsevier's top selling engineering textbooks, including Materials and Design: The Art and Science of Material Selection in Product Design, Materials Selection in Mechanical Design, Materials and the Environment, and Materials: Engineering, Science, Processing and Design. He is also coauthor of the books Engineering Materials 1&2, and Nanomaterials, Nanotechnologies and Design.

Since publishing the first edition of Materials and Design in 2002, Kara Johnson has worked at IDEO, a global design firm and strategic consultancy. Kara leads their efforts in Materials, with a focus on Manufacturing. Her work is primarily about linking a company's brand and business strategies with the products they make.

### **Users Review**

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A lot of people always spent their very own free time to vacation as well as go to the outside with them family members or their friend. Did you know? Many a lot of people spent that they free time just watching TV, as well as playing video games all day long. If you need to try to find a new activity that's look different you can read any book. It is really fun to suit your needs. If you enjoy the book that you simply read you can spent all day long to reading a reserve. The book Materials and Design, Second Edition: The Art and Science of Material Selection in Product Design it is very good to read. There are a lot of those who recommended this book. These folks were enjoying reading this book. When you did not have enough space to bring this book you can buy the actual e-book. You can more simply to read this book from your smart phone. The price is not very costly but this book possesses high quality.

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