The book was found

3D Printing: The Next Industrial Revolution





Synopsis

NOTE: There is an updated version of this book called 3D Printing: Second Edition. 3D Printing is about to transform our lives. While traditional laser and inkjet printers only make marks on paper, 3D printers build up solid objects in a great many very thin layers. Already pioneers are 3D printing production tools, prototypes, jewelry, sunglasses, works of art, toys and vehicle parts. But this is just the beginning, with digital manufacturing destined to change how we create, transport and store a great many things. Within a decade, some products may be downloaded from the Internet for printout in store or even at home. Already DIY enthusiasts are building their own 3D printers, while consumer models for the rest of us are just starting to arrive. Meanwhile doctors are learning how to 3D print kidneys and other replacement human organs.3D Printing: The Next Industrial Revolution explores the practicalities and potential of 3D printing today, as well as trying to realistically foresee the impact of 3D printing on the world of tomorrow. The book is written for a wide audience, including 3D printing enthusiasts, entrepreneurs, designers, investors, students, and indeed anybody who wants to be more informed about the next round of radical technological change. A Particular features of the book include an extensive chapter that details every current 3D printing technology, as well as an industry overview covering 3D printer manufacturers, software providers, and bureau services. These chapters are then supported by an extensive 3D printing glossary (of over 100 terms) and a 3D printing directory. A Other key content includes a chapter on developments in digital manufacturing. This features interviews with a range of pioneering individuals and organizations who are already in the business of 3D printing final products or parts thereof. There are also chapters dedicated to 3D printing and sustainability, bioprinting, and personal fabrication.

Book Information

Paperback: 276 pages Publisher: CreateSpace Independent Publishing Platform (May 4, 2013) Language: English ISBN-10: 148418176X ISBN-13: 978-1484181768 Product Dimensions: 5.2 x 0.7 x 8 inches Shipping Weight: 13.6 ounces (View shipping rates and policies) Average Customer Review: 4.4 out of 5 stars Â See all reviews (21 customer reviews) Best Sellers Rank: #547,871 in Books (See Top 100 in Books) #49 in Books > Computers & Technology > Graphics & Design > 3D Printing #125 in Books > Crafts, Hobbies & Home > Home Improvement & Design > How-to & Home Improvements > Power Tools #1564 in Books > Computers & Technology > Hardware & DIY

Customer Reviews

I bought this book because I had guestions about what was possible with 3-D printing. This book gave a pretty good overview of what it can do, who the players are in the industry, and the prospect of future developments. So these are the questions that I had: What materials can it work with? The answer is that 3-D printing is most commonly done with plastics. The printhead melts plastic and applies it layer by layer to form a solid three-dimensional object. This is useful for forming models or creating die casts. One limitation of the process is that since each layer must be supported by the one underneath, a figure in which one part descends below everything else must be supported by props of one sort or another. You could build a cow from the legs up, but the udder would need a support. This doesn't seem like a tremendous shortcoming. Other limitations of plastic (melting temperature, hardness, and the fact that it is only a single material) are more significant. What materials can be printed? For the time being, plastics are the most common. Ceramic and metal powders are also printed. They are suspended in a binder material which holds the work together as it is created. The end product is about 40% binder, 60% target material; brittle and infirm. Additional steps are used to remove the binder and infuse the product with metal (or whatever) to create a durable, solid product. In some cases, plastics and metals can be applied in other than powdered form. They can both be melted. Certain liquid plastics can be "cured" optically, hardened by the application of light. One process has refined this to the level of individual photons; it can create incredibly detailed models.

Download to continue reading...

3D Printing: The Ultimate Guide to Mastering 3D Printing for Life (3D Printing, 3D Printing Business, 3D Print, How to 3D Print, 3D Printing for Beginners) 3D Printing: The Next Industrial Revolution 3D Printing: The Ultimate 3D Printing Guide! (3D Printers, 3D Modelling, 3D Plotting) (3D Printing, 3D Printers, 3D Modelling, 3D Plotting) The 3D Printing Bible: Everything You Need To Know About 3D Printing (3D Printing, 3D Modelling, Additive Manufacturing, 3D Printers Book 1) 3D Printing: Rise of the Third Industrial Revolution (Gyges 3D Presents) Evaluation of Industrial Disability: Prepared by the Committee of the California Medical Association and Industrial Accident Commission of the State ... of Joint Measures in Industrial Injury Cases. How to Become a 3D Printing Entrepreneur: The Top Book on How You Can Make Money With 3D Printing Printing Things: Visions and Essentials for 3D Printing 3D Printing Business: Learn the opportunities to make money with 3D printing Conventional Label Printing Processes: Letterpress, lithography, flexography, screen, gravure and combination printing How to Make Money with 3D Printing: Passive Profits, Hacking the 3D Printing Ecosystem, and Becoming a World-Class 3D Designer Industrial Hydraulics Manual 5th Ed. 2nd Printing 3D Printing: The Next Technology Gold Rush - Future Factories and How to Capitalize on Distributed Manufacturing The Next Big Thing: From 3D Printing to Mining the Moon Industrial Network Security, Second Edition: Securing Critical Infrastructure Networks for Smart Grid, SCADA, and Other Industrial Control Systems Industrial Network Security: Securing Critical Infrastructure Networks for Smart Grid, SCADA, and Other Industrial Control Systems Industrial Control Systems Industrial Pluid Power, Vol. 1: Basic Text on Hydraulics, Air & Vacuum for Industrial and Mobile Applications Refrigeracià n comercial, doméstica, industrial y aire acondicionado / Commercial refrigeration, domestic, industrial electrical maintenance manual (Spanish Edition) Instrumentacià n Industrial (Instrumentacion Industrial) (Spanish Edition)

<u>Dmca</u>