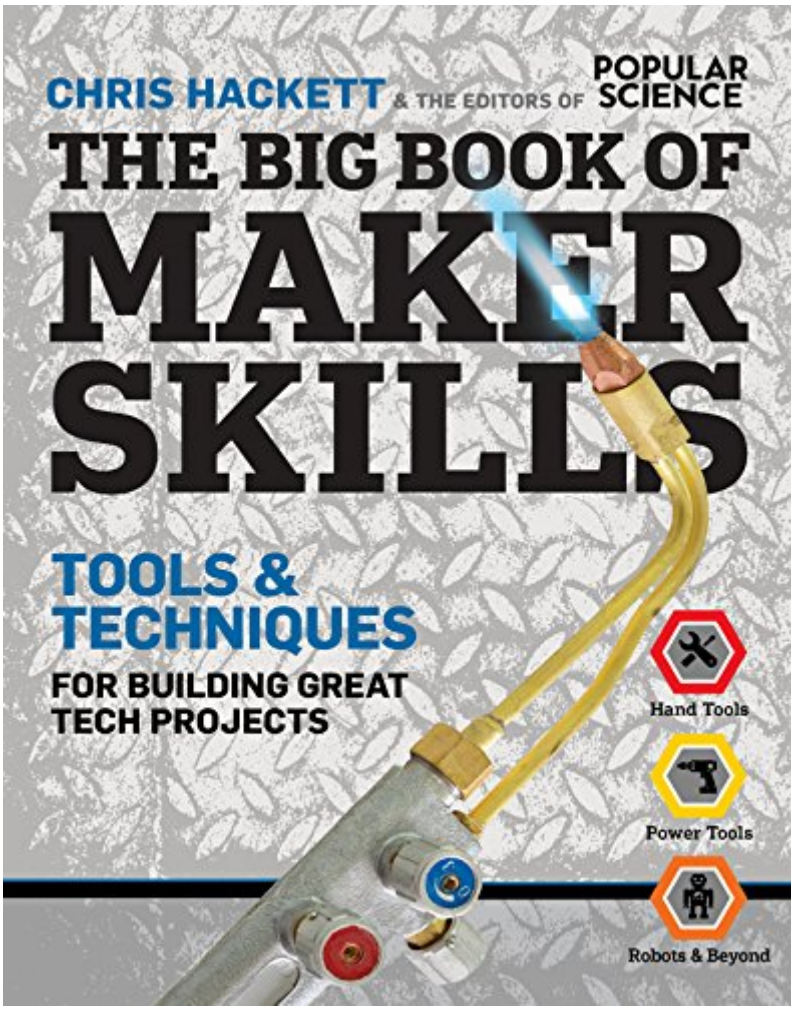
The Big Book Of Maker Skills: Tools & Techniques For Building Great Tech Projects



Synopsis

Makers, get ready: This is your ultimate, must-have, tip-packed guide for taking your DIY projects to the next levelâ ”from basic wood- and metalworking skills to 3D printing and laser-cutting wizardry, plus the entrepreneurial and crowd-sourcing tactics needed to transform your back-of-the-envelope idea into a gleaming finished product.In The Big Book of Maker Skills: 334 Tools and Techniques for Building Great Tech Projects, readers learn classic, tried-and-true techniques from the shop class of yoreâ ”how to use a metal lathe, or pick the perfect drill bit or sawâ ”and get introduced to a whole new world of modern manufacturing technologies, like using CAD software, printing circuits, and more. Step-by-step illustrations, helpful diagrams, and exceptional photography make this book an easy-to-follow and easy-on-the-eyes guide to getting your project done.With an emphasis on making DIY projects that can change the world, The Big Book of Maker Skills includes sections and tutorials on:Setting Up a HackerspacePicking the Right ToolsWelding SmartsCircuitry BasicsProgramming & ArduinosWorking with Wood3-D PrintingLaser-cuttingCNC RoutingTesting & PrototypingDrones and Space Exploration ToolsRoboticsBiotechnologySourcing and Crowdsourcing

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Customer Reviews

A not half bad book.Some of the Maker Skills will work.Some might get you killed.User discretion is advised.This thing covers a lot of what one would need to set up a small industrial factory in one’s back yard.Some of it requires - distance - and, space - for proper operation.A few of the processes have the potential to go seriously wrong.The only thing guaranteeing that you don’t take out your house is a distantly detached garage.Many of the other recommendations are far less consequential.Know "your" limitations.Follow your gut, use your sense of comfort level.It is very McGyver-ish.Most everything will work - as described.It does have very practical advise.Double down on your homeowners before you attempt the more pyrotechnic projects.

Love it, love it, love it!!!Well written (but with a couple of editing mistakes), funny, clever, and full of great advice on how to do it, and do it safe.There are a couple of places where a picture or two would have helped, like the design of the forge/furnace, but those few omissions are more than made up for by the rest of the book.

This is a cool book to read and look through. Almost a "coffee table" (or maybe workbench is more apropos) type book as it has a lot of nice photos that are well taken. My kids also like looking through the book, which is cool. It can be read in short bites as each section can be read as a stand alone section. It has some good ideas, but I found it more inspirational as opposed to instructable (don’t think this is a real word, but you get the drift...).

Well bound, excellent production, great Photos and Diagrams but content for me was superficial and some of the text was too much hip hop cool dude puff daddy etc. Found it irritating and boring. I guess it will help a total newcomer but I feel much of it could also lead someone into trouble.I suppose I had different expectations as to what it would be like so overall I was really disappointed . However you can’t "win em all" and thats life

So useful that the correctional officers confiscated the copy that I sent my dead. For real.And so broad in topic that my mom stole his copy.It’s a great overview book, a guide to all the things that you didn’t know you didn’t know.

Fantastic book covering the basics of most garage projects. Even being experienced its always good to look back at the basics and i learned quite a bit from it as well

Nice book if you know absolutley nothing about tools.

This is a book that basically provides a quick overview over all sorts of numerous "Maker" skills. The Maker movement basically united all the disparate handcrafts and DIY skills and trades and so forth out there under one umbrella. So you can find everything from sewing to ceramics to robotics at a Maker faire or show. This book covers numerous of these skills, although it misses a couple of core segments IMO. Some say that the book goes into too little depth on the subjects it covers to teach anything, but I think that is the point. It just gives you the major basics. EACH one of these subjects could require a book (or ten) on its own. For example, welding. This book has a section on welding. But to really cover welding, well there are whole textbooks out there on the subject, and you can probably get a book on EACH of the different types of welding for example. The book also covers computer programming. You want depth on that? Well there are numerous different programming languages and whole textbooks on programming with them and really advanced programming requires understanding of computer science, and so forth. The book gives some coverage of the very basics of electronics. Well heavens, I don’t even know where to start on that one, there are some very big fat books on that subject. The book "Art of Electronics" alone is about a 1,000 pages (the new 3rd edition is scheduled to be released in April in case anyone is looking to purchase it).But for even a person with a lot of "maker" knowledge, if you will, this book covers some subjects that they may have missed or not thought of. For example, you may know tools, but do you know your fasteners? Dowels, nails, rivets, screws, bolts, nuts, washers, eyebolts, and screw eyes? This book provides a good overview of lots of individual skillsets from which one can then pursue more advanced study.At the beginning of this review, I said that the book missed a couple of core segments. These are mechanisms and gears, and manual machine tools (which I am really surprised about). I also think it missed a few slightly more minor subjects, such as batteries and casting and foundry work (although it does mention about how to make a foundry). If you have any hopes of being able to make any kind of mechanical mechanisms, or understand the basics of mechanical mechanisms, you need to know the basics of mechanisms and gears. The book gives a one page overview of the six simple machines and has a two-page section on the uses you can get out of a power drill that someone else might consider junk (such as getting a planetary gearbox out

of it), but otherwise that is it. Nothing about the different types of gears, the different ways that they combine, etc...two good books on the basics of these are a recent book called "Making Things Move" by Dustyn Roberts and "The How and Why of Mechanical Movements," a book that is out-of-print now (it's from the 1960s), but you can get used copies on and ebay. There is another book by Make magazine titled Machines and Mechanisms that was supposed to come out in late 2014, then was scheduled for February 2015, now it is scheduled for February 2016 (I assume that the author is having some delays). But if the quality of most other Make books, it should be good.Regarding manual machine tools, well heavens, I mean these are what began the Industrial Revolution. And the author of this book, Chris Hackett, even has said that if society ever fell apart for whatever reason, he'd love to be one to help restart industry. Which is great, but if the power grid goes down nationally and we're back to the 19th century technology-wise, you aren't going to be restarting industry with any fancy CNC machines or 3D printers (which the book does cover). To do any kind of such machining, you're going to be using manual lathes, milling machines, grinding machines, etc...which leads into one of the two less core skillsets I mentioned, casting and foundry work. Believe it or not, if you just have metal and wood (and sand), you can make your own machine tools and whole machine shop completely from scrap. You need some casting and foundry work skills, but it basically consists of using wood (and some woodworking skills) to make patterns, using the pattern to produce molds via say sandcasting (the molds are made in sand), and then you pour molten metal into the sand mold to produce the casting (the part), and from these parts, you then construct the lathe, and from the lathe you can gradually construct everything else. The late great David Gingery covered all this in a series of books called "Build Your Own Metalworking Shop from Scrap." You can get a single leather-bound book (or it seems leather-bound anyway) that contains all seven of these books, it is very nice and for sale on . Machining and casting/foundry work are skillsets unto themselves with lots of books on them. Another reason to know manual machine tools is that it aids in being able to be good with CNC machines. So I am very surprised that this book does not include anything on manual machine tools. Regarding batteries, this is also a less-core skillset, but one that I'd imagine would be very handy should you ever need to make use of say automobile batteries for some type of SHTF situation or fancy project you have in mind.Otherwise, the book covers everything from basic hand tools to robots, welding to electronics, fasteners to computer programming, and is a very good overview of the basics of each of these. But before attempting anything that could be dangerous, such as welding or using power saws, get further instruction (such as a good book strictly devoted to the subject and/or maybe some formal lessons), and make sure to use safety equipment.

The Big Book of Maker Skills (Popular Science): Tools & Techniques for Building Great Tech Projects The Big Book of Maker Skills: Tools & Techniques for Building Great Tech Projects High-Tech DIY Projects with Robotics (Maker Kids) High-Tech DIY Projects with Microcontrollers (Maker Kids) Maker Projects for Kids Who Love Games (Be a Maker!) Maker Projects for Kids Who Love Robotics (Be a Maker!) Seventh Son (Tales of Alvin Maker, Book 1) (Tales of Alvin Maker (Audio)) Prentice Alvin (The Tales of Alvin Maker, Book 3) (Tales of Alvin Maker (Audio)) Alvin Journeyman (Tales of Alvin Maker, Book 4) (Tales of Alvin Maker (Audio)) High Tech Start Up, Revised and Updated: The Complete Handbook For Creating Successful New High Tech Companies Make: Like The Pioneers: A Day in the Life with Sustainable, Low-Tech/No-Tech Solutions Payments Tech: A data-driven look at private company financing and exit activity in the payments tech industry Oster Expressbake Bread Machine Cookbook: 101 Classic Recipes With Expert Instructions For Your Bread Maker (Bread Machine & Bread Maker Recipes) Oster Expressbake Bread Machine Cookbook: 101 Classic Recipes With Expert Instructions For Your Bread Maker (Bread Machine & Bread Maker Recipes) (Volume 1) Tapping Into Water Low Tech Well Drilling Techniques and Tools The Tools & Techniques of Financial Planning, 10th Edition (Tools and Techniques of Financial Planning) The Tools & Techniques of Employee Benefit and Retirement Planning (Tools and Techniques of Employee Benefit and Retirement Planning) Tools & Techniques of Employee Benefit and Retirement Planning, 11th ed. (Tools and Techniques of Employee Benefit and Retirement Planning) Earthbag Building: The Tools, Tricks and Techniques (Natural Building Series) KEY CHORAL CONCEPTS: Teaching Techniques & Tools to Help Your Choir Sound Great (Techniques For Teaching & Conducting High School & Adult Choirs Book 1)