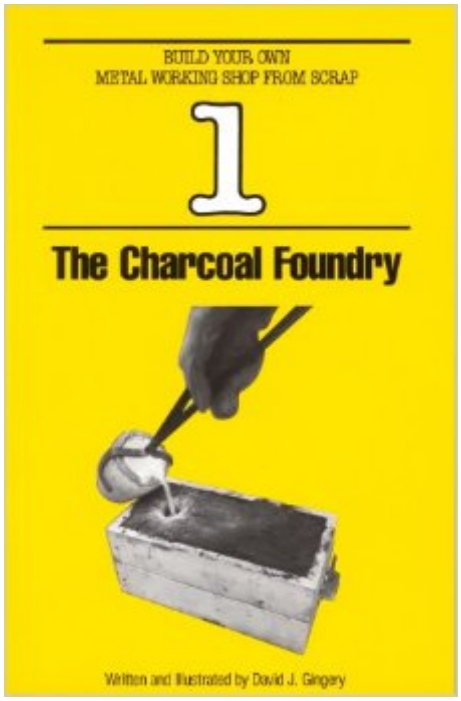
The Charcoal Foundry (Build Your Own Metal Working Shop From Scrap, Vol. 1)



Synopsis

If you can build a sand castle or make a mud pie you can make a sand mold to produce castings for your metal shop projects. It really is cheap and easy with a simple solid fuel furnace. Here are plans to build the melting furnace and instructions for basic pattern making and molding to get your shop project under way. Charcoal is the fuel and aluminum and zinc alloys are the metals to cast. None of the pulsation or roar associated with gas fired furnaces. Build your own molding bench and flasks. Make your own melting pots and most of the simple tools required. Discover how cheap and easy it is. Even if you already have a lathe and other equipment this simple foundry setup will greatly expand the capacity of your shop by providing you with a supply of cheap castings for your projects. Discover why so many shop hands say "Metal Casting has opened a whole new world of shop experience". Heavily illustrated with many photographs that will show you step - by - step how to build a foundry.

Book Information

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Average Customer Review: 4.3 out of 5 starsÂ Â See all reviewsÂ (70 customer reviews)

Best Sellers Rank: #95,360 in Books (See Top 100 in Books) #12 inÂ Books > Engineering & Transportation > Engineering > Materials & Material Science > Metallurgy #55 inÂ Books > Crafts, Hobbies & Home > Crafts & Hobbies > Metal Work #18377 inÂ Books > Textbooks

Customer Reviews

David Gingery’s charcoal foundry book is a fun place to start thinking about sand casting of metals. This book on the charcoal foundry is more like a "letter from a friend" describing his experience with metal casting. It is *not* a reference-material textbook on industrial foundries. Instead, it’s a fun and accessible introduction to doing small "hobbyist" or "prototype" sandcasting.His book is informative and entertaining, but keep in mind that he is not an expert -- he says so himself in the preface of his book -- if you do decide to set up a foundry at home, do additional research!

This book is the first in a series of seven. I bought all seven and will never lend them out; I value them too highly. The author, in a very careful and common-sense fashion, takes the reader through the whole process of small-project metal casting. In later volumes, the reader is shown how to build a lathe, a shaper, a divider, and so on. Throughout the series, the emphasis is on safety, practicality and affordability. You REALLY CAN build your own metal-working shop from the ground up. If you are fascinated by the fabricating arts, don't delay. Lay out the money and buy the whole set. I did and am very, very satisfied. These books are really inspiring and empowering. Do it now.

This is a great book, and the best that I have found so far on getting started in foundrywork.It covers all of the essentials, and guides you step-by-step through the process of building your charcoal-fired furnace. No prior experience in any form of metalworking or handicrafts is required, although some carpentry experience is rather useful. I am a full-time welding and machining student, and this(and Dave's other books in this series), are literally a dream come true.If you enjoy tinkering with stuff, and dream about being a machinist/foundryman/all-around do-it-yourselfer, then you owe it to yourself to get this book, and the others in the series.Have fun!

This is Book 1 of a seven book series. I've only completed this one so far and it was even easier than I thought it would be. Gingery is obviously a hands-on type person and, while very knowledgeable, not very clear in some of his instructions and in the overall structure of the book. For instance, it took me two tries to fire the lid of my furnace because the difference between "curing" and "vitrifying" were not made sufficiently clear (fortunately it was just a matter of crumbling the first try up and adding more water). He also talks several times about "hair dryer hoses" and it took me a couple weeks to realize he was talking about an obsolete type of dryer that was available when he first wrote the book, back in the early 80s.That said, this is not necessarily all bad. By poring over the whole book again and again, trying things out, going back to the book and doing research elsewhere, I learned a lot more than if he'd handed it all to me on a platter. I would definitely recommend this book to anyone wanting to try "something different" that was also cheap. It's really not hard to do--a friend could help you get it all done in a weekend. The only real difficulty is getting one's mind around new concepts and obtaining items you may never have even known existed before.

This is a wonderful book that is the first in the "Build a Metal Working Shop From Scrap" series. It goes over basic foundry processes and materials and finally the building and operation of a

Charcoal fired furnace for melting aluminum. I built a furnace out of a garbage can from this book, but I haven't fired it yet. Unfortunately, the charcoal burns with a lot of smoke and there are a lot of ashes left over when you are done. Even with the disadvantages of the dirtyness, it is easier to work with than gas.

An amazing testament to one man's creativity and hard work, and an inspiration to other budding machinists and tinkerers. The instructions are relatively easy to follow, but be aware that the production values (lay out, graphics, editting) are quite rough.

David Gingery gives explicit step by step instructions on how to build your own small furnace from readily available materials. This is an excellent place to start for people who are interested in metal casting.

I'm using this book as a textbook for my metal casting class. There is much more to learn about casting than this book covers but it's still a great introduction to the basics of sandcasting.

How to Build a Computer: Learn How to Build Your Own Computer From Scratch. The Parts, Connecting Everything Together, Installation and more (PC, Windows, Gaming System, Media System, Linux) Start Your Own Corporation: Why the Rich Own Their Own Companies and Everyone Else Works for Them (Rich Dad Advisors)