

Fine
Woodworking®

Routers & Router Tables



From the Editors,
Contributors, and Readers of
Fine Woodworking

Fine
Woodworking®

Routers & Router Tables

From the Editors of *Fine Woodworking*



The Taunton Press

Text © 2012 by The Taunton Press, Inc.
Photographs © 2012 by The Taunton Press, Inc.
Illustrations © 2012 by The Taunton Press, Inc.
All rights reserved.



The Taunton Press
Inspiration for hands-on living®

THE TAUNTON PRESS, INC.
63 South Main Street, PO Box 5506
Newtown, CT 06470-5506
e-mail: tp@taunton.com

EDITOR: Christina Glennon
COPY EDITOR: Seth Reichgott
INDEXER: Barbara Mortenson
COVER AND INTERIOR DESIGN: Carol Singer
LAYOUT: Susan Lampe-Wilson

Fine Woodworking® is a trademark of The Taunton Press, Inc.,
registered in the U.S. Patent and Trademark Office.

The following names/manufacturers appearing in *Fine Woodworking's Routers & Router Tables* are trademarks: Amana Tool®, Bench Dog®, Bosch®, Corian®, DeWalt®, Deft®, Eagle®, Festool®, Grizzly®, Hitachi®, iPod®, Lee Valley®, Makita®, Masonite®, Porter-Cable®, Ridgid®, Rockler®, Ryobi®, Speed Square®, Stanley®, Trend®, Triton®, Woodcraft®, Woodpeckers®.

Library of Congress Cataloging-in-Publication Data

Routers and router tables / editors of Fine woodworking.

pages cm

Includes index.

E-Book ISBN 978-1-62113-731-3

1. Routers (Tools) 2. Woodwork. 3. Workbenches. I. Fine woodworking.

TT203.5.R6868 2012

684'.08321--dc23

2012022202

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

ABOUT YOUR SAFETY: Working wood is inherently dangerous.

Using hand or power tools improperly or ignoring safety practices can lead to permanent injury or even death. Don't try to perform operations you learn about here (or elsewhere) unless you're certain they are safe for you.

If something about an operation doesn't feel right, don't do it. Look for another way. We want you to enjoy the craft, so please keep safety foremost in your mind whenever you're in the shop.



ACKNOWLEDGMENTS

Special thanks to the authors, editors, art directors, copy editors, and other staff members of *Fine Woodworking* who contributed to the development of the articles in this book.

Contents



Introduction 3

PART ONE

Routers and Bits

- How Many Routers Does Your Shop Need? 4
- Trim Routers 12
- Heavy-Duty Plunge Routers 20
- Ten Essential Router Bits 28
- Upgrade Your Router with Shop-Built Bases 40

PART TWO

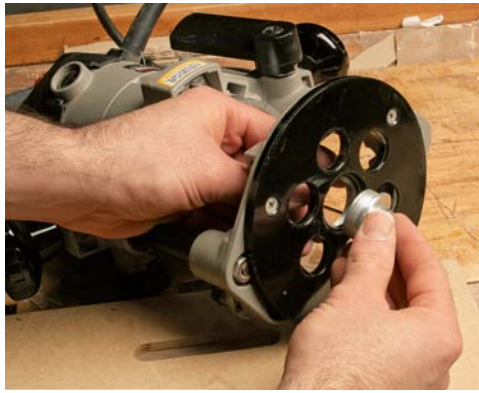
Router Tables

- Router-Table Basics 50
- A Versatile Router Table 62
- Space-Saving Router Table 71
- Rock-Solid Router Table 78

PART THREE

Router Jigs and Techniques

- Handheld Routing 90
- Essential Jigs for the Router Table 96
- Five Smart Router Jigs 105
- Versatile Mortising Jig 113
- Templates Guide the Way 116
- A Guide to Guide Bushings 122



- Climb Cutting: Don't Believe the Naysayers 131
- Eight Tips for Flawless Moldings 138
- Taper Your Sliding Dovetails for Easier Assembly 148
- Level Big Slabs in No Time Flat 157

Metric Equivalents 167

Contributors 168

Credits 169

Index 170



Introduction

At its heart, a router is just a handheld motor that spins a cutting bit, with no built-in way to guide its path. The simplest solution is to use bearing-guided bits, and a lot of woodworkers stop there, making a few moldings and secretly wondering what all the fuss is about. This comprehensive guide will show you why so many woodworkers rave about the router. The secret is controlling its motion. Do that and there is next to nothing the tool can't do. You'll find all of the best approaches here, from the basic edge guide to template guides, smart fences, and the king of all router jigs: the router table. Armed with these, you'll be able to cut perfect joints of all kinds, crank out stacks of matching multiples from a single pattern, level big slabs, and do too many other things to list.

There are lots of ways to make router jigs, and plenty of ink has been spilled on the

subject. But this collection of articles is different. All are culled from *Fine Woodworking* magazine, whose editors travel throughout North America to find the most talented and efficient craftsmen out there, people who do incredible work but won't waste their own time or yours building ultimate super-jigs that never pay off. Almost all of these jigs and fixtures are elegantly simple, costing you nothing more than a trip to your scrap pile and an hour or less of time.

You'll get the basics first—how to choose wisely from the dizzying array of routers and bits—before diving into a host of tips and techniques. Plus you'll get four plans for shopmade router tables, helping you find just the right one for your shop. Master this versatile tool and you'll be doing better work in no time, conquering tasks you didn't think were possible, and becoming yet another router fanatic.

—Asa Christiana
Editor, *Fine Woodworking*

How Many Routers Does Your Shop Need?

JEFF MILLER

Doing a quick inventory of my shop recently, I discovered that over the years I have accumulated nine routers. Nine! How did that happen? Does the average woodworker really need that many routers?

The short answer, happily, is no. Still, the argument for having more than one router is powerful. You can leave one in your router table and have another for handheld work.

Second, adding a router with particular strengths can make certain tasks much more convenient, whether you're cutting edge profiles with large, heavy bits or routing shallow hinge mortises on narrow stock.

There are many router types available, but which ones do you really need? I'll suggest two approaches. Either one will tackle a wide range of work, but the first is kinder to your wallet.



Whenever possible, you should do your routing on a table. Moving the workpiece against a solid fence and table is simply more accurate than moving the router.