

Hybrid Woodworking

BLENDING POWER & HAND TOOLS FOR
QUICK, QUALITY FURNITURE

BY MARC SPAGNUOLO,
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Hybrid Woodworking



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Introduction: The Hand-Tool Renaissance



Hand Tools are Popular

Hand tools are back baby! Whether shiny and new or old and well-used, more hand tools are finding their way into new woodworkers' shops every day.

Have you noticed the most prominent and fastest-growing trend in woodworking these days? No, not midriff flannel shirts, silly! I'm talking about the return to our old-school roots.

We are experiencing a resurgence of interest in human-powered wood manipulation, a hand-tool renaissance. Every day more woodworkers are unplugging their power tools and choosing their traditional, non-electric analogs. Have you leafed through any of the current woodworking magazines lately? You may have noticed not only an increase in the number of hand-tool articles and reviews, but also the number of hand-tool advertisements. Do a few web searches and you'll find some popular blogs focused solely on hand-tool history, maintenance and use. In defiance of a hectic technology-driven world, it is clear that some of today's new woodworkers have the desire to hit the pause button and take some time to carve their own paths.

We resist the urge to stare into screens all day and instead retreat to the workshop to craft functional and beautiful creations with our own hands. Working wood can take some time and a woodworker's world seems to move at a slower pace than the rest of the population's. For us, the

journey is as important, and sometimes more important, than the destination. So is it any wonder that when given the choice between a power tool and a hand tool, many woodworkers are drawn to the more modest option?

This is a very good thing for the craft. Hand-tool techniques are the foundation for the jobs that power tools do. The powered jointer is just an upside-down bench plane with a motorized blade. A band saw is the modern equivalent of the traditional frame saw. Sanders do the work previously assigned to smoothing planes. Our new tools and our old ones are so interconnected that it certainly couldn't hurt to have a strong working knowledge of hand tools, even if you intend to focus on power tool woodworking. Understanding their hand-tool ancestors helps us get the most out of our power tools, and in some cases can help us identify where a modern power tool falls short and how we could overcome such limitations.

SUBSTANTIAL BENEFITS

Adding hand tools to a machine woodworking shop brings several substantial benefits:

- Hand tools are quieter.
- Hand tools are safer.
- Hand tools produce less dust.
- Hand tools improve accuracy.
- Hand tools can save you money.
- Hand tool projects have a special quality about them.
- Hand tools can be more gratifying.

I am a new parent, and I'm very thankful that my hybrid woodworking routines allow me to get some work done while my son is sleeping. If your day job means you can only woodwork at night, or if you live in an apartment, the quiet nature of hand tools could make the difference between woodworking and not woodworking. The sound of a handsaw, the mallet taps on chisel, and the swoosh of a handplane are the only sounds that will emanate from your shop. Plus you have the added bonus of actually being able to hear the radio, or your own thoughts, or in my case, the baby monitor.

Hand tools are generally safer to use than power tools. Sure, you can still end up in the emergency room if you aren't careful, but injuries with hand tools very seldom result in lost digits. And, great news for your lungs, the by-products of hand tools are shavings and chips that you can sweep up, not fine dust you'll be inhaling and coughing up.

Hand tools improve accuracy because they remove small, controlled amounts of material with each stroke or pass. You can sneak up on the perfect fit. And should you go a stroke or two too far, you probably haven't ruined the workpiece. Go a pass too fast or too far with a power tool and you'll be

starting over.

Hand tools also offer a potential economic benefit. By using scrapers and planes, you'll consume less sandpaper. Good quality sandpaper doesn't come cheap, and with a hybrid approach you'll use much less of it and you'll likely need only to stock up on one or two grits. Additionally, because you aren't producing nearly as much dust, you won't have to purchase as many of those expensive replacement bags for your dust extractor or shop vac. When your waste products are shavings and chips, a broom and dust pan becomes a viable cleaning solution.

Also, keep in mind that one of the great joys of hybrid woodworking is the ability to sneak up on the perfect fit. To facilitate this, most power-tool cuts will leave the workpieces oversized. So the chances of cutting a piece too short or making a tenon too small are minimized. That means less waste and fewer do-overs.

The final benefit to consider is the big X-factor, gratification. How much personal satisfaction you get from using hand tools is, well, personal. But I believe we all have the capacity to appreciate the magical feeling of achieving a positive result with a finely-tuned hand tool. And as much as I love to see great results from power tools, I have to admit that a high-quality hand-tool result is a little more special.

Based on all of these benefits, learning about and incorporating hand tools into the wood shop certainly sounds like a great idea. But don't get me wrong. I love my woodworking machines and my portable power tools, and I have no desire to become an exclusive hand-tool user. But I find there are a lot of good reasons to strategically incorporate hand tools into my power-tool shop.

So why doesn't every woodworker hold a ticket for a ride on the hand-tool train? To understand why, we'll need to consider the path of the modern woodworker. As popular as hand tools are, the current landscape still presents numerous obstacles, pitfalls and diversions that create confusion and can send the information-seeking woodworker down a rabbit hole.

POWER TOOLS FIRST, BUT WHY?

Today's new woodworker tends to follow a typical path involving the acquisition of basic power tools (table saw, drill, router, circular saw, jigsaw, and sander). I chat with thousands of woodworkers every year and I have the good fortune of hearing many origin stories about how they entered the craft. Some took shop class in high school, some recall lazy Sundays in the garage with grandpa, but most were influenced by a TV show or inspired after doing their first DIY or honey-do project. One thing nearly all of these people have in common is that their first tools are powered. This is actually the opposite of how it should be. In just about any discipline, one should always begin with the rudimentary tools first, and work up to the more complex gear. These days, that rarely happens.

So why do so many people start off with power tools first? I think they get the woodworking bug from watching DIY home-improvement shows. These shows are aimed at a general audience and the

tend to the viewpoint that hand tools are outdated relics. So it's no surprise that many new woodworkers' first tool purchases will be 100-percent powered and they will start out with no appreciation for traditional hand-tool woodworking.

For example, *The New Yankee Workshop* ran on PBS for 20 years from 1989 to 2009 and influenced countless people, including yours truly, to become woodworkers. The host, Norm Abram, became a celebrity woodworker and he is widely perceived as a power-tool junkie. I am certain Norm has a strong working knowledge of hand tools, but he rarely used them on the show. Perhaps the power-tool sponsors played a role, or perhaps that was what the producers believed the audience wanted. Either way, a new woodworker would walk away with the impression that hand tools just aren't used any more.



A Diamond in the Rough?

In spite of a coat of rust, some old flea-market finds can be rehabilitated into functional working tools.

PLANTING THE HAND-TOOL SEED

Regardless of how people enter the craft, many will eventually become acutely aware of hand tools. Even if they initially regard hand tools with apprehension, most woodworkers develop an appreciation for what these tools can do in skilled hands. As more and more woodworkers turn to the Internet, they are further exposed to blogs, podcasts, and forums where the hand-tool influence is alive and well. And if they begin subscribing to popular woodworking magazines, in most cases they'll find a well-

balanced presentation of both hand- and power-tool use. One way or another, the hand-tool seed gets planted. The question is, will it be allowed to grow?

Unfortunately, because most woodworkers already have a decent complement of power tools, adding hand tools can be expensive. In some extreme cases, woodworkers vow to replace all of their tools with hand-tool equivalents, which is, in my opinion, a big mistake. If you take the hand-tool plunge too soon and too deep, you might find yourself overwhelmed with this new paradigm. Other folks take a more measured approach, adding a new hand tool here or there and discovering over time by trial and error which tools are actually useful. Regardless of how the hand tools find their way into the shop, as an invested power-tool user, money is going to be a major factor. After I made my initial investment in a power-tool shop, I had a tough time persuading the finance committee that I really needed more hand tools. And frankly, I had a tough time convincing myself it was the right thing to do.

To make matters worse, hand tools are no longer the inexpensive alternative they once were. A decade ago, you could find decent fixer-uppers on eBay or at a local flea market. Today, eBay is overpriced and extremely competitive, and good luck finding an undiscovered box of tools at a flea market that someone hasn't already pilfered. Good deals can still be found, but you're going to work hard to get them. And if you want to purchase a new hand tool that doesn't need much in the way of tune-up or fettling, the price can range from merely expensive all the way to ludicrous.

THE CHALLENGE OF MAINTENANCE

Now let's assume the new woodworker overcomes these obstacles of power-tool influence, expense and pride, and acquires a basic complement of usable hand tools. The next challenge is the fact that hand tools require precise care and maintenance. Older tools may need complete rehabilitation including rust removal, sole flattening, filing, japanning and blade replacement. High-quality new tools still require basic maintenance including back-flattening and blade honing as well as general fine-tuning for particular tasks. Even if you are accustomed to the many maintenance requirements of power tools, hand tool fine-tuning and maintenance can be a rude awakening. Thankfully, most woodworkers are not easily deterred by challenges and those who press on will eventually develop a working knowledge of how to maintain and tune their hand tools. Like any other skill, it takes practice.

THE CHALLENGE OF USE

The next challenge is learning how to use the tools, which really should be the fun part, right? In some cases it is, but there are many frustrated woodworkers who simply cannot get good results from their hand tools. Some become so disheartened that they begin to consider giving up the craft altogether. The truth is, wielding hand tools is a lot like hitting a golf ball. The best club in the world won't do

anything for you if you don't know how to swing it. Getting a hand tool to work effectively takes practice and patience. And just like the golf swing, the best thing you can do is have someone critique your form by watching you work. Stance, posture, arm and leg movements, hand placement and grip are all major concerns to the hand-tool user. Someone coming from the power-tool world is liable to underestimate the nuance involved in effectively passing a hand tool over a piece of wood. The hand-tool learning curve is steeper than that of most power tools.



Good Form

Take a wide stance while planing, letting your body move the plane across the board, not your arms.

Ultimately, woodworkers who jump into the wild and crazy world of hand tools too fast, too soon and without proper guidance may end up discouraged and soured on the craft. A crappy untuned hand tool in the hands of a novice won't just produce lackluster results, it won't produce any useful result. It will contribute to the firewood pile while slowly driving its owner into dark madness. Who wants to live in a world filled with torn-out grain, undulating surfaces, non-square edges, calluses and sore

forearms?

Don't get me wrong, the picture is not entirely grim. Hand tools are gaining wide acceptance and we are incredibly lucky to have an over-abundance of free and paid resources to help guide us on our woodworking journey. Thanks to books, DVDs, blogs, podcasts, online courses, local seminars and woodworking schools, there has never been a better time to learn the craft of woodworking with hand tools. At the same time, many of these resources don't consider the possibility that not everyone wants to use hand tools exclusively.

Most woodworkers would never willingly give up their power tools, yet many still have a growing interest in what hand tools might have to offer. The risk is becoming persuaded to purchase a whole host of hand tools they may never wind up using. It wouldn't make sense to invest in a drop-dead gorgeous Lie-Nielsen scrub plane if you never intend to flatten a rough board by hand. Discussing hand tools in a vacuum with no consideration for their power-tool equivalents inevitably leads to significant redundancies. For instance, if I plan to continue using my powered jointer, I have little need of a No. 7 jointer plane. For those who like to collect tools, this is no problem. But for the budget-conscience woodworker, redundancy in tooling can be wasteful, frustrating and confusing.

In my opinion, the discussion is not about hand tools versus power tools as if they were two mutually exclusive categories. Instead, let's talk about how to enhance our existing shops by incorporating carefully chosen hand tools. A similarly useful discussion might center around how to enhance a hand-tool shop with carefully chosen power tools. Because that isn't the kind of shop I run, I can't offer much perspective. I have a well outfitted power-tool shop, and I am most comfortable teaching people how to improve the accuracy, speed and quality of their work with strategic hand-tool selection and use. In fact, that's the exact purpose of this book: to show you how hand tools and power tools can be used together in an efficient, harmonious and gratifying balance. By rights, this all falls under the broad label of woodworking. But because hand tools and power tools have become somewhat segregated in the hearts and minds of many woodworkers, I like to call this best-of-both-worlds system "hybrid woodworking."



Shoulder Maintenance

A tenon cut at the table saw can be fine-tuned at the workbench.

A Broader Perspective

Now it's time for a little disclaimer. There will likely be several times in this book when you might wonder, "Hey, wouldn't it be quicker to do XYZ instead?" If that question pops into your head, I urge you to consider the reasons you work wood in the first place. Is it always about expediency or do you subscribe to the romantic notion that we are doing more than simply building furniture?

As I see it, we are taking one of nature's most amazing natural resources and turning it into a functional and beautiful "something" that can be utilized, appreciated and enjoyed for years well beyond our own. While there are certainly limits to the amount of time I want to spend doing mundane woodworking tasks, having the opportunity to fine-tune joints prior to assembly is a gratifying treat that makes me feel closer to my work and gives me higher quality results. If it happens to eat up a few more minutes on the shop clock, and many times it will, I really don't mind. My work and my mental health both benefit from the extra care and attention.

At the same time, I do have my limits. No one on this planet can convince me it's in my best interest to mill a board 4-square by hand, but that's just me.

HYBRID WOODWORKING

The goal is to use the best tools for the job. The basic tenet of the hybrid woodworker is to let the power tools do the grunt work and the hand tools do the finesse work. In years past, woodworkers had apprentices to do the grunt work, leaving the finer details to the craftsmen who were higher up the chain of command. Today I work alone and my apprentice is a toddler, but I do have help with the

grunt work from my power tools. Whether it's milling boards flat or hogging away excess wood for some particular joint, my power tool "apprentices" allow me to get the job done quickly and efficiently so I can take my time with the details that matter.

As a quick example, I usually batch out tenons using a dado blade in the table saw. It's a fast and repeatable way to make the joint. But the saw leaves a rough tenon cheek and it can be difficult to set the blade at the perfect height, so I leave tenons a bit oversized. I then head over to the workbench and finesse the cheeks using my shoulder plane, rabbeting block plane or router plane. By removing super-thin shavings I can creep up on the perfect fit while also making the tenon nice and smooth. If I go one stroke too far, I'm only a few thousandths of an inch past my desired outcome. If I were doing this finesse work at the table saw, any error would be much greater. Not only does this methodology give me better results and tighter joints, it also avoids major errors. And on a personal level, the process itself just makes me feel good about what I do.

WHY DOESN'T EVERYONE USE THE HYBRID SYSTEM?

In my opinion, the hybrid approach is the most flexible, efficient, accurate and gratifying way to work wood. So why doesn't everybody use this system? Well, some hand-tool devotees are doing woodworking simply because they want to take their time and enjoy a process that has its roots in a bygone era. Perhaps they have a stressful job or a hectic personal life, and woodworking provides a relaxing break. These folks certainly aren't naive to the fact that they could use a router to create a mortise, but chopping that mortise with a chisel and a mallet gives them a more intimate relationship with the furniture and the craft as a whole. To each his or her own.

While some believe power-tool woodworkers are largely focused on the destination and not the journey, that isn't true for me. I enjoy every second of my time sculpting curves with a grinder, pulling glass-smooth figured boards out of my 15" helical-head planer and slicing thin veneers with a powerful band saw. To me, the roar of a powerful motor is the sound of a bird singing a delightful tune. Just as a hand-tool devotee gets a charge out of making beautiful slivers with a finely honed chisel, the power-tool devotee gets amped up when a 5hp motor spins a carbide-tipped blade through 12/4 maple.

I think all woodworkers are here for the same fundamental reasons. We all have at least some appreciation for each step of the woodworking process: selecting the wood, milling, joining, shaping, assembling and finishing. The tools we use to work our way through these steps are just that: tools. Whether using power tools, hand tools or a hybrid combination, we're playing for the same team. After all, isn't everybody sick of mass-produced particleboard furniture? I know I am.

When it's all said and done, the recipient of your craftsmanship and all future onlookers will have no idea what tools you used to make it, nor will they care. So the vehicle you choose for your particular journey from pile of boards to masterpiece is completely and totally a personal one.

Everyone does whatever makes them happy, in the workshop and in life. I hope you'll consider the benefits of the hybrid woodworking approach because I truly feel it makes the whole process more enjoyable and keeps the door open for new ideas and new methods of work.

Neanderthals vs Normites

Sometimes, especially on the Internet, woodworkers are unfairly lumped into two broad categories: hand-tool users and power-tool users. There are fanatics on both sides of the fence who are at the root of this phenomenon. Some hand-tool zealots believe that unless you completely unplug, you're not a real hand-tool user. Some power-tool proponents believe that hand tools are just a waste of time and represent an inefficient step backward. This fanaticism typically generates a counter-reaction in both camps where folks who favor one thing or the other feel the need to defend their choices and the gap only gets wider.

The online woodworking community has been using pet names for years to identify these seemingly disparate groups: Neanderthals and Normites. The Neanderthals are the knuckle-dragging hand-tool lovers who seem to enjoy slow grunt work. Normites, named after the self-confessed power-tool junkie Norm Abram, won't use a tool unless it has a power cord and would rather spend an hour setting up a dovetail jig than 10 minutes cutting the joint by hand.

Of course, I'm having fun at the expense of the extremists because I believe that most folks are better off somewhere in the middle and have a natural desire to be there. But the current state of the online woodworking world compels new woodworkers to choose a side as if hand tools and power tools are mutually exclusive. This is unfortunate because there is tremendous value in knowing how to use all woodworking tools.

Ultimately, you should do the kind of woodworking that makes you happy. But if you're new to the craft, I would hate to see you go down one particular path at the expense of the other. The truth is, both systems have strengths and weaknesses. Fortunately, where many power tools sometimes fall short, hand tools excel. And conversely, where hand tools fall short, power tools excel. That's why, in my humble opinion, hybrid woodworking is the least resistant path to woodworking greatness, as we truly enjoy the best of both worlds.

ABOUT THIS BOOK

This book covers hybrid woodworking basics. I'll discuss the essential tools every hybrid woodworker should own, as well as which ones you might consider. I'll demonstrate numerous woodworking joints and show you how to approach them from a hybrid perspective. If you are new to the craft and haven't started accumulating tools yet, by the end of this book you'll have a much better understanding of what tools you need for the things you want to make.

We'll conclude the book with a brief overview of projects I've made in the past, highlighting areas where specific hybrid techniques were used.

Tools of the Hybrid Woodworker: Enhance, Don't Replace



Redundancy = Options

While the shoulder plane, rabbeting block plane and block plane are very different tools, they do share some functionality.

Have you ever heard anyone claim that hand tools are slow? Perhaps this is a notion you currently subscribe to. If so, you're not alone. In fact I'd guess that this is the primary reason why most power tool enthusiasts don't even consider hand tools as a viable option in the shop. At this point, I bet you're expecting me to try to convince you that hand tools are not slow, but I'm not going to do that. Truth be told, I agree with the notion, but only partially. In my experience, hand tools are only slow when I try to use them as replacements for the jobs currently done by my power tools.

I don't think anyone can argue against the fact that milling a board by hand using several bench planes and winding sticks will certainly take longer than using a powered jointer, planer and table saw. Ripping a board to width at the table saw is, without a doubt, faster than using a handsaw and a

sawbench. So one basic rule of the hybrid woodworking method, as far as it concerns tool buying, is “Enhance, don’t replace.” Don’t trade your sliding compound miter saw for a miter box. Don’t sell your band saw for a bowsaw. And please, for the love of all things made of wood, don’t trade your power planer for a scrub plane. I know several hand-tool zealots who still keep a power planer in the shop for easy milling when no one else is watching.

Keeping the “Enhance, don’t replace” rule in mind, a hybrid woodworker’s tool box begins to take shape, and it probably looks different than you might have anticipated. Most notably, various handplanes and saws will be conspicuously absent. Remember, we are trying to prevent excessive functional redundancy. So what we look for are specific tools that perform specific functions: the ones our power tools either aren’t capable of or simply don’t do with as much precision and accuracy as we’d like.

In addition to the “Enhance, don’t replace” rule, there are a few other guidelines we can apply to help decide if a particular hand tool should become part of our collections. If a tool can bring one or more of the following benefits to the table, then it should at least be considered as a potential purchase:

- functionality
- efficiency
- accuracy
- or gratification.

Keep in mind that there is a lot of room here for personal preference and no two tool kits need to look exactly the same, but evaluating these potential benefits and asking yourself the associated questions will allow you to make a more objective decision about every tool that enters your shop, powered or not.

DECISION-MAKING PROCESS

Let’s use an example to illustrate the question-and-answer process. I’ll also include a score that will help you derive a numerical rating for how well the tool satisfies each benefit. Here’s the scenario: I already own a medium shoulder plane and a block plane. Should I purchase a rabbeting block plane?

1. Functionality

Does the new tool bring something unique to the table and is it a multi-tasker?

While there is overlap between a medium shoulder plane and a rabbeting block plane, there also are some important differences. A shoulder plane can be used to clean up not only the shoulders of a tenon but also the cheeks. Unfortunately though, a medium shoulder plane is quite narrow and would require multiple passes on the tenon cheek. This could result in unevenness and gouges on the tenon cheek, a

well as inconsistent tenon thickness. A rabbeting block plane is significantly wider and covers more real estate per pass. That makes it the better choice for smoothing a tenon cheek. My standard block plane would cover just as much real estate per pass, but its blade does not extend all the way to the sides of the plane body, which means the cut will stop short of the tenon shoulder, which is certainly not ideal. So in my opinion, a rabbeting block plane does offer some additional functionality over both the shoulder plane and the block plane.

A rabbeting block plane isn't just helpful with tenons. You can use it to tune up other joints as well and as the name suggests, it can do many of the jobs that a standard block plane can do. In fact, if you don't already own a block plane, I feel a rabbeting block plane is the better first purchase. But because I already have a standard block plane, the rabbeting block plane does bring some redundancy. So I'll need to decide if its additional functionality justifies bringing it into the fold.

In terms of functionality for my particular situation, I give the rabbeting block plane a score of 2 out of 5. If I didn't already have a shoulder plane and a standard block plane, this score would be higher.

2. Efficiency

Will the tool make specific processes more efficient?

When finessing the fit of tenons, neither the shoulder plane nor the block plane are ideal for trimming tenon cheeks. The rabbeting block plane, however, will make quick work of the task. Fewer passes on each tenon face means the job gets done faster and I can move on to the next part of my project. Additionally, some models (such as the one sold by Lie-Nielsen) feature a nicker that slices the grain ahead of the blade, helping to prevent tear-out and resulting in a cleaner cut.

In terms of efficiency, I give the rabbeting block plane a score of 4 out of 5. To illustrate why, let's look at some actual times. When using a shoulder plane, it takes me about two minutes to clean up a typical tenon, including time for a couple of test fits. With the rabbeting block plane I can do the same work in about half the time, thanks to the wider body and full-width blade. For a set of four frame-and-panel doors (16 tenons), it would take me about 32 minutes using the shoulder plane and 16 minutes using the rabbeting block plane. This is just a ballpark estimate but it does illustrate that over the course of a full project, small time savings can really add up.



Clean Your Cheeks
A rabbeting block plane excels at cleaning up the cheeks of a tenon.



A Time-Saver

The rabbeting block plane features a full-width blade that makes finessing a tenon quick and easy.

3. Accuracy

Will the tool increase my accuracy?

It comes down to making fewer passes to get the job done. Fewer passes translates to more consistent results and fewer opportunities for error. When you use a plane to clean up a tenon cheek, it's important to count your strokes so that you can repeat the same number of passes on the other side. If you don't do this, the tenon becomes off-center. Reducing the number of passes makes it easier for me to count, remember and execute the proper number of passes on both sides of the tenon.

In terms of accuracy, I give the rabbeting block plane a score of 3 out of 5. While fewer passes do increase my overall accuracy, I can get good results with my shoulder plane if I don't lose count and practice solid technique. So there is an increase in accuracy with the rabbeting block plane, but it isn't dramatic.



Shoulder Plane

The shoulder plane, as the name implies, excels at finessing end grain on a tenon shoulder.



The Nicker

The nicker on this rabbeting block plane severs the cross-grain fibers ahead of the blade to yield clean cross-grain cuts.

4. Gratification

Will the tool add to my enjoyment of woodworking?

Without a doubt, gratification is the wild card. If you work wood purely for the enjoyment of the process, this benefit could easily trump the other three. Let's say a particular tool scores very low in the previous three benefits, but you absolutely love the process of using it. I don't know, maybe you just like the way you look holding it? I know for me personally, I enjoy cutting mortises with a router and then squaring the corners with a chisel. Could I have used the hollow-chisel mortiser instead? Certainly. But there's something gratifying about the process of squaring things up with a chisel and mallet. Ultimately, if you value a new tool's potential for gratification more than the other benefits, a low-scoring tool may still find its way into your collection.

In terms of gratification, I give the rabbeting block plane a score of 3 out of 5. A rabbeting block plane doesn't do much to increase my personal enjoyment of the process, although being more efficient and a little more accurate always makes me happy. Plus I find it more comfortable in the hand than comparable tools such as the shoulder plane.

A PERSONAL PROCESS

As you can see, this can be a very personal process. Flexibility relies on comparisons to your unique tool set. Accuracy and efficiency depend not only on your tool set, but also on your level of experience and skill. Just because you're a woodworking ninja with a handsaw doesn't mean I can wield the tool with the same level of skill. And gratification is 100 percent personal. After all, while many woodworkers find it satisfying to chop a mortise by hand, I'd find it more pleasurable to chop a mortise in my hand. That's an exaggeration, but you get the point: We all have different goals, preferences and skills.

Going through this Q&A scoring exercise allows you to think critically about each benefit and how useful the tool is likely to be. If you want a systematic way to approach tool-buying decisions, you can assign weights to each benefit. Each benefit rating then contributes to the total point count and you'll end up with a simple buy/don't buy score. Above is a sample worksheet that gives each benefit equal weight. In other words, equal weight means that I feel all four benefits are equally important to me.

Functionality 2/5, efficiency 4/5, accuracy 3/5, gratification 3/5, using a multiplier of 5, my total score would be 60 out of a possible 100 points. If I set my purchase threshold at 50, any tool that receives a score of at least 50 points will find its way into my shop. In this case, with a score of 60, the rabbeting block plane is victorious and will soon find itself nestled comfortably in my tool chest.

Item/Tool Name:

What purpose(s) does this item serve?

- Milling Carving/Sculpting Shop Organization
 Measuring/Marking Assembly Safety Equipment
 Joinery Finishing
 Other _____
-

Does this item serve a similar purpose to others that I have?

- No Yes, it's similar to
-
-

Do I need this item? (Check all that apply)

- I can't build a particular project without it I want this to work more safely
 I want this to build faster I want this for convenience
 I want this to increase build quality/accuracy I just want it

Category	Score (out of 5)	Multiplier	Total
Functionality	/ 5		
Efficiency	/ 5		
Accuracy	/ 5		
Gratification	/ 5		
Grand total score			/ 100
Purchase threshold			
Should I buy this?			<input type="checkbox"/> Yes <input type="checkbox"/> No

Notes:

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