

Notes from the Shopsmith Wood-working Academy

Should You Have A Thickness Planer In Your Shop?

In terms of the operations it performs, the thickness planer may very well be the simplest power tool in your workshop. Yet, simple as it is, when teamed-up with other power tools, the planer gives you everything you need to transform all kinds of different lumber into useful, beautiful and fun projects.

It gives you greater freedom to work with hardwoods, softwoods, even trees from your backyard or logs from your woodpile. It's a great step toward achieving a totally self-sufficient home workshop. It's also a joy to use, easy to handle and quick to set up.

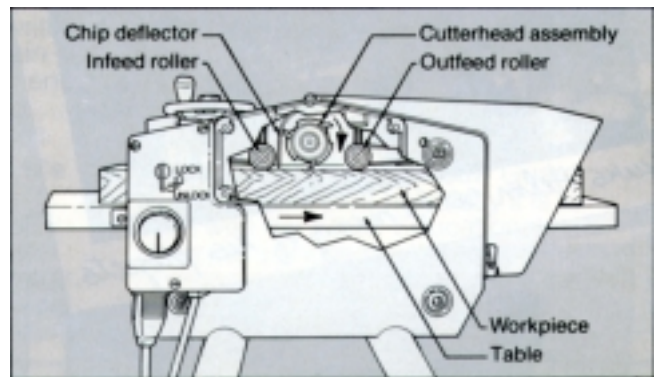
What does it do ?

A thickness planer performs only two basic tasks, but it does these very well:

- 1:) It planes the surface of a workpiece so that it's smooth and flat. Sometimes this means it will remove a large amount of stock in several passes (for example, when you're planing a really rough piece of lumber). At other times, it can just as easily be set to take off just a tiny bit (when you want an extremely smooth, final surface).
- 2:) It will plane any number of boards to the **exact same thickness**.

How does it do it ?

Actually, it's fairly simple (See Fig 1). By raising and lowering the height of the planer table, you can vary the amount of stock you want to remove in a single pass. As you place the lumber on the infeed portion of the table and slide it into the machine, the infeed roller grasps the wood and begins to push it under the rotating cutterhead. As the wood moves past the cutters, the outfeed roller takes hold and pulls the wood, keeping it moving at an even rate of speed throughout the cut. To achieve the thickness you want, merely run through the machine in successive passes, adjusting the height of the table with each pass.



It's really quite simple in design and purpose. It smooths and simplifies all kinds of projects you make from scratch. Underneath its unique capability to prepare the surface of your project wood is this "rule of thumb": **The more cuts a thickness planer makes per linear inch of wood, the better the final surface will be.** *

If you run soft wood (such as poplar or pine) through a thickness planer, you can feed it fairly quickly past the cutterhead. If you run hard woods (such as oak, ash or cherry) through the machine, you should slow down the feed rate, while at the same time, keeping the cutterhead revolving at optimum speed.

When smoothing very dense wood or wood that's highly figured with burls, knots or bird's-

eyes, the feed rate should be as slow as possible and the cutterhead should revolve at optimum speed.

When your objective is to attain consistently thickened lumber for your projects, the key is a stable and controllable support table. Raising or lowering the table will allow you to produce lumber that's as thick or as thin as you need...plus...it will do this for you again and again, producing as many identically thickened boards as you may need for your project.

How to make creative use of one

A thickness planer adds a tremendous amount of potential to your shop...as it complements the stationary power tools you already own.

It works with the jointer to prepare straight, true, parallel wood in preparation for additional cutting, molding, shaping, routing and drilling.

It works with the table saw to ensure that every piece of stock you saw, dado or mold will be exactly the same thickness, eliminating the need to continually adjust your set-ups to compensate for slight differences in the thickness of the various pieces of stock you've purchased from the lumberyard.

Used as a helper for making delicate projects with the bandsaw or scroll saw, it will prepare smooth, thinned stock for crafts and gift items.

It helps ensure that all of your lathe turning blanks are identical. For example, if you're turning four legs for a table with each leg having a square portion where it meets the table's apron, the planer will help you be certain that all of these square leg tops match perfectly.

A planer will also eliminate the need to spend excessive amounts of time making dust while preparing your surfaces with the drum or belt sander.

Increasing Economy

When it comes to stretching the dollars you budget for lumber, a thickness planer will also save your money. By having your own planer, you won't have to pay the lumberyard to plane the stock you want to buy. Depending on the amount of lumber you need, you could purchase rough lumber and pocket some nice savings on every board foot you plane yourself.

Plus, you can purchase more readily available narrow stock, straighten and true-up its edges on your jointer, glue them edge-to-edge to make wider boards, then pass the assembled stock through your planer to achieve exactly the thickness you need. In this way, you'll be able to get the wider boards you need for your projects at a nice savings.

You can also save on your lumber costs by resawing thick stock into thinner pieces, then planing it. Using this technique, you'll get two or more thin boards out of one thick one, eliminating the need to purchase 1-inch thick stock when all you really need is 5/16 thick stock..

Within the established guidelines of planer safety, you'll also be able to run certain pieces of scrap stock through your planer, then use them in larger projects for inlay, marquetry, parquet work and intarsia – or for smaller craft items like jewelry boxes or ornamental items.

Saving time

Best of all, a home shop thickness planer will save your time while offering the potential of better results. Commercial planers are built to run in situations where production speed is more important than surface quality. As a result, they may not always produce the high-quality surface finish you need for your best work.

You'll also save time during the assembly portion of your project. For example, instead of

using sandpaper to attain smooth, even surfaces on stock **after** joinery, you can get the surface quality you want **before** you begin joining the wood together. In this way, the thickness planer will take many of the unpleasant surprises out of joining your project components together, increasing the many pleasures of your woodworking hobby in the process.

If, for instance, you're making stiles and rails for cabinet doors, a thickness planer will trim all your pieces to exactly the same thickness, letting you concentrate on joining them together professionally, knowing that you started with equally thick stock. That means your thickness planer will go a long way toward not only increasing the scope and quality of the projects you build, but also increasing the joys and pleasure you get from working with wood.

What it won't do

Still, a thickness planer is **NOT** a cure-all for all the variations Mother Nature can throw into a single piece of wood. When used in combination with a jointer, it can remove some deviations in straightness...but you'll still have to pay close attention to choosing the stock that's as straight and true as possible. Furthermore, a planer is not a stand-alone tool for the home shop...it simply prepares wood for further processing with other machines and hand tools.

Final Thoughts

The question remains...do **you** need a thickness planer in **your** shop? Just keep in mind that you really don't have to be a highly-skilled craftsman to use one. In fact, a planer is one of the tools you can use in your quest to becoming more skilled. It makes working with all kinds of solid wood a lot easier, less expensive and certainly more satisfying.

Based on what it's designed to do, decide for yourself how the Shopsmith Thickness Planer will fit into the total scheme of your power tool woodworking shop.