

There are so many tools out there that you could fill a shed three time over and never get to even half of them. Power tools are a favourite for many woodturners for nothing more than the time and speed that they save and that's what power tool can do for you. That's not to say that there isn't many jobs you couldn't do by hand but it just means you work faster and more efficiently.

For woodturners there are many jobs we need to do but not everyone has the spare dollars to buy all of the tools required. There is many way to tackle this conundrum: Save the money and buy the tool - borrow it from a friend - make it yourself.

I come from the school of making it yourself - mainly because I'm handy with a welder and partly because my Scottish ancestry "guides" me to be thrifty with my money (a tight-ass).

With some of the items I have turned in recent times I have required a disk sander which I thought I had. Unfortunately what I have is a Multi-tool with the belt sander and a disk sander but the disk sander is a bit useless. It's too small, it wears out too quickly and it is just a bit flimsy. So with a requirement for a disk sander and a distinct lack of coin, I have turned my hand to making a disk sander from commonly available bits and for not a lot of folding.

Now most of us have a lathe and 98% of them will have at least several speeds and the more fortunate will have a variable speed jobby. So the lathe makes a good basis to utilize in a different way.

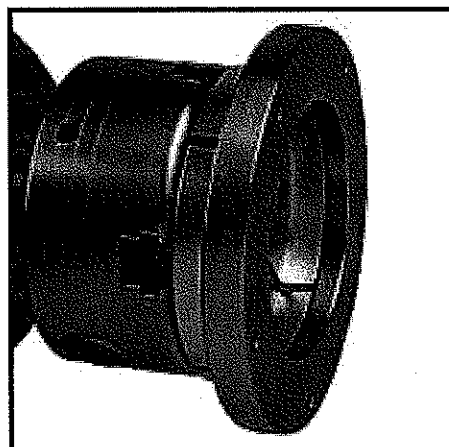
The plan here is not complicated at all. With access to an engineering workshop I am sure I could make something really fancy, but most people don't have this (I don't either).

With this in mind I am going to describe something affordable and easy to construct.

The basis of the "disk sander on the lathe" is a piece of wood with hook and loop velcro which the sandpaper will attach. The ready made easy attachment is your lathes chuck. There are several ways to achieve this:

1. You can turn a spigot of suitable size with an integral dovetail - glue & screw.
2. Turn a recess with a dovetail directly onto a disk of wood
3. Attach a metal ring with integral dovetail & screw it to the wooden disk
4. Attach a fattish bolt and use the chuck in grip mode.
5. Us the screw thread in the Chuck.
6. Use your faceplate that come with your lathe/buy a faceplate

I have chosen to take option three for a few reasons. The main reason is that I want this to be still working in a few years time. With the options of directly chucking the wood I feel that it will at some point "chew" the wood out and need the replacing. The ring I have chosen can be seen below:



This is a metal ring that you can screw to your disk of wood and put on and off your lathe for a long time to come. This is by no means an ad of any sort but I can tell you that Carbatec sell the 50mm faceplate ring for \$27.

I am sure that faceplates are available from many suppliers but this is the one I will be using. At some point you will need to determine how big the sander is going to be and this will be determined by the size of the sanding disk. They are available everywhere and you could make it from 4" all the way to 12". You decide, you may already have some velcro backed disks, make the wooden disk to suit it!

So the theory is pretty basic:

Using at the very least some plywood, MDF or solid wood, cut out on your bandsaw or handsaw a rough circle a little bit bigger than your sandpaper disk. A word of warning here - depending on who you listen to, MDF is either the saviour to the jig/toolmaker or the devils spawn. There are reports that it can shear without warning whereas the ply wood will give you warning if a layer shears. So solid wood is always better but its not as easy to get the big pieces if you want a large sanding disk. A glaring safety tip here - don't use chipboard!

Once you've got your disk of wood cut the next step is to Mark out the centre lines and plan your layout for the faceplate ring or on your faceplate. This should be fairly straightforward and once this has been done you can mount your chosen method of attachment.

Because there is a fair chance your disk won't be perfectly centered, mount your disk on the lathe and true up the outside edge of the disk with a square edged scraper. Throw on some protective varnish, poly, estapol etc. to give your wood some protection. All that's required then is to get your self adhesive "fluffy" side of your velcro stuck onto your disk. Then stick your sandpaper onto the disk and away you go.

No illustrations here because everyone will have a different interpretation on what they have read here, but hopefully you'll have a go and create yourself a very cheap sanding disk.

Should you have the time and inclination you could build a table to suit your lathe and give your disk sander added flexibility. Below are some examples of some shop built models by turners. Enjoy!

