



International Association of Penturners

## Microjig - Bandsaw Small Parts Cutting Sled

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My PSI blank cutting sled worked on my bandsaw but was a bit unpredictable. It used a standard miter slot slide and was made of MDF. The included stop was awful and difficult to tighten correctly.

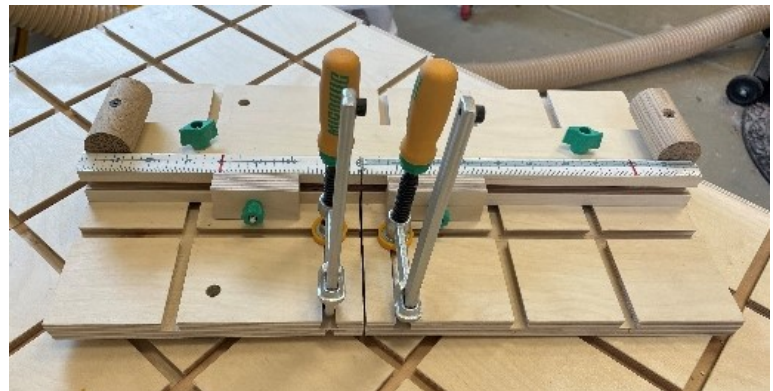
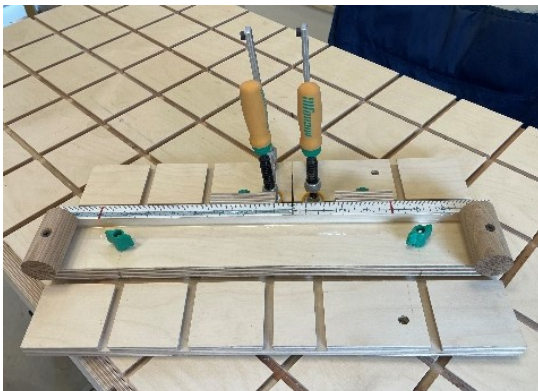


My idea was to make a smaller sled using the Microjig system for miter guide and the Microjig clamps in dovetail grooves to hold my parts and also to make functional stops.

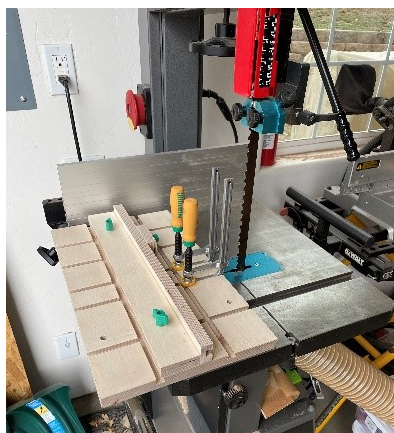
My bandsaw jig is shown below. Note the two Microjig clamps and the pair of stops on the fence. I like using this jig by holding the handles at each side for safety. The dovetail grooves on either side of the kerf need to be close as the Microjig clamps DO NOT rotate. Not too close though or the bandsaw blade will hit the yellow pad on the clamps!



The company wisely suggests that you use their straight bit to route your initial grooves followed by their 14 degree dovetail bit. I agree completely and had perfect grooves as a result. You can see my Microjig inspired assembly table underneath the small parts sled. Underneath each of the green knobs are dovetail bolts which slide in the dovetail grooves for adjustments and then can be tightened firmly in place. I used  $\frac{3}{4}$ " Baltic birch plywood (the good stuff) and it is far better than MDF for jigs like this.

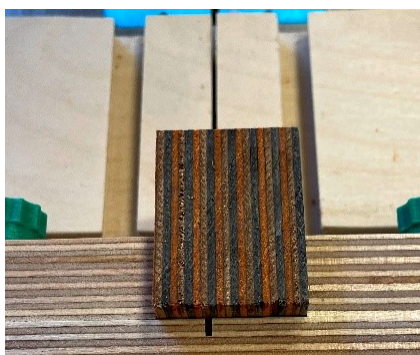


Here is what it looks like on the bandsaw. Note that the clamps have considerable height so lots of the blade is exposed. I would like them to make half height clamps – they don't. It still cuts smoothly and safely with a variety of materials like wood and acrylic.

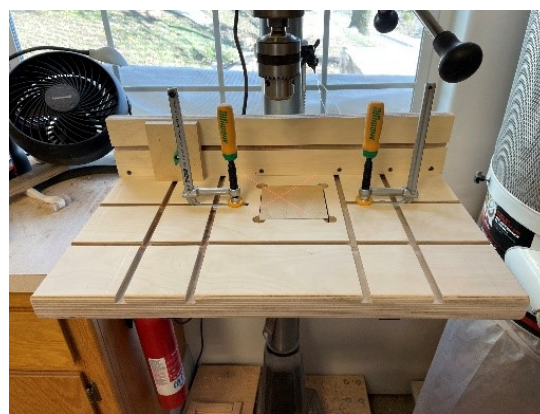


I made the fence quite low since I mostly cut pen blanks that are less than 1' tall. If you make it too tall the fence will hide your piece and it will be hard to determine when you have finished your cut.

I cut small slices of wood to make rings and money clips. This kind of cut can be very dangerous on the table saw. If unsecured the slices can be launched about the shop or worse - toward me. My hands were also too close to the blade. This sled has solved that completely by using two stops, one on either side of the piece to be cut. The photos show before and after the smooth, safe cut.

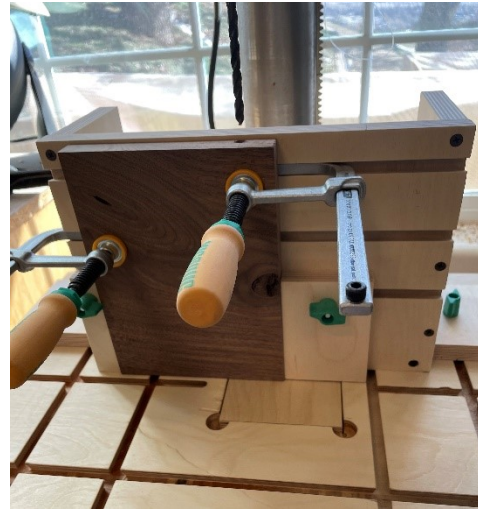


If you start with the Microjig system I predict your shop will have numerous objects quickly with dovetails in them. Here is my drill press top.

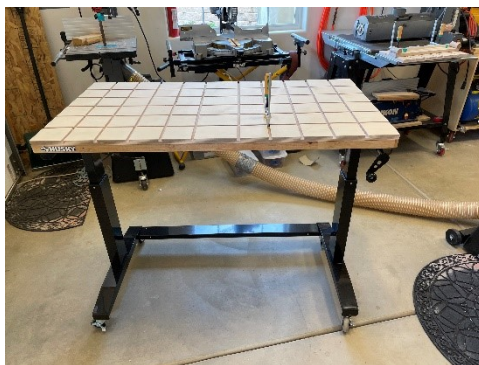




The clamps are very secure and the workpiece is immobile as I like it. I modified the fence (after these photos) to be much lower than as it appears here to avoid interference with the chuck. I make a lot of cheese slicers and a tall fence was made to secure the piece for a 4" long drill hole. Two small stops made sure the hole placement was exact and repeatable.



A rolling assembly cart was also made using dovetail grooves and Microjig clamps.



There are numerous YouTube videos using the Microjig system of clamps and dovetail grooves, I used many of them to make these items. I did, however, modify them to work with me, my projects and my tools. Best of luck!