

Sanding Disc/Table by Keith Davidson

I knocked up this sanding platform from scrap. The kinematic design of the five points of contact with the two lathe bed bars (essentially two “V” blocks to rest on the front bar and a stop on the back bar) ensures that the normal six degrees of freedom of movement are limited to only one. So just as a three legged stool won’t wobble on an uneven floor, so this is absolutely stable on the lathe bars: The remaining degree of freedom, sliding along the bed, is taken care of by the friction in the wing-nut-bolted clamp underneath.



The retrospectoscope reveals a serious flaw in this design, which was conceived and developed with my “woodturning” head on: I presumed that you should only work on the “front” half of the disc, where the sanding disc is pushing the work down onto the platform. In fact, provided you keep the work down on the platform, a different edge of the abrasive presents itself on the rear half. If Mk II is produced it will incorporate this facility.



When turning the sanding disc from MDF- not a pleasant task- I made a duplicate disc, and up-cycled/repurposed an obsolete leather trouser belt: I possess a few of these as over the years my belts have been in the habit of shrinking! I glued the belt to the edge of the second disc with Gorilla glue, which is very tenacious and will fill huge gaps. I charged the leather with green Dialux compound to make a honing/stropping wheel. This polishes HSS nicely and is also very useful to sharpen other tools, although you do have to be careful not to round the edge over.

