



Digital Tailstock/Drill Press Measurer

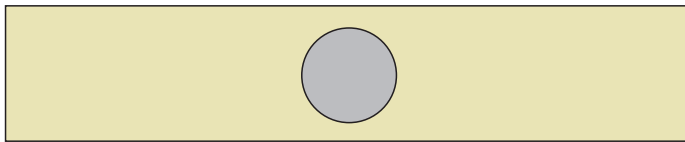
Developed by Bruce Wood

Materials required: 100mm digital caliper; wood 170 x 30 x 10 dressed; Two rare earth pot magnets 20 x 7.2mm (at least 7kg pull); One bolt 4 x 35mm countersunk head (check that it will fit through the pot magnet); wood or other material to make a 20mm diameter round packer between the end of the caliper and one of the magnets.

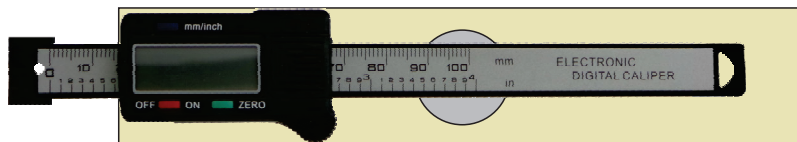
Cut the appendages off the caliper as shown. Drill a hole the correct size for the bolt near the zero on the caliper scale.



Check the size of one pot magnet and then drill a hole to fit it at the centre of the wood. Glue the magnet in with its face flush with the under side of the wood.



Remove the makers label from the under side of the caliper body. Roughen the surface that is exposed with coarse sandpaper. Use a gap-filling glue to attach the body of the caliper to the upper side of the wood.



Place the caliper and wood combination on the tailstock of the lathe with the zero end of the scale hanging over the extended quill. Place the second pot magnet on the quill exactly below the hole you drilled in the end of the caliper. Measure the gap between magnet and caliper end. Make a packer to fit this space. This packer is best made round and of plywood. Put the bolt through the middle to hold it all together. Check carefully and add or subtract from the packer height to ensure that there is no upward or downward pressure on the caliper shaft.

