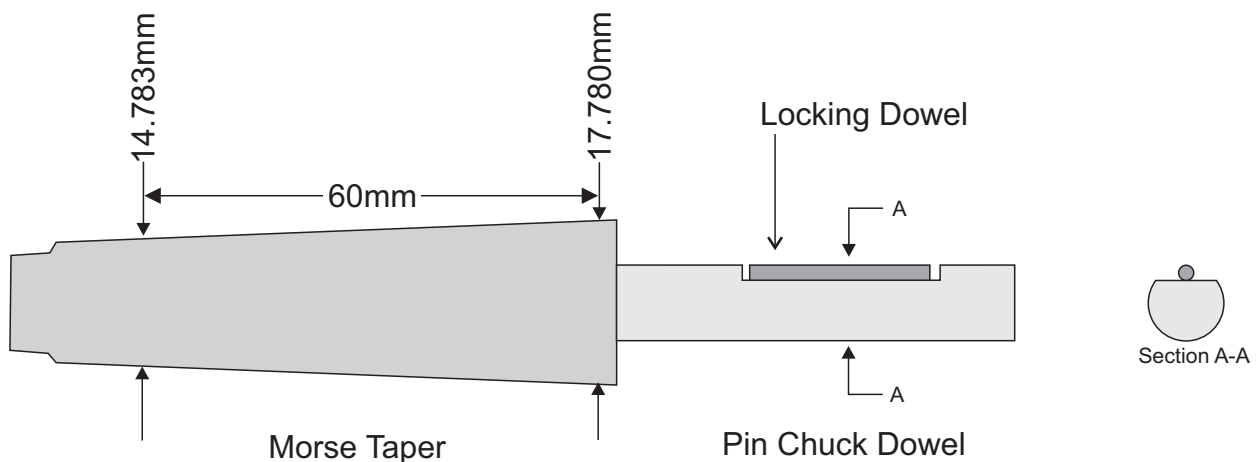


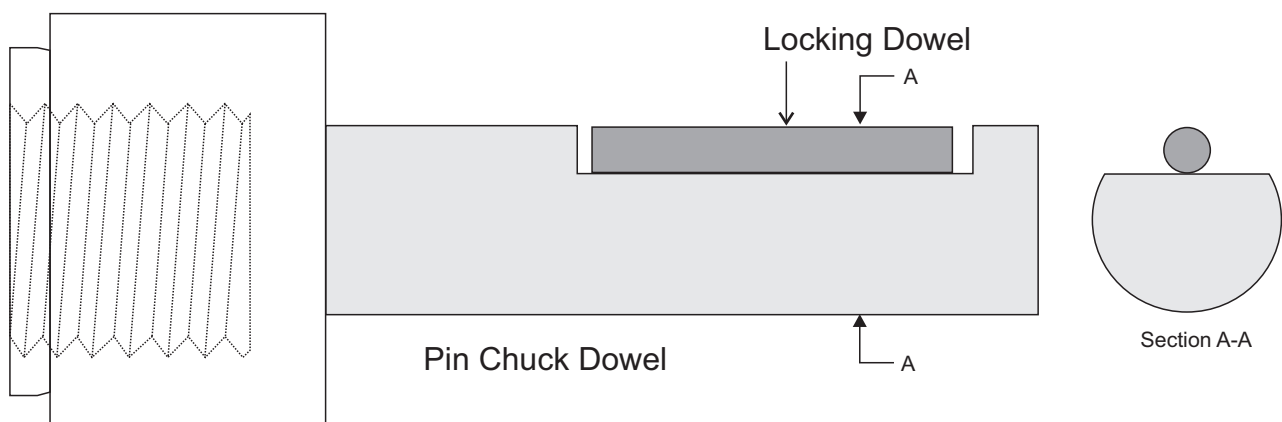


Pin Chuck

A pin chuck is a device, usually made of steel, but can be made from wood, intended to hold an item on a lathe so that the item can be turned or finished. A pin chuck may be any size. It may be screwed onto the lathe spindle, held in a multi-jawed chuck or fitted into the morse taper of the lathe. The part that holds the work is a dowel with a flat area cut into one side. Within that flat area is a second length of dowel - the Locking Dowel - usually steel, but can be made from wood, that is almost as long as the flat and the same thickness as the depth of the flat area. In use, a hole the size of the Pin Chuck Dowel is drilled into the work piece. The work piece is then slid onto the pin chuck and locking dowel combination and then rotated so that the locking dowel moves off-centre and hold the work in place.



A pin chuck on a number 2 Morse taper. The shaft of the pin chuck is 10mm diameter. The flat is cut 2mm into the shaft. The short locking dowel is 2mm diameter. The wood fitted onto this chuck would need a 10mm hole drilled about 50mm into it. In use the wood would be fitted onto the main dowel with the locking dowel in the location shown. With the shaft of the lathe locked the upper side of the wood would then be rotated away from the operator so that the locking dowel moves across the flat to lock into the narrower space near the edge.

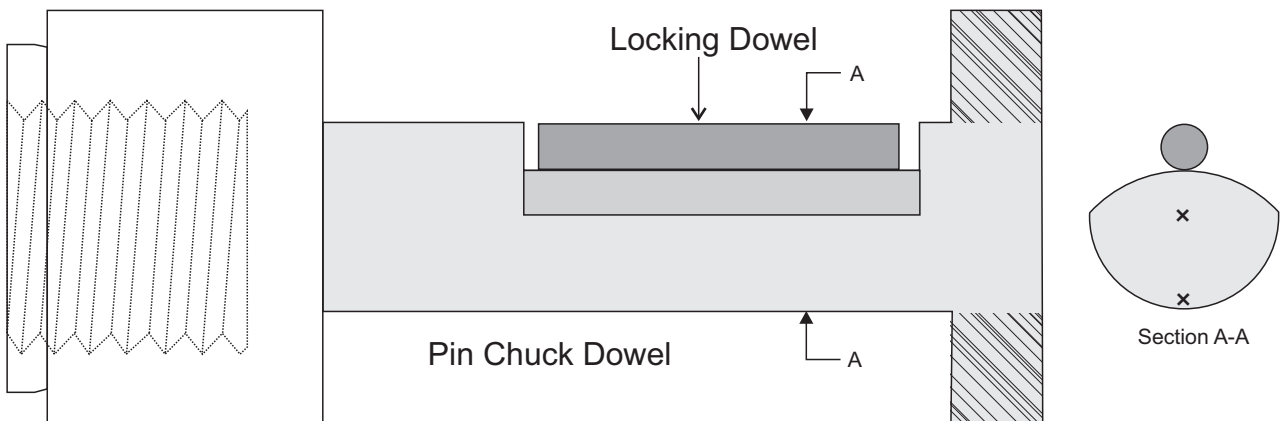
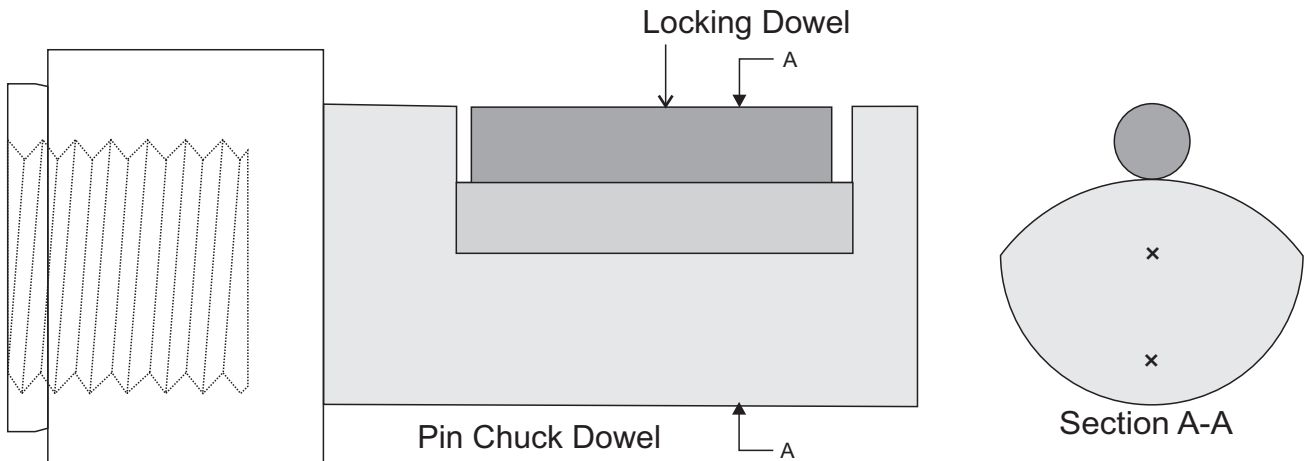


A pin chuck with a 25mm shaft, a flat cut 6mm into the shaft and 6mm locking dowel. This is made or mounted on a plate which can be held in a four jaw woodturning chuck or be threaded to fit the lathe drive..



Pin Chuck Roy Child Model

This design is intended to hold large odd-shaped items on a woodturning lathe. The Pin Chuck diameter is 40mm and Locking Dowel diameter 10mm. Note that the slot for the Locking Dowel is not flat - it has a curve of 50mm diameter which is centred 16mm below the centre of the main dowel.



To get a similar curved seat for the dowel on smaller pin chuck. Turn the main shaft to size but leave the end full size. Remount the wood between centres that are about 12mm off-centre. Turn the curved seat for the dowel. Remount the work between its true centres and remove the excess wood at the end.