

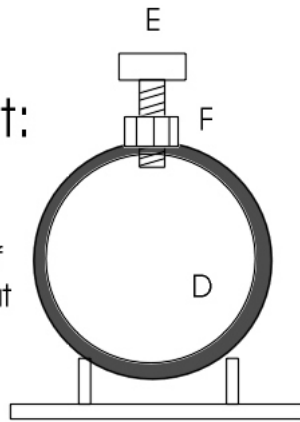
Knife Maker's Vise

Materials:

- A: 1 4" x 4" x 0.25" plate of steel
- B: 2 1" x 2" x 0.25" plate of steel
- C: 1 Black pipe: 3.5" OD (3.000" ID)
- D: 1 4.0" OD (3.585" ID)
- E: 3 1/2" x 13 cap-head bolts
- F: 3 1/2" x 13 nuts

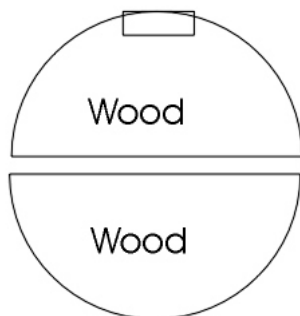
Clamp Unit:

Weld the 4" pipe onto the 1" x 2" plates. Drill a 0.5" hole in the top of the pipe and weld a nut over the hole.

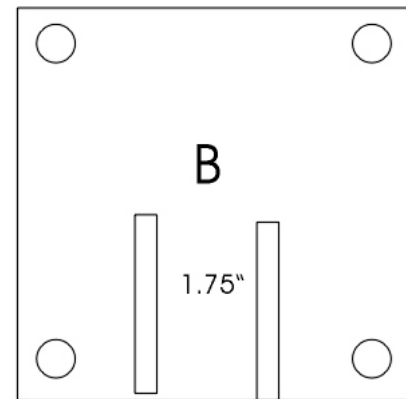


Vise Liner

From scrap hard wood, shape a cylinder that slips into the 6" pipe. Cut it in half so that when the bolts are withdrawn, there is a 3/8" to 1/2" gap between the wood blocks. Inset a washer in the block under the ends of the bolts.



Base



Drill 0.5" holes in each corner. Weld the B plates as shown, along one edge and 1.75" apart.

Vise Unit



Drill 2 0.5" holes 3/4" from each end of the 6" long pipe. Weld a nut over one and thread the other. Cut a 1.5" x 0.5" slot on the end with the nut.

Mount and use:

Slip the blocks into the long pipe and the long pipe into the short pipe. Insert a knife (tang or blade) either length-wise between the blocks or cross-wise in the slots. Tighten the bolts on the long pipe to lock the knife and then rotate the pipe as needed in the shorter pipe. Lock the rotation with the bolt on the shorter pipe. Bolt the whole assembly to a table using the holes in the base or fabricate a piece of angle-iron with matching holds for a vise-mount.