



*A Cut Above*

## Knew Concepts Tilting Dovetail Adapter

V1.2



### Some Uses For the Tilting Dovetail Adapter

The Tilting Dovetail Adapter allows you to tilt any standard jeweler's dovetail-mounted tool up to 45 degrees either way. There are several reasons why you might want to do this:

- To tilt your bench pin to one side or the other for more comfortable filing.
- To tilt your bench pin to the side so that you can see past your sawframe while piercing under a microscope.
- To tilt your bench pin to a specific angle for hand cutting jewelry blanking dies.
- For angled cutting of sheet metal



### Installation

The installation of the Tilting Dovetail Adapter is simple. Slide it onto your normal dovetail, and then slide whatever accessory you like onto the face of the adapter.

### Adjusting the Angle of the Adapter

The adapter can be adjusted to any angle between zero and 45 degrees simply by loosening the two screws inside the square hole in the dovetail with a 1/8" Allen wrench. Tilt to whatever angle is required, and re-tighten the screws.

The Tilting Dovetail Adapter comes with a small black star shaped knob that will pre-set the adapter to 6 angles that have been determined to give good results with hand cut dies in a variety of situations. The knob is not required for angles other than those marked on it.

## Adjusting to One of the Pre-Set Angles

To adjust the adapter to specific angles for hand-cutting blanking dies, there is a black star-shaped knob that mounts into either of the two holes at the extreme lower corners of the rear plate. The knob is marked on both sides with a series of numbers and “R” and “L”. These numbered settings will tilt the adapter to angles of 9.5, 10.5, 11, 12, 13, and 14 degrees.

The knob is marked “R” and “L” for “Right” and “Left” in terms of which side of the adapter that side of the knob relates to. The “L” side of the knob is for the left hole, and the “R” side is for the right hole. They must be installed with the correct side facing out. Reversing them will give inaccurate angle settings.



**To set the adapter to a leftward tilt of 14 degrees, for example:**

1. Loosen the two screws inside the center of the dovetail.
2. Place the knob screw through the knob with the “R” side of the knob facing out, and screw it into the lower right hole.
3. Rotate it until the lobe of the star marked with 14 is uppermost.
4. There is a small notch in the bottom of the front plate. Rotate the knob and the front plate together until the 14 marked lobe of the knob settles into the notch in the front plate.
5. Once the lobe settles into the notch, tighten both screws in the center of the dovetail, as well as the screw in the center of the knob.



The same procedure is followed for any other angle marked on the knob: rotate both the knob and the front plate until the desired lobe settles into the notch in the front plate, then tighten all the screws.

## More Information About Hand Cutting Dies

The proper cutting of blanking dies is more complex than can be covered in a simple instruction sheet. We recommend you read chapter 4 in *Hydraulic Die Forming for Jewelers & Metalsmiths*, by Susan Kingsley.