

## PULLMAX SHRINKING DIES

### CAUTION

These dies are designed for use in a Pullmax machine. Read and follow all safety instructions.

Maximum metal thickness is 16 gau. Soft steel.

Do NOT weld on the heat treated die faces.

Set die clearance before use. Do not overload as damage to machine and/or dies may result.

Check dies before each use for cracks or wear. Do not use if damaged!

Use all machine guards.

Wear gloves and safety glasses.

Shrinking die shanks may need to be cut to length to properly fit your machine.

### MACHINE SET UP

These dies work by fluting or forming a ruffle in the metal thus pulling the metal and then pressing it flat again, thickening it slightly. It is the same as shrinking done by hand on a tree stump by copper workers and silversmiths.

Install the female die on the top side of the Pullmax with the recess to the back.

Install the male die on the bottom with the raised "beak" to the back. Check that they nest together and line up sideways and front to back. Lower the adjusting screw enough to prevent binding when the machine is turned on and the tool raising lever is in the lowest position.

Set the Pullmax machine to about one eighth inch of stroke and to its fastest speed.

With the machine running, insert an edge of your sheet metal into the dies just up to the "beak" and tighten the lower adjusting screw until the dies are touching the metal. Then tighten it about .010 of an inch more. There should be a change in the sound as you do this. Check your metal. It should not show any sign of thinning. It may be a little shinier from the polished die surface.

That's ok.

**CAUTION!** If the dies are set too tight you will break something with a chance of injury. But if the dies are not tight enough they will not shrink properly. Once adjusted check tightness of both top and bottom collets. Keep them tight.

### SHRINKING

The dies shrink about 1/32" per pass. In theory the flute needs to form or pull the metal with a minimum of stretching. Some pre bending or manual manipulation may be helpful. Draw guide lines on the metal indicating how deep to shrink and where to stop.

Push the metal straight in to the depth you want to shrink, creating a flute pulling the metal together and then pull it straight back out on the same path to flatten the flute. Do this in 2", steps along the edge you are shrinking. This will give you a waved edge that you can bring back flat with a series of shallower shrinks. Then go back and run another pass of your main shrinks. The depth you shrink will determine the shape you get.

Experience will show that lifting up and pushing down, thus manipulating the metal will help get the shapes you want. Nobody was born knowing how to shape metal. It is an acquired skill that takes lots of practice.



**Trick-Tools.com**

80 Truman Road  
Pella, IA 50219

Phone: 1-877-VAN-SANT

E-mail: [sales@trick-tools.com](mailto:sales@trick-tools.com)

