

TRICKS FOR HOLLOW RINGS
with
FRETZ MINIATURE STAKES
in
Hardened Stainless Steel

1. Make the inner band the desired size first. 18 or 20 gauge is about right.
2. Next make the bezel or inlay unit if it is an integral part of the design.
3. Cut a paper template of the desired ring shape from stiff paper that fits over the inner band. *The top part of the ring pattern should be slightly smaller than the bezel as it will stretch in the forming stages.* Use small pieces of tape to hold the paper pattern together.
4. If the ring shank is to be flat, the paper template shank section should be reduced to allow for stretching. If it is to be domed, leave it tight to the inner band. The forming of the ring will stretch the ring. *The doming of the ring shank reduces the ring size dramatically.*
5. Some ring blanks will be shaped like a double ended T. Bend the blank so the top sections meet like the tapered pattern. *Only fit and solder one side at a time.* It is nearly impossible to keep both sides aligned while heating and soldering. Use the highest temperature solder available.
6. After the metal shape is soldered, true the ring round with a ring mandrel. It is mandatory to have a reference point when the ring (at this stage) does not look like the final design.
7. Fabricate a heavy (14ga.) bronze or sterling bezel that matches the top unit of the ring. This forming bezel should be about 1/2" tall and be formed on a mandrel so it conforms to the mandrel's taper. This tapered shape allows the unit to act like a mini- mandrel to true up the top of the ring. It can be annealed and pickled in place. It is removed by pushing the ring mandrel through the ring. The ring top should then be the proper shape.
8. Form round rings on the R-3 Raising Stake only. Put the rounded end through the top of the ring so it touches the ring shank. *Hammer the low areas to bring them up.* When metal is hammered against a stake it stretches and thins the metal. The metal can not go down since it hits the stake and expands, so it swells upward. *The metal will conform to the shape of the stake as it is being plannished.* Because the R-3 Stake is rounded with parallel sides, the shapes hammered on it will become rounded if they are slowly rotated during the plannishing process.
9. For oval or freeform rings, both R-2 and R-3 will be necessary. The R-2 Stake is tapered at both ends with rounded edges. The R-2 will be used for tight turns and the R-3 for

the larger curves. If an extreme oval is desired then the R-1 Stake would be used on the very slight curved areas. The R-1, R-2 and R-3 can be reground for custom curves if desired.

10. *The stakes mounted on two H-1 holders about 6" apart will allow the work to proceed without constant stake changes.*

11. To dome the ring shank use F-8 or the nose of either R-2 or R-3 to roll the shank area over into a curve. This also makes the ring smaller. For a very domed shank use the M-6 10mm High Dome Mushroom Stake.

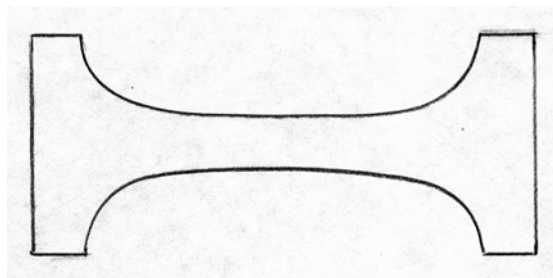
12. Slowly stretch the ring to fit over the inner band. Stop before the fit gets really tight. *Flare the inner band with a dapping punch from both sides.* This will make a tight fit between the shell and inner band.

13. Use the inner band's extra width as a shelf for the solder. Saw off the extra, file, emery and polish.

14. Fill the ring with pitch and place in the freezer until frozen. The surface can be textured by hammering or chasing without distorting the shell while it remains cold.

15. Finally, solder the top unit in. Questions and comments: gold@fretzgoldsmiths.com

Example of an Outer Shell: Will make a size 8 ring with an inner rim and outer shell of 18 gauge sheet metal.



To modify or change Stakes:

Step#1 File to shape using a #0 file and fine tune with a #2 file. Use a hand file for flat and convex shapes. Use a crossing or half-round file for the concave curves.

Step#2 Remove the file marks with 180 grit emery cloth followed by 240 grit and then 320 grit. Using a polishing stick or wrapping the cloth around a file will produce a more precise finish.

Step#3 Finally, polish with greystar compound on a felt or a stitched buff about 4" x 1" to a high shine.