

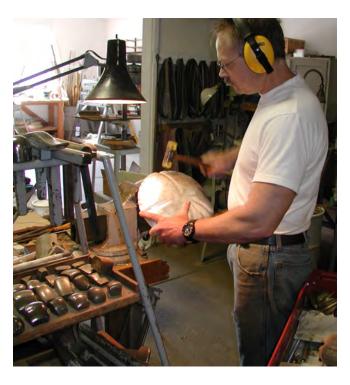
Chalice Kit: \$1584.98 (material cost, June 2017) Some assembly required.

The entire chalice starts as two flat sheets and a couple pieces of rod. The diameter of the initial circle is determined by a formula involving the height and diameter of the final shape.











Raising is a many-step process, alternately crimping the material and beating the crimps into themselves, gradually getting the curve to become more acute.

An old text book of Hans' put it: Der Anfänger wird finden, dass sein erstes Werk recht langsam fortzukommen ist — "The beginner will find his first piece of work is really slow to come out!" It's a slow and arduous process, even for the experienced worker.





Hearing protection is vital!
I have been banging on metal with hammers for some 45 years by now and I am anxious to save what hearing I have left.





Between crimping steps, the metal must be annealed: heated red-hot then cooled to soften it. The silver is coated with boric acid first to prevent fire scale, a problem peculiar to sterling. Brass is much more forgiving.

After an acid bath to remove oxides, the work is rinsed, dried and ready for the next step.



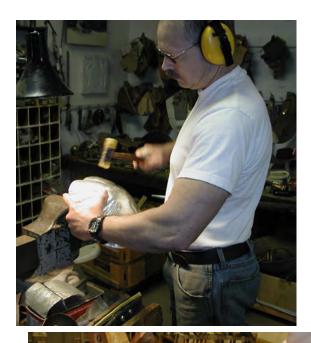








Bowl and base gradually get deeper. A resin hammer and wooden stakes are used for crimping; heavy steel raising hammer and steel stake then force the metal into itself like very stiff clay.







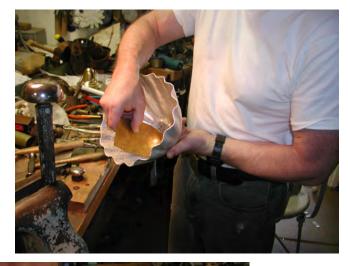
















A template is used to check the shape. The bowl is almost done! Below: the penultimate annealing, the base being worked concave, and rolling up a reinforcing ring for the base.



















Planishing: finalizing the shape and working out the crude raising marks. Then come trimming the edges, soldering on rings, and other detail-work. Finally, polishing, cleaning, assembly.













Marking the base to trim it level, fitting rings and soldering them.





Polishing. One careless move at this point can mangle a piece beyond repair!





THE ASSEMBLED PIECE.

