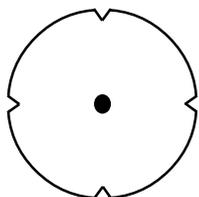


Instructions for Curing

If you will be using a frame set within which organic rubber was previously cured, be sure to wash it down with acetone or a rubber solvent such as lighter fluid.

1. Each one inch die is composed of four 1/4" thick discs. Make sure that the surface of the silicone rubber disc is free of any dust, oil, perspiration, etc. If there is any difficulty in adhering the discs to one another, use a rubber solvent or acetone to clean them.

2. Sometimes air may become entrapped in a rubber mold during vulcanization. To avoid this problem, we recommend that "V" notches be cut into the *unvulcanized* mold, prior to placing within the frame set (see illustration).



3. With the use of locking devices, the following precautions should be taken:

Hex-shaped locknuts are preferable to the cone-style locators, because they more effectively reduce the tendency of the mold to shift.

Make sure that the locking devices are free of any oil film. This film could contaminate the silicone compound and prevent curing in the area surrounding the locking device.

Be sure to push the locking device part way into the silicone rubber disc to reduce air entrapment.

Refrain from placing the locking devices equally distant from the center of the mold. They should, instead, be placed in clusters at different distances from the center. If only one radius measurement is used, the mold will have a tendency to ride up and shift.

4. Our silicone rubber discs, when cured at a temperature of 325 degrees F for a period of 60 minutes per inch of mold thickness, have a nominal hardness (durometer) of 60. When cured at this temperature, the important properties of elongation, flexibility, and tear strength are at their optimum. However, if for some reason the rubber die is too soft for a certain application, we recommend that the silicone compound be cured at 350 degrees F for seventy minutes. This will increase the hardness of the mold, but will decrease, to some extent, the elongation, flexibility, and tear properties of the mold. You will also experience increased shrinkage.

5. When the mold is ready for vulcanization, it should be inserted within a *preheated* frame set. Apply light pressure, continuous for 4 to 5 minutes, after which you should release the pressure momentarily to allow any entrapped air to escape. Then, apply high jack pressure for the remainder of the curing cycle.

6. Curing time is calculated on the basis of mold thickness. A minimum of one hour is recommended for a 1" thick mold and an additional hour should be added to the cycle for each additional inch of mold thickness.

7. When casting into the silicone rubber mold, a cycle of 20-30 seconds is recommended, after which time the castings should be removed from the mold as quickly as possible to reduce deterioration of the mold, to help prevent distortion of the mold cavities, and to diminish mold warping. Metal should always be cast at the lowest possible temperature, and the mold cooled as much as possible between pours, preferably by forced air cooling.

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