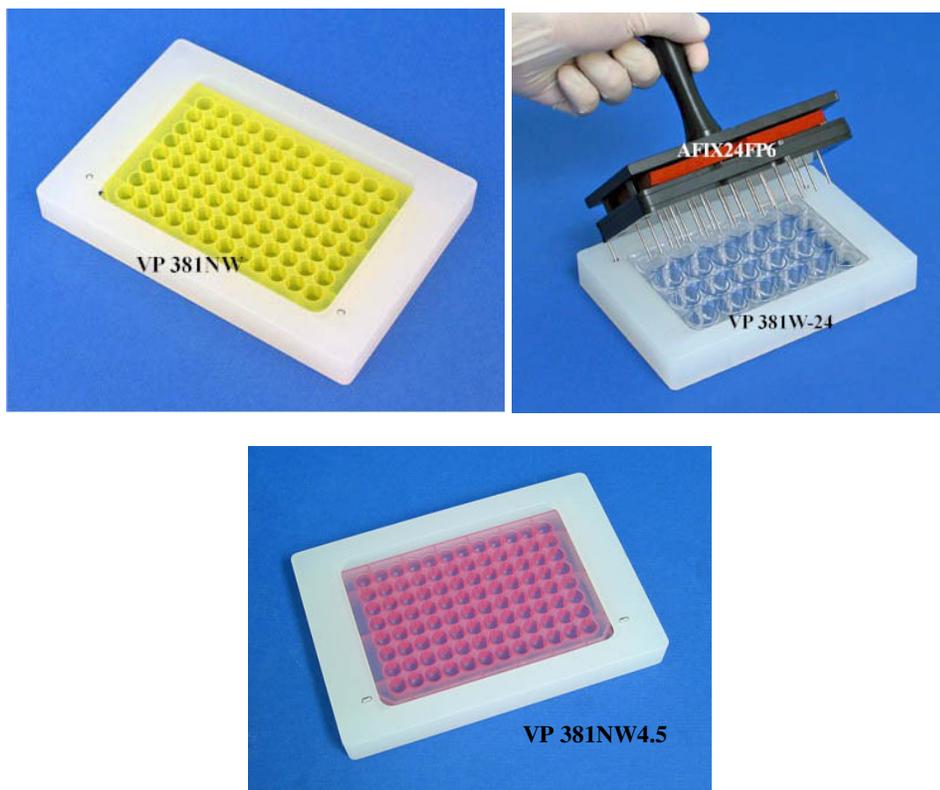


**CARE AND USE OF FLOATING PIN REPLICATORS:
Use with Monolayer Wounding LIBRARY COPIERS VP 381NW, VP 381NW4.5, or VP
381W-24**



VP 381NW- Mono layer wounding LIBRARY COPIER™ that registers all 96 and 384 FP, FP1, FP3, FP4, FP8, FP6 and FP9 series Floating MULTI-BLOT™ Replicators to 96 and 384 microplates that conform to the SBS standards for microplates

VP 381W-24- Mono layer wounding LIBRARY COPIER™ that registers 24 pin FP and FP6 series Floating MULTI-BLOT™ Replicators to Greiner 24 well microplates

Care:

Before each day's use we recommend that the pins be cleaned with VP 110 Pin Cleaning Solution, which is designed to clean stainless steel and condition the pins. If the pins should become coated with organic material they can be mechanically cleaned with the VP 425 brush and Ivory dish

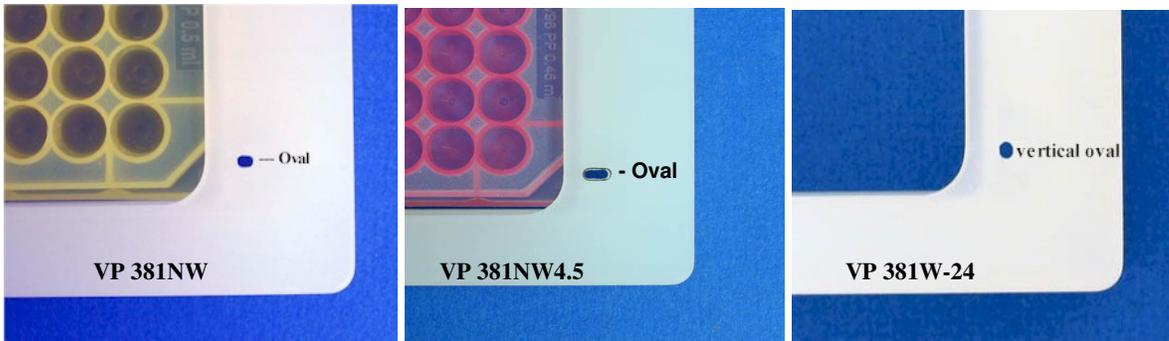
detergent. If you have access to an ultrasonic bath we recommend using MICRO 90®, from Cole Parmer®, at a 1/100 dilution in the ultrasonic bath. If you use an ultrasonic bath, hold the Replicator in the bath without letting the pins touch the bottom of the reservoir (the vibrating bottom surface of the sonicator's reservoir may damage the pin tips). The Cole Parmer Catalog #P-08857-02 Ultrasonic Cleaner is ideal for cleaning the Replicators. It is not necessary to clean the Replicators in an ultrasonic cleaner if you clean the pins with bleach and brush with detergent after each day's use.

Disinfecting:

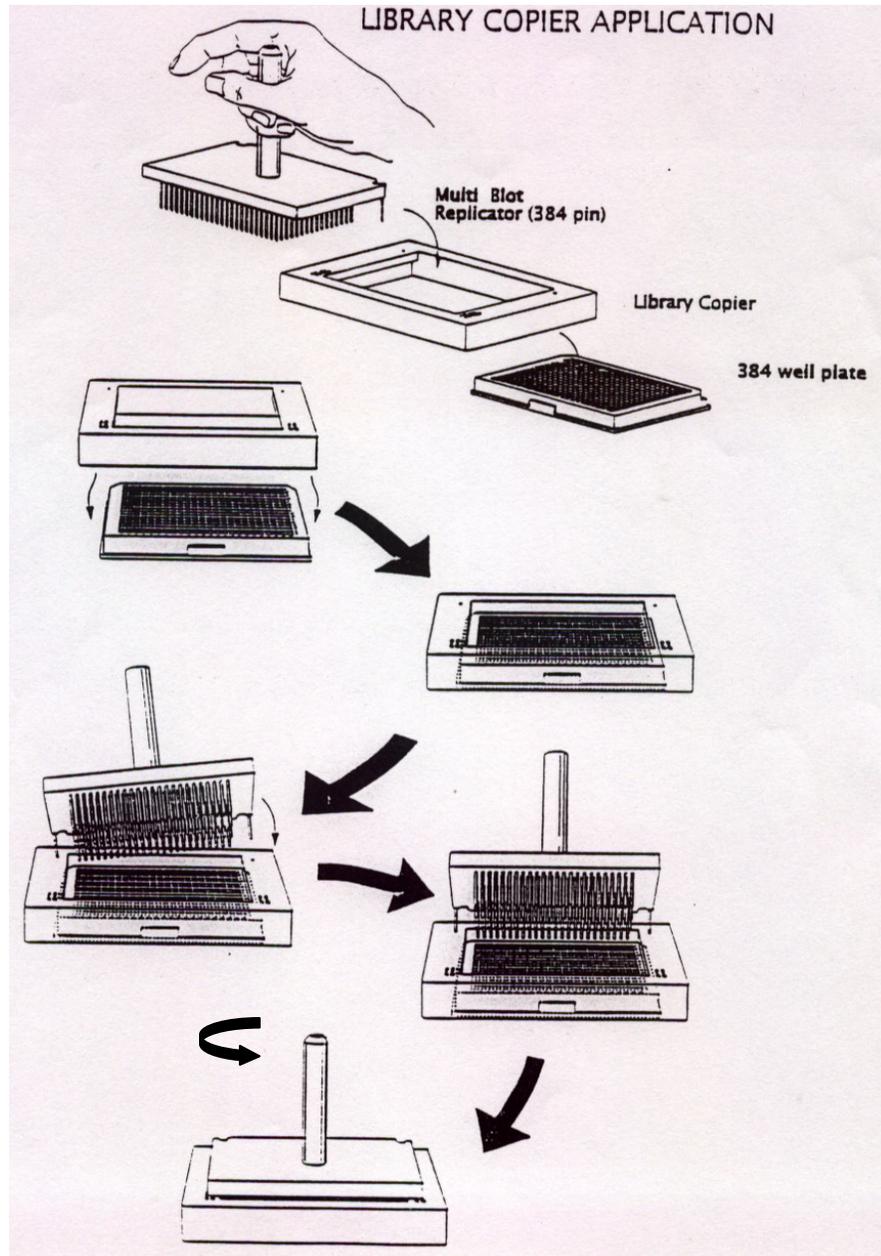
1. The Replicators can be sterilized by hot air oven, autoclaving, treating in 10% bleach or isopropyl alcohol.
2. The pins can be cleaned between sample plates by dipping briefly in a 10% bleach solution, followed by a series of two sterile dH₂O baths (all in tip lid boxes), then a 99% isopropanol bath. Between baths, remove the liquid from the pins by blotting on a Lint-Free Blotting Paper (VP 522). This blotting step is very important to reduce carry over. It is important that the pins be dry before going into the next source plate.
3. The pins can be air-dried or dried using a portable hair drier.
4. Hydrogen peroxide may also be used to disinfect the pins as long as it is rinsed off with distilled water. The % of hydrogen peroxide necessary will vary between applications.
5. It is important that the liquid in the baths not get into the pin slide holes as that will interfere with the pins floating freely. We recommend only filling the baths with just enough liquid to cover the "high water mark" of the liquid in the microplates. Thus it is best not to "float" the pins when cleaning them.

Use: (see diagram on next page)

1. Place the LIBRARY COPIER™, VP 381NW, VP 381NW4.5, or VP 381W-24, over a 96, 384 or 24 well plate containing the cell monolayer with the single alignment hole side of the device closest to the last row of the plate. Slide the LIBRARY COPIER™ to make sure the plate is seated within the device and therefore registered.
2. Hold a sterile Floating MULTI-BLOT™ Replicator at a 45° angle to the monolayer plate LIBRARY COPIER™ and 20° angle to the left alignment hole. Place the right guide pin into the right alignment hole. Slowly decrease the 20° angle and place the left guide pin into the left alignment hole. Rotate the Replicator forward until guide pins line up vertically. Slide the Replicator down the alignment holes allowing pins drop into the wells.



3. Hold the LIBRARY COPIER™ in one hand and move Replicator in a “race track” movement using the oval shaped alignment hole.
4. To wound another microplate disinfect the pins as described above.



WARNING

- Do not soak in bleach solutions for a long period of time as this can corrode the stainless steel pins.
- Do not soak in deionized water as this can corrode the stainless steel pins.
- **The VP 110 Pin Cleaning Solution contains a dilute acid solution which can strip the protective anodized surface off the anodized aluminum replicator bases or float plates. If you accidentally get the VP 110 Pin Cleaning Solution on an anodized surface, quickly rinse it off with water.**