



OVENS WITH 500°F INTERNAL HEPA FILTERS **FILTER CONDITIONING SCHEDULE**

Clean Room Ovens are equipped with one or more high temperature HEPA filter to remove particles from the recirculated air flow in the oven. Prior to putting the oven into service these internal HEPA filters must be conditioned by burning out binders in the filter media. Fresh air filters external to the oven do not need to be conditioned.

Ovens are shipped with the internal HEPA filters installed. The internal HEPA filters can either be conditioned in place or removed and conditioned in a separate oven. During conditioning, binders in the filter media will burnout and particles will be generated in the form of smoke. If filters are conditioned in place, the oven may need to be cleaned before putting the unit into service. It may be more convenient to condition the filters in a separate oven.

Once the binders are burned out, the filter media will become brittle. For this reason, conditioned filters must be handled gently. This is especially true during installation of conditioned filters. Touching the filter media may cause it to crack. Small filter media cracks can be sealed with high temperature silicone rubber.

The greater the temperature the filters are exposed to, the more brittle the filter media becomes. Do not expose the filters to temperatures higher than your maximum operating temperature. For example, if the highest temperature you will be operating at is 250°F, do not condition the filters above 250°F.

During conditioning, filters must be heated and cooled slowly. Provide a gentle rise in temperature over a long period of time. Raise the filter temperature 25°F every 15 minutes and hold every 100°F for one hour to allow the binders to burnout at a slow rate. This will reduce the chance of particles depositing on interior oven surfaces. Cool at 25°F every 15 minutes to allow filter frame and media to adjust.

Recommended conditioning steps are:

- Increase the temperature in 25°F steps every 15 minutes to maximum operating temperature.
- Hold every 100°F (approximately 170°F, 270°F, 370°F, 470°F) for 1 hour or longer if there is still smoke in the oven at the end of 1 hour.
- Do not heat filters higher than maximum operating temperature of process. Do not heat filters over 500°F.
- Cool oven in 25°F steps every 15 minutes to 150°F.

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