

## Storage, Mounting, and Usage Recommendations

- Store templates in a dry area at room temperature – 65°F to 76°F (18°C to 25°C).
- Do not use templates which have been in cooler or warmer temperatures (including shipping) without first allowing to stabilize for at least 24 hours at room temperature prior to use.
- Shelf life in above conditions is 6 months.
- Keep templates in sealed poly bag until they are to be used.
- Head Preparation Guidelines:
  - Prior to mounting, ensure that the head is clean and dry.
  - **Best practice: Isopropyl alcohol [(CH<sub>3</sub>)<sub>2</sub>CHOH], heptane [C<sub>7</sub>H<sub>16</sub>] or water [H<sub>2</sub>O] recommended as a final wipe prior to mounting template.**
  - For best results, use an air dryer on warm setting to dry head after cleaning, between 70° to 100°F (21° to 38°C)
  - This will evaporate moisture that may remain, and reverse the cooling effect caused by the cleaning agent (such as: isopropyl alcohol).
- Template Mounting Guidelines:
  - Template application should be completed in a warm area, between 70° to 100°F (21° to 38°C)
  - Peel back about 1/3 of the release paper covering the adhesive
  - Align the OD of the template with the OD of the head and carefully adhere the section with exposed adhesive.
  - Slowly peel back the release paper while smoothing the template surface and pockets.
  - Apply pressure while smoothing to firmly set the Pressure Sensitive Adhesive (PSA) to the head.
  - Work out air bubbles trapped between head and PSA for best results.
- Guidelines for Best Bonding of template onto head:
  - Prior to using, allow PSA to set to develop bond with head. Applying pressure to the FR-4 frame and in template pockets will improve the overall bond. Maximum bond strength is achieved after 72 hours.
  - **Before wetting templates, allow adhesive to cure for 3 hours minimum.**
- Inspect for Air Pockets between template and head:
  - Wet template with DI water and check for “bubbles” due to improper mounting by gently rubbing pocket area with hand.
  - If bubbles are present, “prick” with pin and squeeze out the air.
  - Pocket may be rinsed with DI water and brushed lightly with soft bristle brush.
  - **DO NOT TRY TO DEMOUNT AND RE-MOUNT THE TEMPLATE**
- Install wafers with a “wringing” or “twisting” motion:
  - With the templates wetted, press and twist the wafers clockwise and counter-clockwise to be sure that they are seated in the pocket and that excess water is pushed out from between the wafer and the pocket material.
- Mount heads and polish.
- Remove wafers with care:

## Waxless Mount Semiconductor Polishing Templates



- Do Not damage the pad material: To release wafer from pocket, a stream of DI water can be directed at the edge of the wafer (notches can be provided in the pockets at no additional charge to allow water to be directed under the wafer).
- Do Not damage the edge of the Template's Lamitex carrier layer: If your process requires use of "pick" to remove the wafer, use care so that the carrier isn't damaged which could lead to problems on subsequent loads of wafers.
- Clean the pocket between loads of wafers:
  - Clean the pocket between loads of wafers with a quick scrubbing of each pocket with a soft bristle brush and DI water to help remove particles that are on the surface of the pad.
- If templates are temporarily removed from use:
  - If templates are temporarily removed from use for more than an hour, we recommend that the head be covered with a poly sheet over the surface of the template to keep it from drying out. Templates may be stored in sealed plastic bags if desired.
  - **DO NOT TRY TO DEMOUNT AND RE-MOUNT THE TEMPLATE ON THE HEAD**
  - When templates are returned to use, the surface should again be "wetted" with DI water and brushed lightly with a soft bristle brush.
- Optimum processing temperatures:
  - **Standard Template**  
For optimum template performance, PR Hoffman recommends running waxless mount polishing template in polishing processes where the operating temperature does not exceed 50°C.
  - **High Temperature Template**  
For optimum template performance of high temperature templates, PR Hoffman recommends running waxless mount high temperature polishing template in polishing processes where the operating temperature > 50°C.

These general guidelines are recommended to help insure the longest productive life from your waxless mounting polishing templates. We recognize that each company has its own manufacturing processes, but suggest that you review and incorporate these recommendations if you are having difficulty in using our products. Our goal is for you to achieve the best possible results with our products.

These recommendations are subject to change or revision without notice.  
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