OVERVIEW

Probe Clean®, Probe Polish®, Probe Scrub®, Probe Lap® and LCxK are engineered probe-card cleaning materials manufactured by International Test Solutions. For typical field installation onto an abrasion plate (i.e., cleaning unit or wide area polishing plate), a semi-rigid polyester film is used in the construction.

After repeated use, the working surface will accumulate a substantial amount of debris as well as various air-borne particulates, such as dust, skin, etc., found within a prober. Once the surface has been fully utilized, the material can be easily removed by peeling the sheet from the abrasion plate surface.

The instructions are meant to be general guidelines and each user can have slightly different practices; however, these practices should follow the overall procedures.

MATERIALS

- Latex gloves
- Lint free clean room clothes
- Firm foam rubber roller
- Cleaning sheet.
- Polymer materials will have a front and back protective release liner
- Stereo Microscope for inspection of the sheet edges after cutting (optional)
- Prober substrate, abrasion plate, EZ-planar block, cleaning unit, or WAPP (wide area polishing plate) onto which the cleaning polymer material has been previously installed.
- Liquid alcohol (preferably IPA), greater than 99.5% pure, anhydrous, meets SEMI base spec standards, and is labeled “electronic grade”

CAUTION: To avoid contaminating the adhesive, surface of the cleaning sheet or the substrate, latex gloves are recommended when handling all materials. Cleaning sheet working surface (probe side) contamination due to fingerprints and exposure to unapproved materials and chemicals will void any warranty.

Once the abrasion plate surface onto which the sheet is to be installed has been thoroughly cleaned, the sheet can be replaced according to the general instructions outlined below.

OVERVIEW

- Clean the surface of the plate (or substrate) thoroughly with Semi-Grade IPA using a clean-room, lint free cloth and allow the surface to dry completely.
- Inspect the surface carefully and make sure that there are no liquid droplets, dust particles, or any sort of other debris visible across the surface.
- Partially remove the back release liner from the cleaning material sheet along one edge to expose the backside adhesive as shown in Figure 1.
- Carefully align edge of exposed backside adhesive along the desired starting location on the substrate, abrasion plate, EZ-planar block, cleaning unit, or WAPP (wide area polishing plate) as shown in Figure 2.
GENERAL PRACTICES
CLEANING SHEET INSTALLATION

SHEET INSTALLATION

• Gently and uniformly apply the material onto the substrate using a firm foam rubber roller (as shown in Figure 3) while SIMULTANEOUSLY removing the back release liner (Figure 4).
• This can be quite tricky in the beginning and will require some practice.

Figure 1 – Remove back release liner as indicated by label applied to surface.

Figure 2 – Align edge along desired starting location.

Figure 3 – Gently and uniformly apply the material onto the substrate using a firm foam rubber roller.

• Move very slowly and carefully to avoid capturing any air or debris between the adhesive layer and the substrate.

Figure 4 – SIMULTANEOUSLY removing the back release liner while rolling the material onto the plate or substrate.
**CLEANING SHEET INSTALLATION**

**SHEET INSTALLATION**

- Working slowly and methodically, carefully apply the material to the plate until the back release liner has been removed (Figure 5).

**IMPORTANT**

The cleaning sheet can be generally applied **ONLY ONCE** without damaging the backside adhesive or affecting the tack strength of the adhesive. The material typically cannot be pulled back multiple times without compromising either the backside adhesive, creating creases in the working surface, or the damaging the cleaning polymer. If the sheet is pulled back, it is possible that the material will delaminate during usage, surface ridges could form, and could damage the probe card.

Once the installation has been completed and the substrate, abrasion plate, EZ-planar block, cleaning unit, or WAPP (wide area polishing plate) is ready for on-line usage. Install the substrate with the cleaning material applied into the appropriate location of the prober.

If a polymer sheet has been installed, remove the front release liner per the instructions on the release liner label prior to use (Figure 7 and Figure 8). If the front release liner is not removed, the probe card could be catastrophically damaged during the first cleaning cycle.

The Probe Lap and LCxK materials do not have a protective front release liner.

---

**Figure 5** – The installation should be performed in one continuous motion, if possible.

**Figure 6** – Carefully examine along all the edges to confirm that they are free of tears, shredded material, trim debris, or any discontinuities.

---

For more information, please contact:
International Test Solutions | 1595 Meadow Wood Lane | Reno, NV 89502 (USA)
www.inttest.net | mail: sales@inttest.net | Phone: +1 775-284-9220
Sheets Installation

For manual entry of the install height into the prober settings, please reference the values documented on the label applied to the front release liner; otherwise, refer to the ITS website (www.inttest.net) for the appropriate installed stack height documentation.

Please contact International Test Solutions Technical Support (775-284-9220) with questions regarding the installation of the materials.

Figure 7 – Once the cleaning has been installed, remove the polymer working surface front release liner using a tape tab at the corner.

Figure 8 – Completely remove the front release from the surface of the cleaning material prior to usage.