

**INSTRUCTIONS  
FOR USING PRESS-O-FILM HT  
WITH AN INCH (mil)  
LINEARIZING GAGE**

**TESTEX**  
PO Box 867  
Newark, DE 19715  
USA  
Tel: 302 731 5693  
Fax: 302 455 0915  
www.testextape.com

**Step 1:** Locate a representative site for measurement.

**Step 2:** Select an appropriate grade of Press-O-Film replica tape based on your target profile:

For smoother surfaces, below 2.0 mils, choose Coarse grade. For rougher surfaces, 2.0 mils and above, choose X-Coarse grade. **The gage will indicate if the proper grade of tape is used in Step 7.**

**Step 3:** Prepare the snap gage: clean anvils, adjust outer black ring on gage face so the needle points to "Zero Here". This will automatically subtract the plastic substrate from all readings.

**Step 4:** Pull a single piece of adhesive-backed tape free of its release paper. The Press-O-Film replica material is the 0.4 inch (1.0 cm) square white plastic film at the center of the adhesive-backed paper. A "bullseye" circle of paper may remain behind on the release paper (i.e., it is not used in the measurement.)

**Step 5:** Apply film to blasted surface. Press adhesive-backed paper to hold it firmly in place.

**Step 6:** **Firmly** compress replica film with the smoothest surface on the round-end rubbing tool provided, applying sufficient pressure to produce a replica with a uniform pebblegrain appearance. (In a pinch, the rounded edge of the tape dispenser is also an acceptable rubbing tool.) Use either a circular, or x-y rubbing motion. Fully compress all parts of the film but be careful not to slide the film with respect to the blasted surface by bumping edges of the circular paper cutout. In general, too much compression is safer than too little.

**Step 7:** Remove replica and place between anvils of micrometer gage, making sure replica is centered between anvils. If the measurement is in the RED region (below 2 mils) and the tape grade used is Coarse, this is your reading. If the tape grade is X-Coarse and the reading is below 2.0 mils, switch to Coarse grade and repeat measurement. Similarly, for readings above 1.9 mils (the BLUE region), use X-Coarse grade. **There is no need to take the average of Coarse and X-Coarse readings in the range between 1.5 and 2.5 mils with this gage.**

If the gage reads above 5.0 mils or below 0.8 mils, the surface roughness is outside the current standards range and cannot be measured by the linearizing gage.

The gage reading is a measure of average maximum peak-to-valley height of the blasted surface. If differing numerical values are obtained for the same site while using the proper grade, the lowest value will tend to occur where the replica foam has been most completely compressed and therefore be the most reliable.