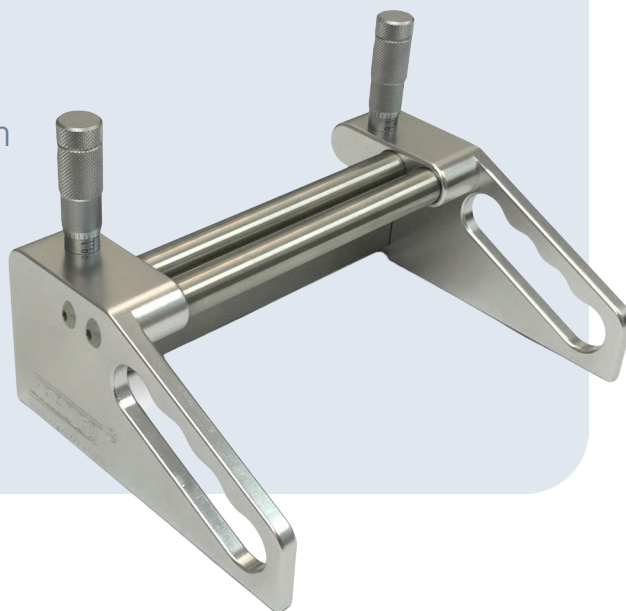




Paul N. Gardner Company

MICROM II FILM APPLICATOR PAINT APPLICATION

Instructions for using the Microm II Film
Applicator (Metric & Imperial).



Microm II Film Applicator



Microm II Film Applicators are adjustable micrometer film applicators designed to produce fast, accurate, and repeatable drawdowns. The Microm II uses two precision micrometers to set blade clearance for controlled wet film application on test panels and other flat substrates.

Products Covered

Microm II Film Applicators are available in metric and imperial versions, with multiple film widths and optional side plate and blade configurations. See the linked product pages for currently available models and options.

Metric Film Applicator



Metric model with micrometer adjustment in metric units for controlled film application.

[View options](#)

Imperial Film Applicator



Imperial model with micrometer adjustment in mils (inch-based) units for controlled film application.

[View options](#)

Application Procedure

1. Place the applicator at the upper end of the test panel.
2. Pour or place the coating directly in front of the knife blade.
3. Draw the applicator toward the lower end of the panel at a uniform rate of approximately 10 to 12 in./sec (250 to 300 mm/sec).
4. Clean the applicator immediately after use and dry the blade thoroughly.

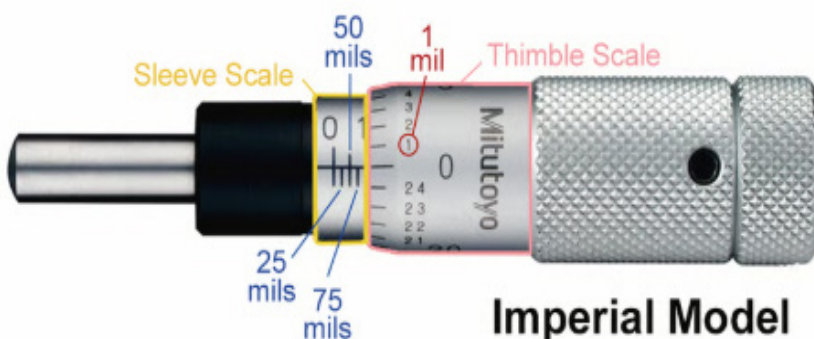
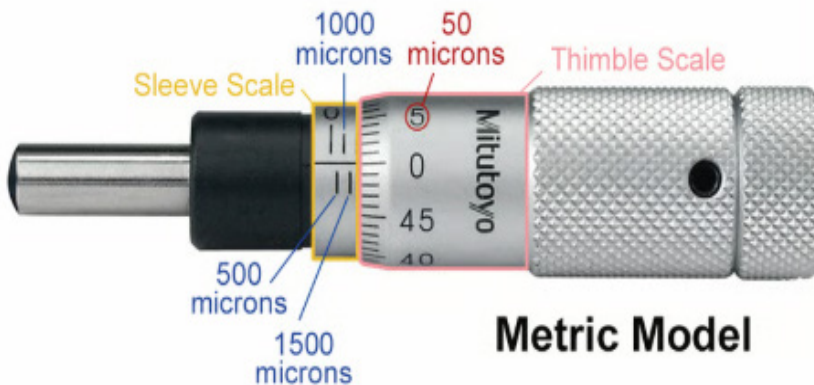


Instructions for Zero Adjustment

1. Prepare the surface. Use a polished granite flat plate or a suitable plate-glass surface for calibration.
2. Set the micrometers to zero. Ensure the blade makes full contact with the flat surface from end to end. Confirm that the side plates are not elevated.
3. Perform a visual inspection. Position the applicator between a bright light source and the observer. Verify that no light is visible beneath the blade or side plates.
4. Check zero tolerance. Confirm that the zero point is within ± 0.0005 in. If the measurement falls outside this tolerance, proceed with adjustment.
5. Adjust the micrometers. Apply slight, consistent pressure to the applicator's support rods. Rotate the micrometers until the blade sits evenly on the flat surface. Loosen the micrometer thimble set screw, align the thimble zero mark with the barrel zero mark, and retighten the set screw.
6. Recheck the zero point. Repeat the process as needed until the zero point falls within the specified tolerance.



How to read the Micrometer



Microm II Film Applicator



Microm Measurements

Metric Film Applicator

Each graduation on the thimble scale is 0.01 mm. The first visible number is 5, which is 5 graduations = 0.05 mm = 50 microns. One complete revolution is 50 graduations, which is 0.50 mm = 500 microns. The first increment on the sleeve scale is 0.50 mm = 500 microns, and the second increment on the sleeve scale is 1.00 mm = 1000 microns, etc.

Imperial Film Applicator

Each graduation on the thimble scale equals 0.001 in. = 1 mil. The first visible number is 1, which is 0.001 in. = 1 mil; the second number is 2, which is 0.002 in. = 2 mils, etc. One complete revolution is 25 graduations = 0.025 in. = 25 mils. The first increment on the sleeve scale is 0.025 in. = 25 mils, the second increment on the sleeve scale is 0.050 in. = 50 mils, and the third increment on the sleeve scale is 0.075 in. = 75 mils, etc.