

# Automatic Film Applicator-MSK-AFA-II

## Operation Manual



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Thanks for purchasing MTI's product, please carefully read this manual before use, we have no responsibility for any damage caused by misuse.

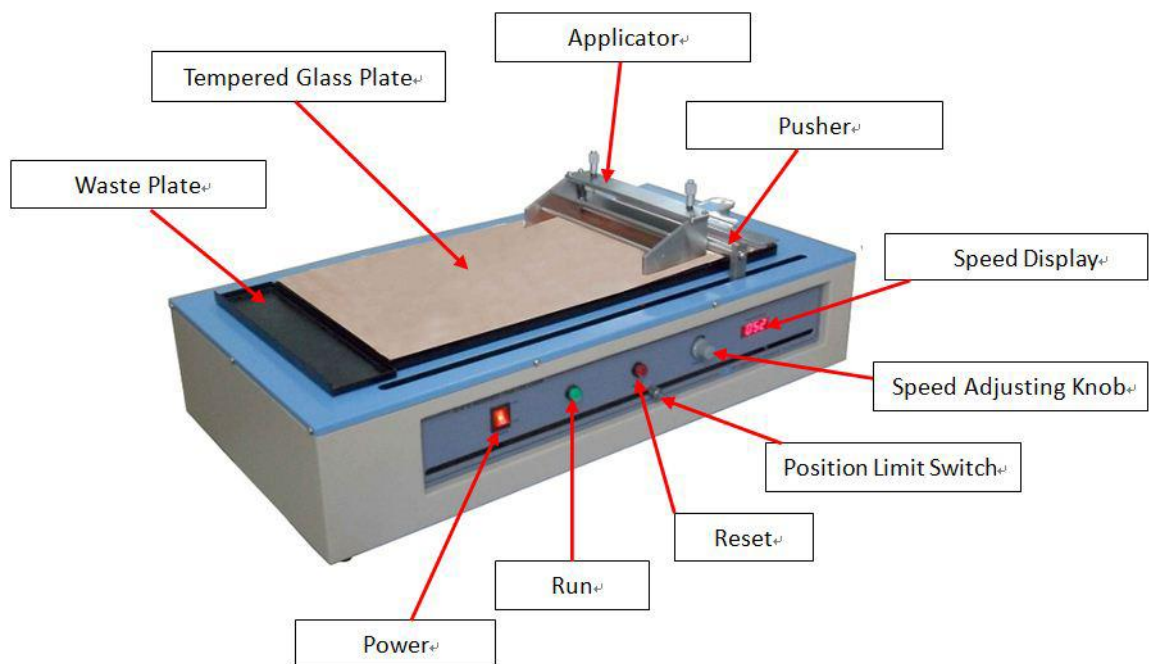
**Note:** The specification data may be different from the real product since MTI keeps upgrading the machine; if any confusion, please visit our website [www.mtixtl.com](http://www.mtixtl.com) for the latest information.

## Introduction

This automatic film applicator is designed to produce consistent results when used with a wide range of different applicators, such as micrometer adjustable applicator and etc to provide the benefits of reproducibility and control of application. These instruments have a unique drive system that has been designed to run smoothly with all types of coating material at every film thicknesses. This machine can be used for research of ceramic tap casting and Li-Ion battery electrode coating.

## Specification

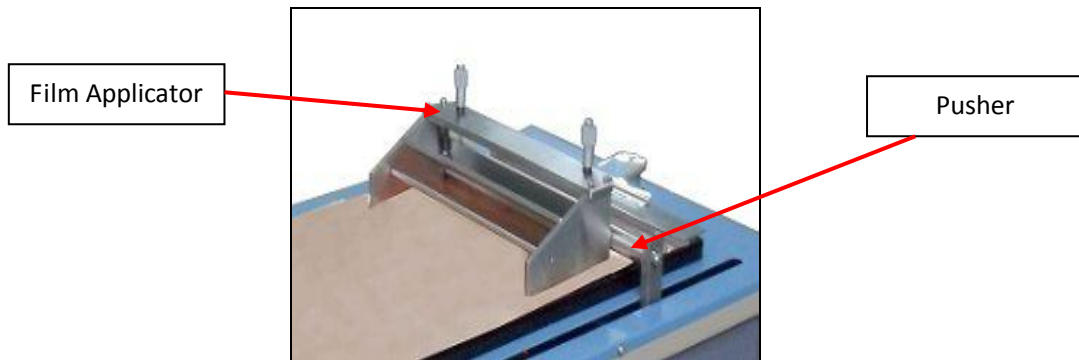
- Pushing speeds can be varied between 0 and 100 mm /sec to establish the most suitable application conditions for all coating material
- 600mm L x 300mm width x 20mm Thick flat tempered glass plate for support substrate to be coated via clip
- Built in pushing bar for using for micrometer adjustable applicator or frame film applicator
- Adjustable position switch allow you set up a stroke from 10 - 600 mm
- One [250 mm width micrometer adjustable film applicator](#) is included
- Unique driving system to produce smooth coating at all types of materials up to 250mm W x 500mm L



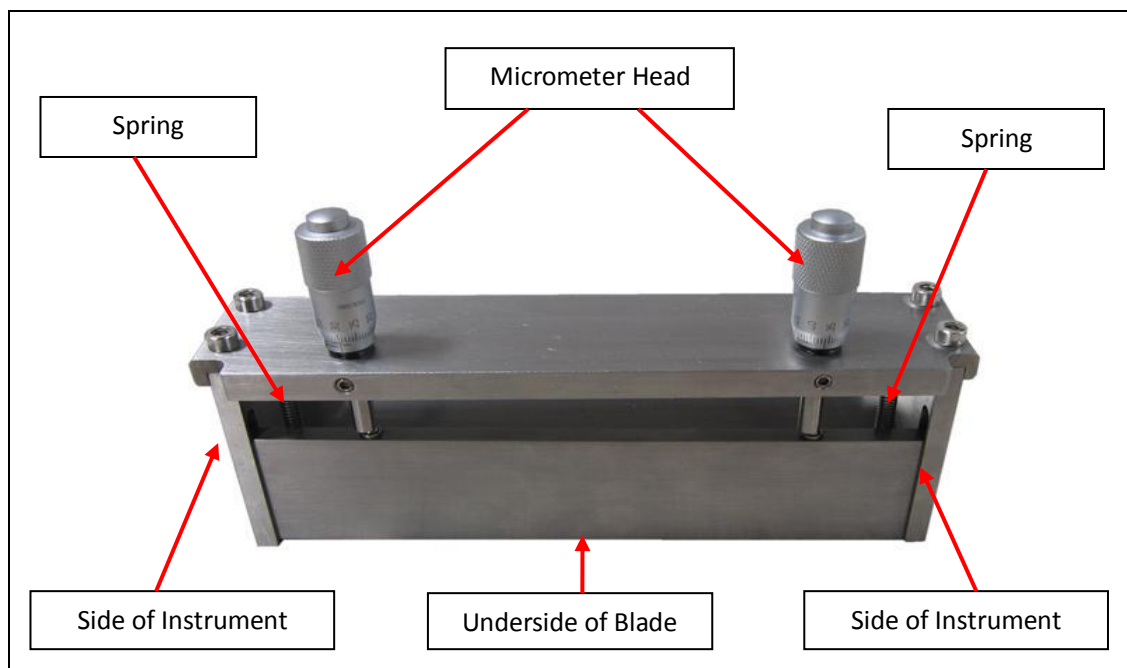
*Figure 1*

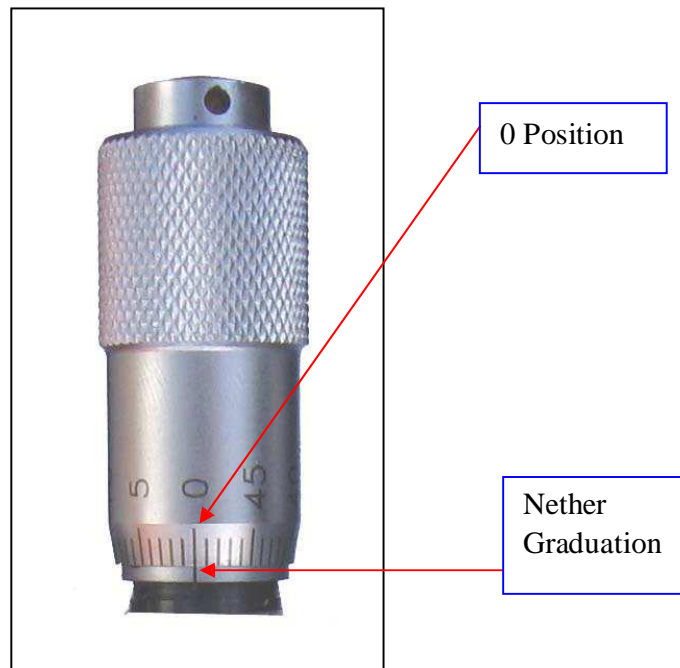
## Operation

1. Power the machine with 220VAC/110VAC supply.
2. Turn on the power, press “Reset” to make the pusher to the initial coating position, then turn off the power (Skip this step if the fixture pole already there).
3. Put the coating substrate onto the Tempered Glass Plate.
4. Using Film Applicator (250mm provided in standard package)



- a. Follow the instructions below to calibrate the film applicator:
  1. Before using this applicator, please calibrate the so-called “0 position”.
    - 1) Place the instrument on horizontal plane.
    - 2) Rotate the two micrometer-heads respectively to make the underside of the blade and the two sides be on the same level.
    - 3) Make sure the readouts of the two micrometer-heads are the same, and “0 position” perfectly match the nether graduation.
  2. Adjust the micrometer-head to get desired blade clearance, which means the film thickness.
  3. When finish coating, clean the instrument with solution.
  4. Loosen the spring by calibrating position of the blade.





- b. Assemble the **pusher** on the fixture pole as shown in figure 6.
- c. Put it on the substrate, with the push of the transverse pusher to coat.
5. Turn on the power.
6. Properly adjust the **position limit switch** to get desired coating distance.  
Note: you may practice the adjustment a few times to ensure the right position.
7. Adjust the **speed adjusting knob** to get an ideal pushing speed, the speed rate will display on LED.
8. Store some coating material in front of the coating tools (bar or applicator).
9. Push “Run” to coat.
10. When finish coating, collect the surplus coating material into the **waste plate**.
11. Turn off the power and take the coating product out.

## Maintenance

1. Keep the chuck always clean, no waste on the platform.
2. Regularly check the oil line in the lube inlet, fill some if insufficient.
3. Cover the machine especially the tempered glass plate to prevent dust from eroding.
4. Clean the waste plate when finish the coating job.

If you have any questions, please contact us at [info@mtixtl.com](mailto:info@mtixtl.com), MTI’s engineer will help you out within 24 hours.