Solitec Spinners

Idle condition check

 The spinner should be off. There will be no red numbers on the LED display and none of the push buttons will be illuminated



Mounting a sample

- Turn on the power by pressing the white Power button.



- It is highly recommended to place a couple wipers in the spinner bowl to help catch any extra material. This will help keep the spinner clean for other users and facilitate in your cleanup of the spinner.



Choose an appropriate chuck based on the sample size you wish to coat. Too large of a chuck will cause vacuum problems and may result in your sample coming off of the chuck when it is spinning. A chuck that is too small for the sample size will have trouble holding the sample as well.



- Place chuck on the spindle aligning the pin to the notches in the bottom of the chuck





 Put your sample on the chuck and try to center it. A well centered sample will be less likely to come off during the spin and will result in a more uniform coating. Press the VACUUM button to pull vacuum on the back of the sample. The orange vacuum interlock light should turn off.



To check how well the sample is centered set the spread speed to about 500 RPM by adjusting the dial below the illuminated SPREAD button so that it displays about 50. If the SPREAD button is not lit press it once which enable a spread cycle and set the timer for about 20 seconds, just enough time to see observe the sample as it spins.



Set the SPIN dial to 0 so that the spindle doesn't ramp up while you are monitoring the sample. Press START to begin the spin, you can press STOP once you've seen enough to know if it needs further centering.



Press VACUUM to release vacuum, adjust your sample as necessary, press VACUUM again to reactivate it and try it again.

Spinning

It may be wise to run a dry spin to verify the actual spin speed as there is a small mechanical error between the reading on the dial display and the speed displayed on the LED readout. The LED readout has been verified to be correct, so the dials should be adjusted during the dry spin to get the desired speed.



Set the spread and spin speeds using their respective dial adjustments. They are multiplied by a factor of 10 so a spin speed of 300 indicated will be about 3000RPM. Set the desired spread and spin times using the timers below each dial. The maximum spread cycle time is 99.9 seconds and the maximum spin time is 999 seconds. Place the cover on top of the spinner in the event the sample comes off. With all of the spin parameters set press START



- There is a small error between what the dials read and what is displayed on the red readout. The red readout is verified to be accurate and should be the one you trust. Adjust the dials as necessary so the red display reads your desired spread and spin speeds.
- Once you've verified the spin is yielding the speeds you want apply your coating

material, cover the spinner, and press START.



When the spin is complete remove the cover, press VACUUM, remove your sample, clean out the bowl, recover the spinner and press POWER to turn the machine off.