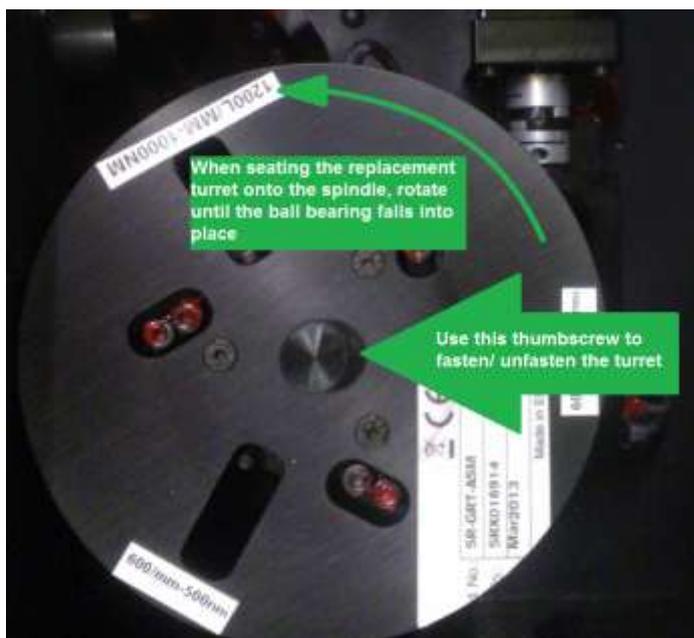


Technical Solutions

Changing the Grating Turret of a Shamrock SR-500/750 Spectrograph

To replace the grating turret in a Shamrock spectrograph, ensure the environment is dust free and the user is wearing powder free disposable gloves to avoid contaminating or damaging the optics.

1. Remove the lid of the spectrograph.
2. Loosen the turret using the thumbscrew and gently lift from the spindle using the top plate.
3. Place the replacement turret onto the spindle and rotate until the ball bearing (on the base of the turret) falls into place.
4. Fasten the turret in place using the thumbscrew and place the lid back onto the spectrograph unit.



WARNING

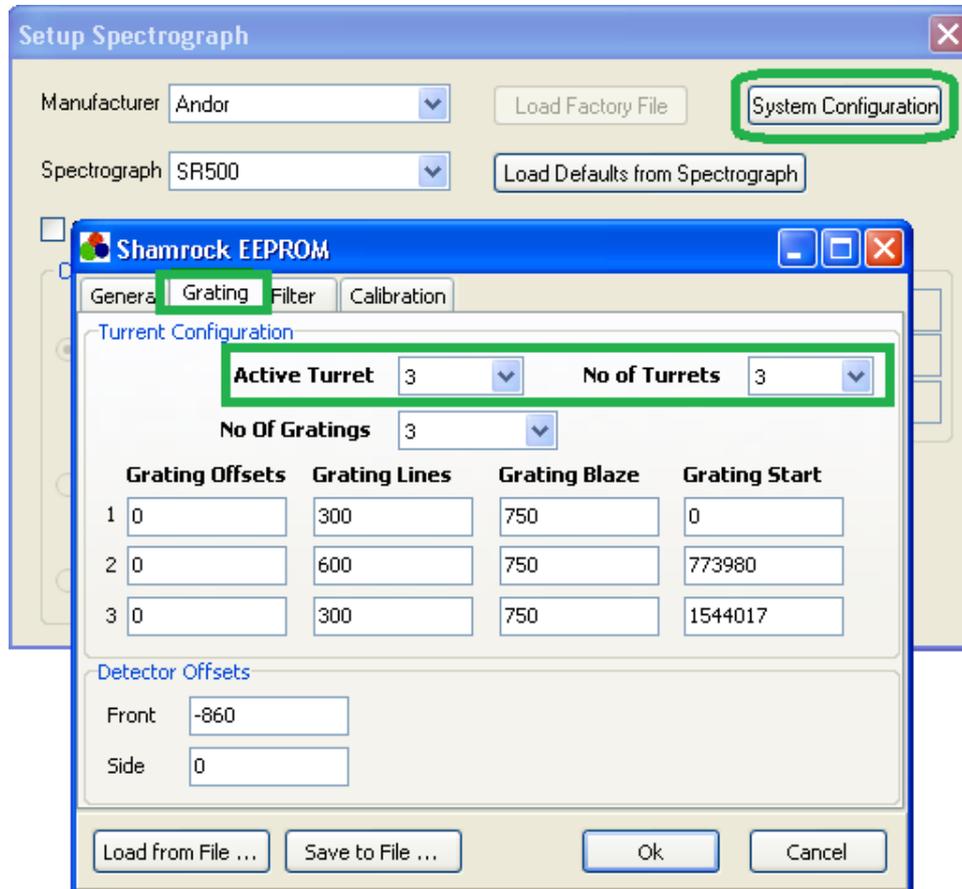
DO NOT LIFT THE TURRET USING THE THUMBSCREW AS IT MAY DETACH AND DAMAGE THE GRATINGS

BE CAREFUL NOT TO TOUCH THE GRATINGS OR OPTICS AS THIS MAY RESULT IN DAMAGE

USER DAMAGE TO GRATINGS OR OTHER OPTICAL SURFACES WILL NOT BE COVERED UNDER WARRANTY

To Add/Edit or Change the current turret used, the EEPROM of the spectrograph needs to be updated with the latest configuration.

Open the Andor Solis software and Go to the menu *Hardware >> Setup Spectrograph*. Click on the “*System Configuration*” to open up the Shamrock EEPROM Editor.



Add an additional Turret to the *No of Turrets* option. The new turret information can be added to one of the unused turret options.

Add to the new turret: **No of gratings** **Grating lines/mm (for each grating)** **Grating blaze (for each grating)**

The **Grating Start** should be left with the default values.

When complete select the turret number you wish to use (Active Turret) and click *OK*

The Shamrock Panel in Solis should now have the details of the updated grating details.

Correcting for centre wavelength offsets should be done using the Offset Adjustment tool (see *Shamrock Wavelength Calibration* from the [Andor Product Support webpage](#))

Optimising for dispersion coefficients can be done using the Dispersion Optimiser tool in Solis (see *Reoptimise Dispersion Coefficients* from [Andor Product Support webpage](#))