

This user guide instructs how to create and/or edit a scan routine for the Dektak 6M Surface Profiler.

1. If you are currently viewing the "Load" file dialog box, click cancel to return to the Sample Position Window. From the Sample Position Window or sample viewing window, left click once on "Switch to Automatic Program Window".

2. Double click on number 1 to edit the program.

3. Left click once on any of the underlined items listed under "Scan Parameters", this will bring up the "Nominal parameters" tab. Under this menu you can change the scanning parameters. The possible acceptable values for each of the parameters are listed below:

Length- 50 $\mu$ m to 30mm

The length of the scan should be sufficiently long to trace across the entire area you wish to measure.

Duration- No limits

If the scan is too fast, the resolution of the scan decreases, leading to less accurate data.

Sample--Is automatically calculated based on the length and duration of the scan.

Resolution--Is automatically calculated based on the length and duration of the scan.

If you wish to obtain a certain resolution, you may enter that value into the resolution box and the length and duration values will automatically be recalculated.

Scan Type--Always standard scan

Stylus Force--10 mg should work for most samples. Do not change this value without receiving guidance from Scott first.

Meas Range--50 angstroms to 2,620 kiloangstroms .

This is the maximum height range for the sample. Ideally, you should choose the lowest range appropriate for your particular sample. If the range you have selected is too low for the sample, the scan will result in a flat line across any areas that are greater than the maximum value for the range.

Profile-- Hills&Valleys works best for most samples, however it can be changed to either Hills or Valleys.

Additional parameters--You have the option to raise the tower after the scan. Recommended only if you intend to do one scan of the sample.

4. Once you have setup the desired parameters, click "OK" then go to "File" and "Save As...".

**Note: DO NOT go to "File" then "Save", this will overwrite your changes into the default scan program!** The file should be saved in "Desktop", "Shortcut to User Programs". Name the file, be sure to put your first and last initials as the first two letters of the file name so that it is easy to find your program at a later date. Click "Save" and the program is ready to be run.