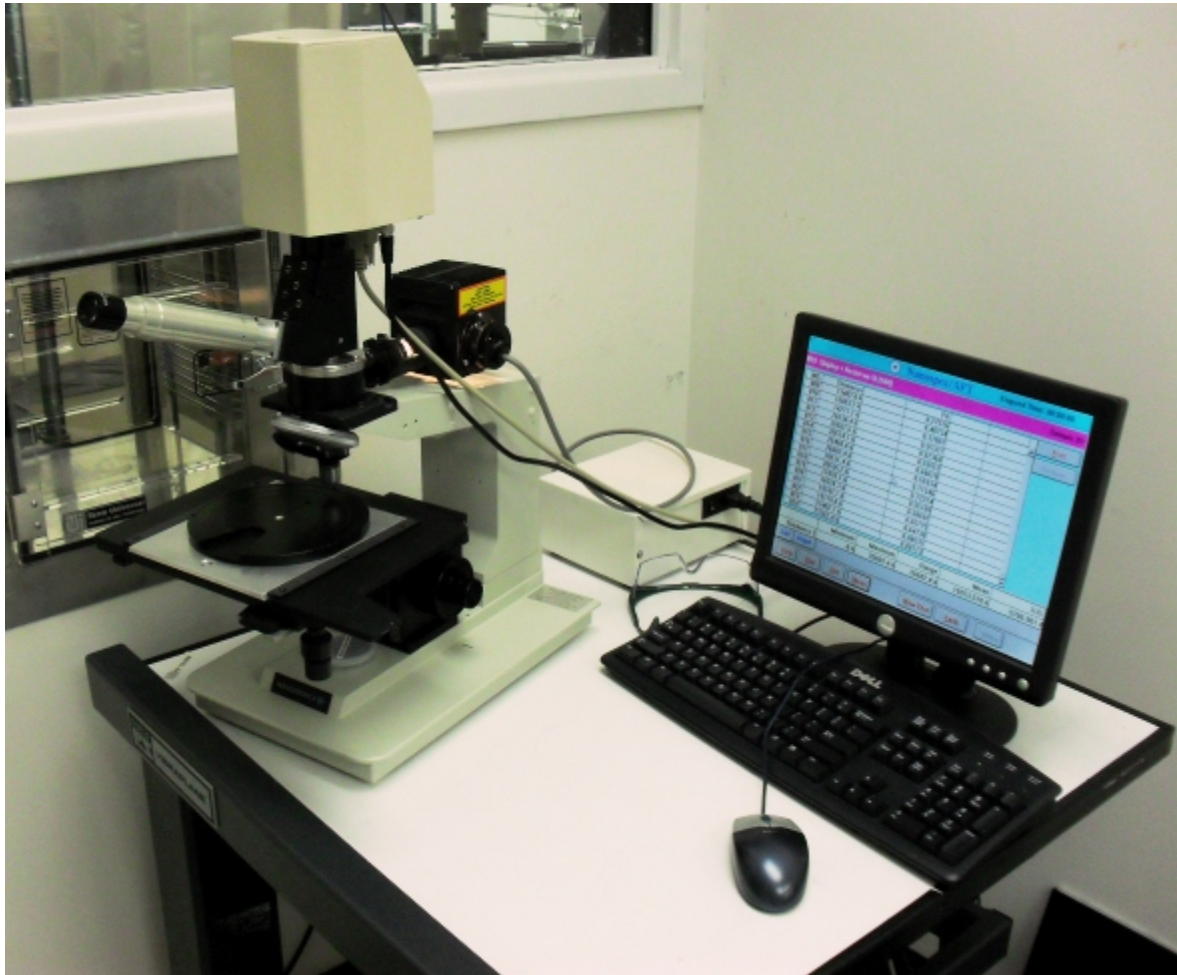


Nanospec 3000 SOP



1. Scope

1.1 This document provides procedures for measuring film thickness with the Nanospec 3000.

2. Table of Contents

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3. Reference Documents

3.1 Referenced within this Document

3.1.1 None

3.2 External Documents

3.2.1 None

4. Equipment and/or Materials

4.1 Nanospec

4.2 Wafer/Sample

4.3 Calibration Wafer

5. Safety

5.1 Follow all Nanofab safety procedures.

6. Setup Procedures

6.1 Load Sample

6.1.1 Slide out microscope stage.

6.1.2 Place sample in the center of the stage, polished side up.

6.1.3 Slide in the stage.

6.1.4 Focus on the sample. See *Figure 2*.

6.2 Select Program

6.2.1 If in the measurement screen, check the top to see which program is selected.

6.2.1.1 If it is the program you need;

6.2.1.1.1 Press New Test. See *Figure 1, Measurement Screen*.

6.2.1.1.2 Enter your sample number.

6.2.1.1.3 Skip to section 7

6.2.1.2 If you need a different program proceed to step 6.2.2

6.2.2 Click Calib. See *Figure 1*.

6.2.3 Select a program from the list. See *Figure 3, Programs List*.

6.2.4 When prompted by the yellow filter warning, turn the yellow filter on or off. See *Figure 2*.

6.2.4.1 If the warning says “Yellow filter”, turn on the yellow filter.

6.2.4.2 If the warning says “No filter”, turn off the yellow filter.

6.3 Calibration

6.3.1 If prompted to “Measure New Reference?”, click Yes.

6.3.2 When prompted by the dark reference measurement,

6.3.2.1 Move the sample out of the way of the microscope reticule.

6.3.2.2 Click Ok.

6.3.3 When prompted to focus on reference sample,

6.3.3.1 Place calibration wafer on top of your wafer, polished side up.

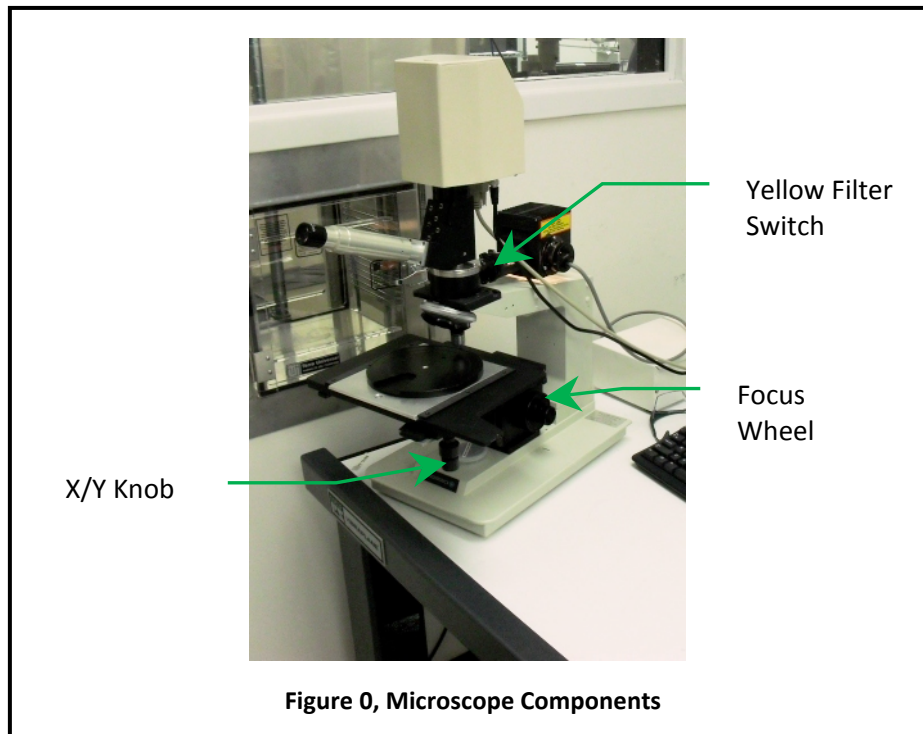
6.3.3.2 Move calibration wafer under the microscope reticule.

6.3.3.3 Focus on the calibration wafer.

6.3.3.4 Click Ok.



Figure 0, Measurement Screen



7. Measurement Procedures

7.1 Film Thickness Measurement

- 7.1.1 Use X and Y knob to move sample to measurement point. See *Figure 2*.
- 7.1.2 Focus on the sample.
- 7.1.3 Click the M meas button to take a measurement. See *Figure 1, Measurement Screen*.
- 7.1.4 Repeat as necessary.



Figure 0, Programs List

8. Revision History

Rev	Date	Originator	Description of Changes
1	17 June 2010	Sam Bell	