D75, S100, Pro 55 & Pro95 Tolerance and Dimension

1. Tolerance:

Tolerance Calibration (exposure adjustment), is recommended for first use of new resin. Also as printer age recalibration is necessary to conpasate weaking of UV output thus maintaining consistent accuracy.

- *1.1.* Open the RayWare (version 2.8.8 and later) and connected to printer.
- 1.2. Select Print→ Fine Tuning → Material Fine Tuning:



1.3. Select the material and layer thickness for calibration: (Example: ApplyLabWork DLP Modeling Tan v3 used SprintRay Die and Model 2 Tan profile, select Sprintray Die and Model 2 Tan)



1.4. Select **Fit and Tolerance** (this test should always be *performed before* dimensional accuracy):



1.5. Ready printer, resin tank, and build plate, and fill the resin tank to minimum fill line. **Start Print**.

Material Fine Tuning			
	3 Sprint	Ray Die and Model 2 Ta	n 🕏 50 µm
Prepare to Print			
Fill the resin tank to t printer as you would	he minimum fill line with the mate with any other print. Once your pr	erial you'd like to calibr inter is ready, press 'Sti	ate. Prepare the art Print'.
Previous		Skip Print	Start Print

- **1.6.** Clean and postcure the prints following ApplyLabWork printing tips of the selected resin.
- *1.7.* Record the number that the window reaches without forcing them together.



1.8. Entering the fiting score.

After printing is done RayWare will prompt score input. (if disconnected during calibration process, returning to calibration screen by going back through the calibration menu and hitting "*Skip print*" instead of "*Start Print*" on the last step.)



Design Concept Series

APPLYLABWORK PRINTING TIPS



Score of 2-4 indicates that the parts are fitting within the expected tolerances, and you can proceed with normal printing. If score is 1 or 5, please enter score accordingly. Followup to reprint, starting from Step *1.2.* (each repeating cycle should move the fiting closer to score 3)

2. Dimension:

Dialing in X and Y acurrancy. It is best to perform the Fit and Tolerance test first before Dimension calibration.

2.1. Select Print \rightarrow Fine Tuning \rightarrow Material Fine Tuning on RayWare. Make sure you select the correct Material and Layer Thickness. (ref step 1.1~1.2)

2.2. Select Dimensional Accurancy



2.3. Select Automatic Calibration



- 2.4. Ready printer then start print. Next, clean and postcure the printed cube. (ref step 1.5~1.7)
- **2.5.** Measure the printed cube and enter the measured value (down to the second decimal place in Metric.) then Click Finish.



Now, your printer is calibrated.