STS Quick Guide

Loading Samples

Go to **Operator** screen

**VENT LOADLOCK** to get access to the loadlock.

Open loadlock when **Load Lock Press** reads atmosphere (~750000 mTorr)

Load wafer, aligning flats with scores on the holder

**Pump MAP** to bring the loadlock back to vacuum.

**Load W1 (or W2)** to place the wafer in the chamber. The number is on the corner of the wafer holder.

Selecting and Starting a Recipe

(On the AOE)  (On the ASE2)

Go to the **Operator** screen  Go to the **MAIN** screen (Do not go to the operator screen)

Select Recipe  **Non-Switch Process Recipes** or **Switched Process Recipes**

Press recipe number on the left

Press **Load** button

Press **Close** button

Press **[RECIPE NAME]** button on **Operator** or **MAIN** screen

Go to the **MAIN** screen and copy recipe values from screen into the appropriate logbook

Unloading Samples

Go to the **Operator** screen

**Unload W1 (or W2)** to bring the wafer from the chamber into the loadlock

**VENT LOADLOCK**

Remove wafer from the chamber.

**Pump MAP**

Recipe Definitions on the other side.
Recipe Definitions (Recommended Values)

**ContinuousProcessMode**: Recommend **OFF**. Disables the recipe timer so the process runs indefinitely.

**APC Auto (ON)**: Enables/disables pressure control.

**Description S#**: Step name

**Coil Load/Tune (60/70 for AOE, 50/50 for ASE2)**: Starting position for coil matching network.

**Platen Load/Tune (50/50 for AOE, 50/60 for ASE2)**: Starting position for platen matching network

**Pressure**: Etch recipe pressure.

**Position (0)**: Sets position of throttle valve when **APC Auto** is **Off**.

**Coil RF**: Power for the plasma source (in W)

**Platen RF**: Power for the plasma bias (in W)

**C4F8 Lo, O2, CF4, He, C4F8, SF6, Ar**: Gas flows (in SCCM)

**ASE2 Switched Recipe Specific Definitions**

*Note: ASE2 switched makes constant references to Etch and Dep. If you have any confusion over this e-mail the staff in charge before using the tool.*

**Start Dep (On)**: Start recipe with your deposition step.

**Start Etch (Off)**: Start recipe with your etch step.

**End Dep (Off)**: End recipe with your deposition step.

**End Etch (On)**: End recipe with your etch step.

**Pulse (Off)**: Not for use with this tool. Set to Off.

**LF (Off)**: Not for use with this tool. Set to Off.

**SW Etch Time**: Number of seconds each etch step takes.

**SW Dep Time**: Number of seconds each deposition step takes.

**Etch Overrun Time**: Number of seconds gases from both steps are flowed. For expert users only.

**Dep Overrun Time**: Number of seconds gases from both steps are flowed. For expert users only.

**PlatenLF (0)**: Not for use with this tool. Set to 0.

**PlatenHF**: Power for the plasma bias (in W)