

# AU5800 Daily Startup with Automation

## ✓ Pause Loading

Take appropriate steps at your connected automation computer to Pause sample loading to the AU5800

## ✓ Place AU5800 in Standby

1. Wait for sample tubes queued in the AU5800 Rack Builder module to load into the analyzer
2. Select **Feeder Stop** on the AU5800 to transition to *Measure 2* mode. The system completes analysis of samples and offloads them back to the track
3. Wait for the system mode to transition to *Standby*

## ✓ Set a New Index

1. Select **Home > Start Condition**
2. Select **Edit F1**
3. Select **New Index**
4. Select the **Group of Tests** for processing
5. (Optional) Enter an **Operator Name**
6. Select **Confirm F1** and then select **OK** to set the index

## ✓ Perform Analyzer Daily Maintenance

1. Inspect syringes for cracks, leaks, or condensation (analyzer and ISE units)
2. Inspect the stability of the upper covers
3. Inspect and clean the probes and mix bars:
  - Confirm probes are not bent or damaged
  - Wipe probes with 70% isopropyl alcohol if contaminants or crystallization observed
  - Confirm mix bars are not bent, scratched, or chipped
  - Wipe mix bars with 70% isopropyl alcohol if contaminants or crystallization observed
4. Prime probes and mix bars to confirm proper operation:
  - Select **Home > Analyzer Maintenance**
  - Place a check in the **Analyzer Maintenance** box
  - Select **Inspect Probes & Mixing Bar** button
  - Select **OK** to confirm
  - Press the **green DIAG** button on the analyzer unit to start the prime:
    - Confirm each probe dispenses a thin straight stream of water and water flows in the wash wells
    - Confirm that the mix bars align correctly in the wash wells during rotation of mix bar components
  - Deselect the **Analyzer Maintenance** box when the priming cycle is complete
5. Replace the DI water in the pre-dilution bottles
6. Replace the sample probe wash solutions (located by the sample probes in positions labeled **DET-1** and **DET-2**)
7. Replace the contamination parameter solutions (located by the reagent probes in positions labeled **CLN-1** and **CLN-2**)
8. Confirm the printer is on and there is enough paper
9. Confirm the handle on the diluted wash solution tank is in the **OPEN** position

## ✓ Inspect the Analyzer Status

1. Select **Home > Analyzer Status**
2. Confirm system components are within acceptable limits (blue); investigate any yellow or red conditions

## ✓ ISE Startup (for labs with ISE Unit)

1. Inspect the ISE reagents, and replace if needed:
  - Confirm reagents are within 90-day onboard stability and volume meets the daily requirements for your lab
  - If ISE Buffer is replaced perform a **Buffer Prime**
  - If ISE MID Standard or ISE Reference is replaced perform a **MID/REF Prime**
2. Inspect, clean, and prime the ISE sample probe:
  - Confirm the probe is not bent or damaged
  - Wipe probe with 70% isopropyl alcohol if contaminants or crystallization observed
  - Select **Home > Analyzer Maintenance > ISE Maintenance**
  - Place a check in the **ISE Maintenance** box
  - Select **Replace Sample Probe** button
  - For **Times**, enter **3**, and select **OK** to confirm
  - Press the **green DIAG** button on the ISE unit to start the prime:
    - Confirm the probe dispenses a thin straight stream of water and water flows in the wash well
  - Deselect the **ISE Maintenance** box when the priming cycle is complete
3. Perform the ISE Clean:
  - Place a Hitachi cup with 1 mL of ISE Cleaning Solution in the **CLEAN** position of the ISE unit
  - Select **Home > Analyzer Maintenance > ISE Maintenance**
  - Select **Cleaning F5** and select **OK** to begin the clean
  - When cleaning is complete, discard the Hitachi cup
4. Perform a Total Prime:
  - Select **Home > Analyzer Maintenance > ISE Maintenance**
  - Place a check mark in the **ISE Maintenance** box
  - Select **Total Prime** button
  - Select **OK** to confirm selection
  - Press the **green DIAG** button on the ISE unit to move the ISE sample probe away
  - Press the **green DIAG** button again to start the prime
  - Deselect the **ISE Maintenance** box when the priming is complete
5. Perform an ISE Calibration:
  - Place Hitachi cups filled with approximately 500  $\mu$ L of the required ISE Serum and/or Urine Standards into the **S-L**, **S-H**, **U-L**, and **U-H** positions of the ISE unit
  - Select **Calibration** tab from ISE Maintenance
  - Select **Serum Start**, **Urine Start**, or **Serum/Urine Start**
  - Select **OK** to begin the ISE calibration
  - When the calibration is complete, confirm the results are within the Slope and MID Factor ranges for Cell 1 and Cell 2
  - Remove and discard the Hitachi cups

Continue on the reverse side

# AU5800 Daily Startup with Automation, continued

## ✓ Replenish Reagents and Perform a Reagent Check (Note: Can be performed during ISE Clean or ISE Calibration)

1. Select **Home > Reagent Management > Details**. For each sample type processed in your lab and each analyzer unit:
  - Review the **Shots** column for tests remaining, the **Onboard Remaining** column for open bottle expiration, and the **Expiration** column for lot expiration
2. Replace and/or add reagent bottles based on volume and expiration criteria for your lab
  - Lift and remove the reagent refrigerator covers
  - Remove required reagent bottles
  - Place new reagents bottles into available positions and secure with partitions and adapters as needed
  - Place non-bar coded reagents bottles into fixed positions assigned in the **Details** tab
  - Replace the reagent refrigerator covers
3. Perform a reagent check
  - Select **Reagent Check F5**
  - Select **Check All Positions** and select **Start**
4. View the **Main** and **Details** tabs to confirm status of onboard reagents meet the daily requirements for your lab
5. View the **ISE** tab to confirm the ISE detergent bottles are checked. Perform a reagent check of ISE, if needed

## ✓ Perform Analyzer Calibration

1. Select **Home > Rack Requisition > Calibration**
2. Confirm automatic calibration order is correct (RB highlighted in blue, CAL highlighted in yellow). Select the sample type from the **Type** drop down menu to review the order for each sample type processed in your lab
3. Select **Display Cup Set F5** to display the required reagent blank, calibrators, racks, and positions. Scroll down to view additional racks. Load the reagent blank and calibrators in the blue and yellow racks according to the list
4. Place the racks on the rack input tray with the blue rack first, followed by yellow racks
5. Select **Close** to close the Display Cup Set dialog
6. Select **Start** to process the reagent blank and calibrator racks


## ✓ Perform Quality Control

1. Select **Home > Rack Requisition > QC**
2. Confirm automatic QC order is correct (test names highlighted in blue). Select the sample type from the **Type** drop down menu to review the order for each sample type processed in your lab
3. Select **Display Cup Set F5** to display the required control materials, racks, and positions. Scroll down to view additional racks. Load the control materials in the green racks according to the list
4. Place the QC racks on the rack input tray
5. Select **Close** to close the Display Cup Set dialog
6. Select **Start** to process the QC racks

## ✓ Review RB/CAL/QC Results

1. Review the reagent blank, calibration, and QC reports for flags. Take appropriate actions based on flags
2. Review the Calibration Monitor to confirm reagent blank and calibration results meet lab requirements (**Menu List > Calibration > Calibration Monitor > select Reagent Blank or Calibration** column for desired test)
3. Review the QC Monitor to confirm QC results meet lab requirements (**Menu List > QC > QC Monitor**)

## ✓ Resume Sample Processing

1. At the AU5800, select **Start**  to transition the analyzer from *Standby* to *Measure 1*
2. Take appropriate steps at your connected automation computer to Resume sample loading to the AU5800