**Purpose**

To provide instructions for TANGO start up and shut down according to the TANGO User Guide,

including how to use Restart after an extended shut down.

**Limitations and Precautions**

* If necessary to interrupt a run it should be for only a short time and for a good reason. The PAUSE disturbs the chronological sequence of sample processing and a long break could yield erroneous results. Any pause longer than one (1) minute may result in flagged results.
* If the controls are not correct, additional rinsing with System Liquid and Wash Solution may be required.

**Required Materials**

* DI Water
* Microcide SQ

**Procedure**

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| **Step** | **Action** | **Related Documents** |
| **Start Up** | | |
| 1 | Turn on the TANGO. |  |
| 2 | The main switch is found on the right side of the instrument, above the power cord. |  |
| 5 | Turn on the PC.   * The TANGO software will start automatically. * The touch screen monitor will turn on with the PC |  |
| 6 | Login to the software.   * When the login screen appears, enter operator User ID and password. * Select the ‘OK’ button |  |
| 7 | The TANGO will automatically go through the initialization process. |  |
| 8 | Do not load plates, reagents or samples until initialization is complete. |  |
| 9 | The warm-up/cool down operations will take several minutes.   * The Status icons will flash red if the area is not within the specified temperature range or if the volume in the containers reaches the lower or upper limit. * The gray bar on the strip waste icon will indicate how close the waste container is to maximum capacity |  |
| 10 | When the TANGO system is ready for operation, ‘Ready’ appears in the analyzer status field and none of the status icons are flashing red. |  |
| **Step** | **Action** | **Related Documents** |
| **User Initiated Pause** | | |
| 1 | A run can be interrupted to load additional reagents or unload an urgently needed sample at any time by touching the ‘Pause’ button. |  |
| 2 | The ‘Pause’ button appears with a green X across the button. |  |
| 3 | Functions in progress, such as pipetting and centrifugation, are completed. Then the system will pause. |  |
| 4 | The incubation will continue. |  |
| 5 | A run should be interrupted for a short time since the pause disturbs the chronological sequence of sample processing. A long break may cause erroneous test results.   * Time in ‘Pause’ should not exceed one minute to ensure that samples do not exceed the maximum incubation time. * If incubation time is exceeded, the samples affected by the ‘Pause’ are flagged. |  |
| 6 | To restart the system, touch the ‘Pause’ button again. |  |
| 7 | If the system is not started in 45 seconds, an audible signal (beep) sounds. If the time in ‘Pause’ exceeds one minute, a warning message is displayed, and all affected wells will be flagged with flag symbol 16. |  |

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| **Short Term Shut Down** | | |
| 1 | Touch ‘Shut Down’ in the ‘Shut Down Tango infinity’ dialog   * The software will automatically shut off the PC, if it does not, wait until the screen instructs you to turn off the PC |  |
| 2 | After the PC is switched off, switch off the analyzer by pressing the main switch on the right side of the TANGO infinity. |  |
| 3 | Once it has been powered off, the operator can remove all the mechanical assemblies.   * Wait at least 5 minutes before restarting analyzer |  |

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| **Long Term Shut Down** | | |
| 1 | If the instrument will not be used for a week or more, disinfect the system and containers using Microcide | TANGO infinity: Monthly Maintenance  TANGO infinity: Preparing Decontamination Solution |
| 2 | Rinse containers thoroughly with DI water and refill with fresh DI water.   * Prime system with DI water to flush out the Microcide. * Both containers and complete liquid system remain filled with DI water when shut down. | TANGO infinity: Monthly Maintenance |
| 3 | Empty and rinse the Waste Container. |  |
| 4 | Remove all plates from the analyzer.   * Select the ‘Remove Plates’ button in the ‘Plates Loading’ dialog to unload all plates. |  |
| 5 | Remove all reagents from the analyzer. |  |
| **Step** | **Action** | **Related Documents** |
| **Long Term Shut Down (continued)** | | |
| 6 | Empty and clean the strip waste bin |  |
| 7 | Replace the Suspension Cup and Splash Bowl | TANGO infinity: Monthly Maintenance |
| 8 | Turn off the computer.   * Select the ‘Shutdown’ button in the Main Menu. * Touch ‘Shut Down’ in the ‘Shut Down TANGO infinity’ Dialog. * The TANGO software will automatically switch off the PC. If the software does not turn off the PC, wait until the screen instructs you to turn off the PC |  |
| 9 | After the computer is turned off, turn off the analyzer using the main switch on the right side of the instrument. |  |
| **Restart After Extended Shut Down (4 weeks or more)** | | |
| 1 | Use the switch located on the right side of the instrument to turn the TANGO infinity on. |  |
| 2 | Turn on the PC, the TANGO software will begin automatically.   * Log in using User ID and Password |  |
| 3 | The instrument will automatically go through the initialization process |  |
| 4 | If the analyzer was not in use for an extended period of time, clean the containers and liquid system with diluted Microcide. | TANGO infinity: Monthly Maintenance  TANGO infinity: Preparing Decontamination Solution |
| 5 | Rinse containers thoroughly with DI water. |  |
| 6 | Fill the containers with the appropriate solutions and connect the sensors and tubing.   * System Liquid is DI Water * Wash Solution is phosphate buffered saline (PBS). * The Waste Container remains empty. |  |
| 7 | Prime system liquids | TANGO infinity: Liquid Container Management |
| 8 | After the priming cycles are complete, load plates and reagents. | TANGO infinity Plate Preparation, Loading, and Unloading  Tango infinity Liquid Reagents |
| 9 | Run controls. Testing can be resumed after correct QC results are obtained. | TANGO infinity: ABO Rh Antibody Screen QC  TANGO infinity: Control Result Validation |

**References:**

TANGO Infinity User Manual, Version 1.7.1