**TITLE: Yorkville Lab Maintenance and/or Function Checks**

**Principle:** Appropriate maintenance and function checks are performed and records retained for all instruments (eg, analyzers) and equipment (eg, centrifuges) following a defined schedule, at least as frequent as specified by the manufacturer. Function checks should be designed to detect drift, instability, or malfunction, before the problem is allowed to affect test results. COM.30600

**Personnel:** Medical Technologist

**Stepwise Procedure:**

**DAILY**

* Temperatures taken
* Disinfect counters
* Clean microscopes

**Architect**

C side Architect: Check 1 mL Syringes, check DI water Purity, Daily Maintenance, Daily Mixer Inspection.

I side Architect: Daily Maintenance

**XN-450**

Shut down analyzer

Run QC

**XP-300**

Cell Clean and Shut down analyzer

Run QC

**CA-600**

Shut down analyzer, empty waste and fill DI water container if needed.

Check the pneumatic trap for liquid

Clean reagents cups

Replace reagents

Record temperatures

Run QC

**ABL 80**

Verify status is ready twice a day

**Triage Meter**

Run Daily QC Device

**Alere ID Now**

Clean analyzers with alcohol.

Clean hood and area around the analyzers with bleach wipe

**Hematek Stainer**

Flood Hematek stainer platen with Methanol then wipe with gauze

Prime the hematek STN(1) line with methanol until line runs clear

Empty and rinse the waste container

**Cobas u411**

Power off analyzer

Empty waste area

Clean the test strip transfer system

Power on the analyzer

Run QC

**WEEKLY**

* Perform Gram Stain QC
* Empty Sed Rate Waste Bottle
* Flush both Eye Wash Stations

**Blood Bank**

Change the temperature chart wheel

Rotate two units of blood to the main lab

**Architect**

C side: Check ICT Componets, Clean Mixers, Clean Sample/Reagent Probes, Clean cuvettes with Detergent, check HC Waste Pump Tubing, Change Water Bath Additive

I side: Probe cleaning (manual), Pipettor/WZ Probe Cleaning, Wash Cup Cleaning

**XN-450**

Routine Cleaning w/ Cellclean Auto

**XP-300**

Clean the SRV tray

Clean rinse cup

**CA-600**

Change the trash liner

Clean Instrument interior/exterior

**Hematek Stainer**

Flood the platen with methanol and clean channels

**Urisys 1100**

Wipe down instrument and clean strip tray

Calibrate instrument

Run the QC

**Piccolo**

Clean screen

**MONTHLY**

* Water Culture sent to Main Lab
* Clean Centrifuges
* IQCP Reports Review for Heme, Coag, and Chemistry
* Clean water bath
* Review/sign Maintenance binders
* Pull Recollection Reports
* Pull TAT Statistics from ED

**Architect**

C side: Check Dispense Components, Clean Cuvette Washer Nozzles, Check Syringes and Valves, Clean ICT Drain Tip, Database backup, Change on board Saline

I side: Clean Air Filters

**XN-450**

Clean Exterior

**XP-300**

Clean Waste Chamber (Rinse Sequence)

Clean Transducer (Rinse Sequence)

**Piccolo**

Run external QC

**Cobas u411**

Calibrate

Clean interior and exterior instrument

**iSED**

Cleaning

**Triage Meter**

Run external QC

**ABL80**

Change solution pack and sensor cassette, run external 3 levels QC, download data files, clean analyzer. Run a patient comparison.

**QUARTERLY**

* Check Rotator
* Clean Hood
* INR Calculation Check

**Architect**

C side: Change Lamp, Sample Syringe Maintenance, Wash Syringe Maintenance, Reagent Syringe Maintenance, change 1 mL Syringes, Change ICT Asp check Value, Check ICT Ref Check Valves

**XP-300**

Clean the SRV

**CA-600**

Perform LED Calibration, Filter Inspection and Cleaning, Clean water rinse bottle with alcohol

**Piccolo**

Clean air filters

**Blood Bank**

Alarm Check

**ABL80**

ctHb Calibration

**SEMI-ANNUALLY**

* Linearites and comparison
* Blood Bank Transport Bags
* Calibrate D-Dimer
* Calibrate the BioTek Plate Reader
* Manually Diff Comparison
* Piccolo cleaning of printer

**ANNUALLY**

* Change Cobas u411 calibration strip in analyzer (April)
* LIS calculation verification (August)
* Architect reagent probe carryover
* Platelet Poor Plasma Centrifuge Check
* New Coag lot validation

**Notes:** See individual procedures and manuals for specific instructions. Individual maintenance logs are signed for completed actions.

**References:** College of American Pathologists, CAP Accreditation Program; All Common Checklist.

Radiometer ABL80 Operations Manual

ABBOTT ARCHITECT System Operations Manual, Abbott Park, IL 60064 PN 90977-104

Sysmex CA-660 Preventative Maintenance Procedure

Sysmex XN-L Series Basic Operation (North American Edition), Sysmex Corporation, Kobe, Japan.

Cobas u411 Operator Manual 2009-2013