qs
quick steps

HemaTrue Veterinary Hematology Analyzer

NOTE: For access to the full user manual for this product, please visit www.heska.com/productmanuals.

Starting the HemaTrue® Veterinary Hematology Analyzer Each Working Day

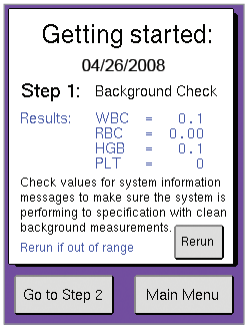
1. The System is in Standby
   Touch the screen to activate the system. On the initial screen display, press **EXIT STANDBY**. You will see a user ID screen, where you may enter an ID or cancel. You will see the display at right while the system prepares itself for the day.

   After exiting standby, the system will automatically go to the daily startup menus.

NOTE: Backgrounds and controls only need to be run one time every 24 hours.

Follow the screen instructions to:

2. Perform a Background Check
   - Pressing the start plate will automatically initiate a background check. This verifies that the system will accurately measure very low cell concentrations.
   - When background passes, touch **GO TO STEP 2**.



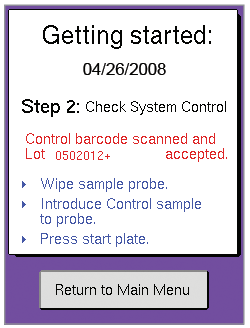
Accepted Background Values

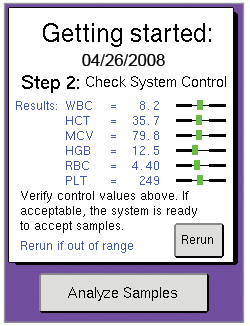
The background count should not be higher than the values shown at right. Rerun sample if values are not acceptable. If second background count is not acceptable, contact Heska's Technical Support Services at 800.464.3752, option 3.

Parameters	Values Accepted
RBC	≤0.03 (10^6/µl)
WBC	≤0.2 (10^3/µl)
HGB	≤0.2 (g/dL)
PLT	≤10 (10^3/µl)

Getting Started Each Working Day *(cont'd)*

3. Perform a Quality Control Check
   - Good laboratory practice recommends that the performance of the HemaTrue® Veterinary Hematology Analyzer is checked daily with certified blood controls authorized by Heska. Comparing the analyzer results to the known assay values is good assurance that the system is functioning properly.
   - When the control tube barcode is scanned, the screen indicates the system is ready for control sample introduction. Follow the control preparation and introduction instructions.
   - After introducing the control sample by pressing the start plate, results of analysis will be displayed within 1 minute. Evaluate results of analysis on screen.
   - When the quality control results pass, touch **ANALYZE SAMPLES**. Select [Sample] to display the sample mode.





IMPORTANT

- Please refer to the Blood Control Product Insert for complete instructions for handling and use of blood control materials.
- Never use an open vial longer than recommended by the manufacturer (16 days) or subject any vial to excessive heat or agitation.
- Wipe the sample probe with a Kimwipes® tissue or equivalent before each control run. Not performing this step may lead to decreasing parameter values due to dilution of the control material.

Running a Sample

1. To analyze a sample from either the Sample, List or Main Menu screens, touch **NEW SAMPLE.**

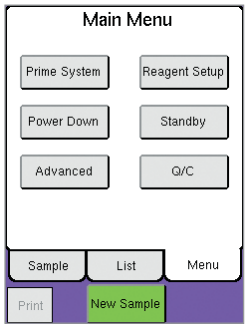
2. Select the species by scrolling through the species list with the profile buttons. This step is skipped when analyzing the default species, typically DOG.

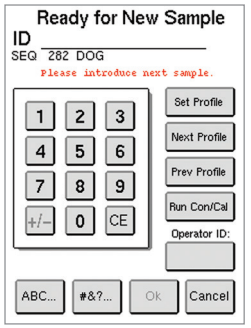
3. Enter the desired Sample ID using the touch keypad. Press the appropriate text key to move between alpha and numeric ID touch pads.

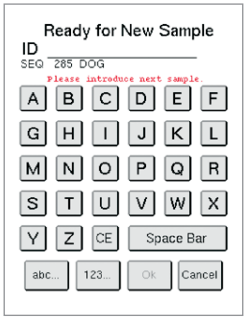
4. Introduce the sample to the sample probe and press the start plate to analyze the sample.

5. Results of sample analysis will be viewed on the Sample screen (see next page).

6. The Operator ID is an optional feature which can be entered prior to analyzing a sample or when exiting Standby Mode. To enter an Operator ID, press the specified button and enter up to a 4-digit numerical or alphabetic ID. The Operator ID will stay the same until Operator ID button is pressed again and changed, or when the analyzer goes into Standby Mode.



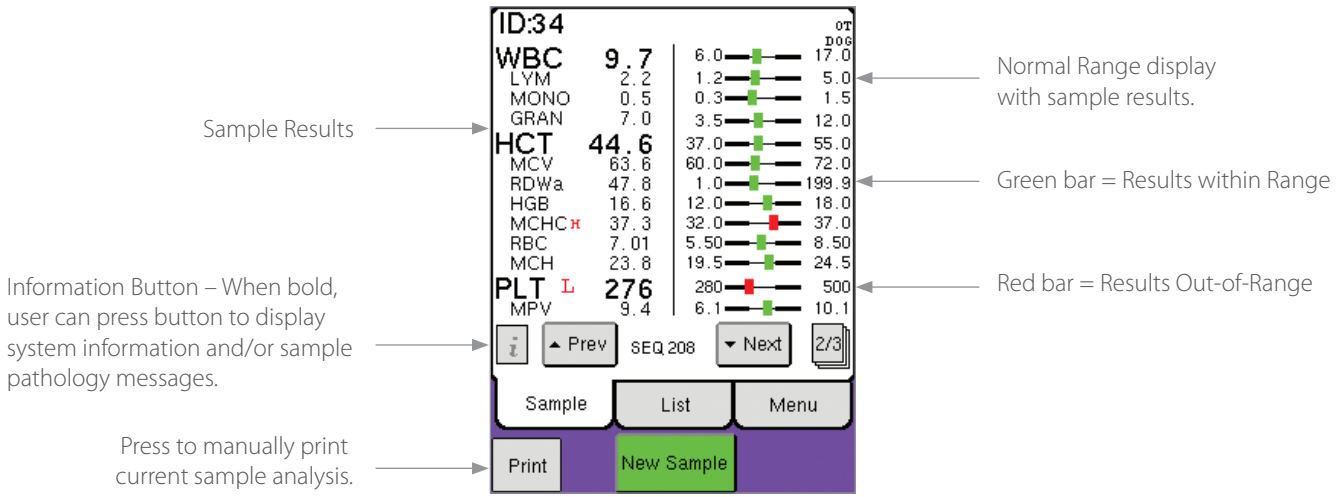




Running a Sample (*cont'd*)

Display of Sample Results on Sample Screen
There are three screens from which to choose based on individual preference. Below is an example of Sample View 2.

Sample View 2

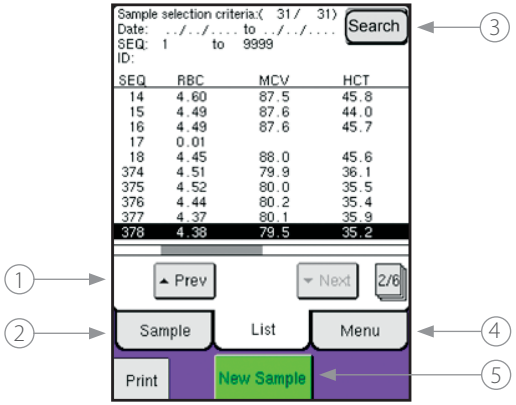


Running a Sample (*cont'd*)

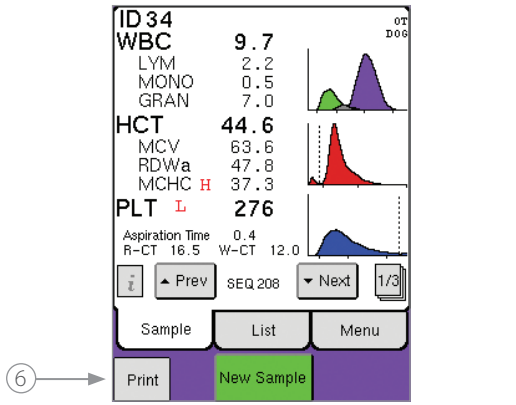
To search for results, select [List] to move to the List Menu.

1. Touch **PREVIOUS** or **NEXT** to navigate samples in the list.
2. Touch **SAMPLE** to display results of the sample highlighted in the list.
3. Touch **SEARCH** from List Menu to recall a list of results in memory based on search criteria.
4. Touch **MENU** to move to the Main Menu.
5. Touch **NEW SAMPLE** to analyze more samples.

NOTE: After 15 minutes of inactivity during the day, the system will initiate a screen saver mode. Touch the screen anywhere to wake up the analyzer.

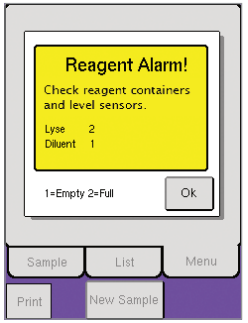


List Screen



Sample Screen

NOTE: The Reagent Alarm will display when at least one reagent needs to be changed. When this occurs, there is only enough reagent for approximately two sample runs. The Reagent Alarm will then display after each sample run until the indicated reagent bottle is changed. Touch **OK** to exit Reagent Alarm.



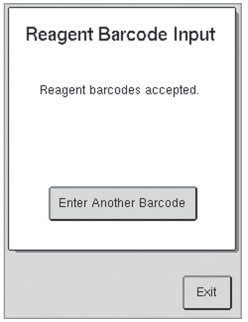
Reagents and Controls

Changing an Empty, Low or Expired Reagent Container

1. Touch **MENU** to access the Main Menu, then Touch **REAGENT SETUP.**
2. Touch **ENTER NEW REAGENT.**
3. The scanner's ON button must be pressed for each barcode scan. Using this procedure, scan barcode 1, then barcode 2 on the reagent container.

   The message at right confirms barcode entry: Touch **EXIT** to return to the Main Menu.

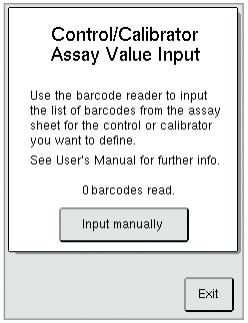
4. Remove the used reagent bottle from the reagent tray.
5. Place the new reagent bottle in the proper reagent tray position.
6. Remove the cap and seal on the new reagent bottle.
7. Transfer the tube and colored top from the used reagent bottle to the new reagent bottle.
8. The analyzer is now ready to resume operation or run samples.



Reagents and Controls *(cont'd)*

Activating a New Lot of Blood Control

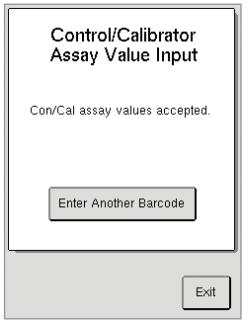
When your current lot of blood control is replaced by receipt of a new lot, the system should be prepared to work with the new lot.



1. Touch **MENU** to access the Main Menu, then Touch **QC**.

2. Touch **ENTER CON/CAL** button. Screen at right appears.

3. Sequentially scan all the barcodes on the control assay sheet. It is necessary to press the scanner's ON button for each barcode scanned. More detailed instructions are present on the Control Assay Sheet.



4. When all barcodes have been scanned, the screen at lower right appears. Touch **EXIT** to go back to the Main Menu.

This procedure has entered all control assay value ranges for the new lot of control material and the system will automatically recognize the control tube barcode scan when controls are analyzed each day.

NOTE: Assay values for 12 different lots can be stored simultaneously. When renewing the assay values, the previously scanned CON/CAL assay values will be removed in a chronological order starting with the assay values that were entered first.

Sample Collection and Handling

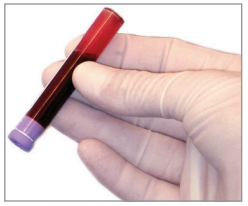
Correct sample processing is the most important step in obtaining accurate results on an automated hematology system. Most analytical errors are caused by improper sample collection and handling.

1. Swift, a traumatic venipuncture is critical to proper sample collection.
   - Use a 22-gauge or larger size needle to minimize hemolysis.
   - To prevent micro clot formation, avoid repositioning and/or excessive suction on the syringe.

2. Immediately transfer blood into a purple-top (EDTA) collection tube by one of two methods:
   a. Remove the needle from the syringe and remove the stopper from the tube. Hold the top of the syringe over the tube and gently dispense the blood into the tube. Fill the tube 1/2 full or to the manufacturer's recommended fill line, then recap; **OR**
   b. Push the needle through the stopper and allow the vacuum to aspirate the blood into the tube. Do not press on the syringe plunger! This will cause hemolysis.

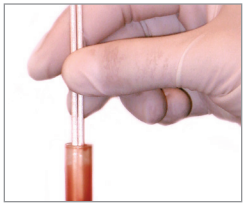
Sample Collection and Handling *(cont'd)*

3. Immediately invert the tube 8–10 times to mix blood and anticoagulant. If testing is delayed, mix the sample again immediately before analysis.



4. Place blood tubes in the HemaTrue analyzer on-board blood tube mixer until analysis. Mix tubes for a minimum of one minute.

5. Check the sample for microclots/fibrin:
   - Immerse 2 wooden applicator sticks into the blood and swirl gently.
   - Remove the sticks and examine for microclots (small dark red or white translucent particles) or fibrin.
   - If clots or fibrin are present, discard the sample and redraw. Clots will alter results and cause obstructions in the analyzer.



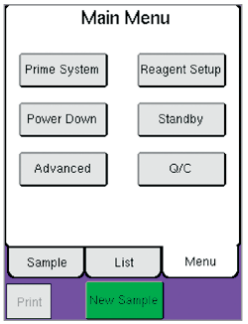
The HemaTrue analyzer has the option to analyze capillary whole blood samples with the use of the micropipette adapter (MPA). Refer to the *HemaTrue Veterinary Hemotology Analyzer User Manual* for complete instructions on MPA usage.

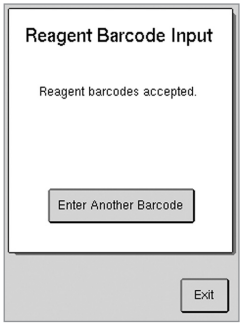
Cleaning and Maintenance

End of Workday System Care

1. Clean the sample probe up to the hub with an alcohol swab to remove any residual blood and salt crystals. Using the same swab, clean the probe rinse cup.

2. After 8 hours of inactivity, the system will initiate a self cleaning cycle and enter Standby. This moves enzymatic cleaner into contact with all internal components involved with blood processing. This automode is recommended for routine use overnight and may be used on weekends. You may also put the unit into Standby by touching **STANDBY** on the Main Menu.





The majority of the HemaTrue system's cleaning procedures are automated to keep user maintenance to a minimum.

Cleaning and Maintenance *(cont'd)*

Automatic Cleaning Mode

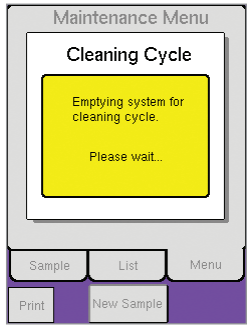
The HemaTrue system has been designed to clean internal components on a daily basis. The system uses the enzymatic cleaner to flush and clean all components that come into contact with blood when in Standby or Power-OFF mode. The analyzer remains filled with the cleaner until it is powered back on or taken out of Standby. This automatic daily cleaning increases the longevity of the system and decreases maintenance procedures.

Annual Cleaning Procedure

NOTE: To order the Heska Hematology System Cleaning Kit call 800.464.3752, option 1.

To increase the life of the analyzer's internal tubing, the following cleaning procedure is strongly recommended at least once a year.

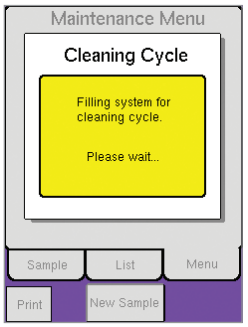
1. To enter the Cleaning Menu, from Main Menu touch **ADVANCED ▶ MAINTENANCE ▶ CLEANING MENU**.
2. Follow the instructions for the HESKA Hematology System Cleaning Kit to clean the analyzer. (Instructions for use are supplied with the cleaning kit).
3. The Annual Cleaning procedure takes approximately 1 hour and 15 minutes to complete.



HESKA Hematology System Cleaning Kit

This cleaning kit contains the following items:

- Enzymatic cleaner
- Hypochlorite (2%)
- Detergent cleaner



LCD Display

When necessary, gently clean the display with a soft cloth, slightly moistened with water and a mild soap. Dry carefully.

For further assistance, please call Heska's Technical Support Services at 800.464.3752, option 3.