

# Element DC5X Veterinary Chemistry Analyzer







# Element DC5X™ Veterinary Chemistry Analyzer Supplies

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

Remove testing supplies from refrigerator and warm to room temperature:

• Slides: 5 minutes in foil pouch.

NOTE: Remove only those needed for ordered tests.

- Reconstituted HESKA® Chemistry Control: 5 minutes.
- Electrolyte Reference Fluid: 5 minutes.

**NOTE:** Fill 0.5-ml or 1.5-ml Red Top sample tube depending on the reference fluid setting designated in, "Tube setting for diluent & reference fluid" (Administrator mode), then return remaining RE Fluid to refrigerator.

# Replacing Consumables

- 1. First ensure [Warming Up], [Lamp Warming Up], or [Ready to Test] is displayed on the screen.
- 2. To stop sampling, touch **STOP**.

#### **Setting Tips**

- 1. Touch the image of the tip racks on the display screen to turn sample carousel.
- 2. Once carousel stops, remove tip racks.
- 3. Fill tip racks and replace.
- 4. Touch **RESET**, then touch **FINISH**.





# Replacing Consumables (Cont'd)

## **Replacing Mixing Cups**

- 1. Touch the mixing cup image to turn sample carousel.
- 2. Remove used mixing cups from carousel and replace with new mixing cups.
- 3. Touch **RESET** under the mixing cups that were replaced to reset the quantity. Touch **FINISH**.

## **Replacing Diluent**

- 1. Put 1.5-ml of distilled water into a 1.5-ml Red Top non-heparinized sample tube.
- 2. Touch the diluent image (test tubes) to turn the sample carousel.
- 3. Place diluent tube in appropriate location (D2) labeled "Water".
- 4. Touch **FINISH** to return carousel to its normal position.

## Replacing Reference Fluid

Pipette Reference Fluid into a 0.5-ml or 1.5-ml Red Top non-heparinized sample tube depending on the reference fluid setting. Set the tube in the center of the carousel.

IMPORTANT: Replace RE fluid after 12 hours.









# Sample Collection and Handling

NOTE: Handle all samples and used materials as infectious waste. Wear gloves, glasses and other protective gear for your safety.

#### Heska-Supplied Green Top (lithium heparin) Tubes

**NOTE:** Use with Heska-provided centrifuge to save a step.

- 1. Draw patient sample using a 23-gauge or larger needle.
- 2. Remove needle from syringe to fill a 0.5-ml or 1.5-ml Green Top tube.

**NOTE:** Full 0.5-ml Green Top tube-6-test profile plus electrolytes.

Full 1.5-ml Green Top tube—Adequate volume for all available tests.

- 3. Fill sample tube.
  - 0.5-ml tube: Fill with at least 0.3 ml of sample (second line); Immediately invert the tube 5 to 6 times to ensure proper mixing with the lithium heparin.
  - 1.5-ml tube: Fill with at least 1 ml of sample (second line); use standard inversion or rolling to mix.
- 4. Spin sample in Heska-provided centrifuge for 3 to 5 minutes.

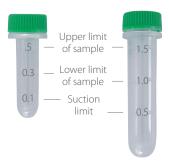
### Standard Green Top Lithium Heparin or Red Top Plain Tubes for Harvesting Serum or Plasma

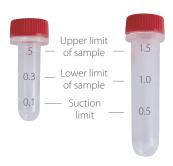
1. Collect sample and separate serum or plasma as you normally would.

**NOTE:** Red Top tube serum samples: Allow 20 minutes to clot prior to centrifugation (45 minutes for equine blood).

2. Transfer plasma or serum to a 0.5-ml Heska Red Top tube for analysis.

**NOTE:** Full 0.5-ml Red Top tube—adequate volume for all available tests. The 1.5-ml Red Top tube should only be used if it can be filled to at least the 1-ml mark (second line).







## **Basic Operation**

Make sure that [Ready], [Warming Up], or [Lamp Warming Up] is displayed before loading samples and slides. To stop sampling, touch **STOP**.

- 1. Lift front cover.
- 2. Place slides to be tested, barcode surface down, into slide cartridge and place weight on top.

  NOTE: Handle slides by outside edges only and if using an E-Wrap panel, remove the clear plastic wrap.
- 3. Place slide cartridge properly in appropriate sample position.
- 4. Remove cap from sample tube and place into appropriate sample rack.
- 5. Place RE fluid if testing electrolytes. (See replacing RE Fluid section).
- 6. Close sampler cover.
- 7. Touch appropriate Sample position (A, B, C, D or E).
- 8. If using Work List, touch the Work List icon and select the desired patient. Touch **OK**. Go to Step 12.
- 9. If not using Work List, touch **SAMPLE ID**.
- 10. Input sample ID (Example: 100). Touch **OK** to accept.
- 11. Touch ANIMAL and select desired species.
- 12. Make sure sample type is set to Plasma/Serum. Touch OK.
- 13. Repeat Patient ID entry for samples in additional positions (A–E).
- 14. Touch **START**.







# Running Auto-Dilution Samples

#### Example: To rerun Sample C with 5 times dilution:

- 1. Replace slides in slide cartridge C and place slide cartridge in position.
- 2. On test results screen, touch (Rerun)
- 3. Touch position C.
- 4. Touch **DILUTION** and select dilution factor.
- 5. Touch **OK** to accept.
- 6. Touch **START** to begin testing.

### **Running STAT Samples**

Use this feature to prioritize a critical sample if more than one sample is already in progress.

Example: running STAT sample in position D.

- 1. Touch **STAT**. LCD screen shows [Please wait a moment].
- 2. Open cover and place slides and slide weight in position D.
- 3. Touch position **D** and input appropriate patient ID and species. Touch **OK**.
- 4. Screen will display [Spotting is suspended]. Touch **RESTART** to begin testing.

**NOTE:** Original sample that was interrupted will finish first. STAT sample will be processed next, followed by any remaining programmed samples.

### Interrupting Samples

Touch PAUSE once to interrupt sampling. Touch STOP while sample is paused to cancel the paused test.

**NOTE:** Do not open waste disposal drawer during sample processing.



#### Calibration

Ensure that [Warming Up], [Lamp Warming Up], or [Ready to Test] is displayed.

• For new slide lot #, insert the QC card into the slot with the QR code facing to the left.

**NOTE:** Test name and lot #'s appear on the display and will print out. Analyzer will store 5 lots per analyte or panel.



#### Controls

**NOTE:** Always wear gloves when running controls.

- 1. Run HESKA Chemistry Control solution as you would a patient sample by transferring into a 0.5-ml Red Top tube.
- 2. Select [Control] for your species.

## Daily Maintenance

- 1. Keep cover closed except when loading and unloading slides, samples and consumables.
- 2. Empty waste disposal drawer.
- 3. Change reference fluid every 12 hours.
- 4. Remove sample tubes when finished testing.
- 5. Clean any spills on the spotting slide transit area.

Element DC5X Veterinary Chemistry Analyzer Slides		Quantity Per Box
CAT 6330-ALB	Albumin	24/box
CAT 6330-ALP	Alkaline Phosphatase	24/box
CAT 6330-ALT	ALT (GPT)	24/box
CAT 6330-AMY	Amylase	24/box
CAT 6330-AST	AST (GOT)	24/box
CAT 6330-BUN	BUN	24/box
CAT 6330-CA	Calcium	24/box
CAT 6330-CHOL	Total Cholesterol	24/box
CAT 6330-CK	CK	24/box
CAT 6330-CREA	Creatinine	24/box
CAT 6330-GGT	GGT	24/box
CAT 6330-GLU	Glucose	24/box
CAT 6330-LDH	Lactate Dehydrogenase	24/box
CAT 6330-LIP	Lipase	24/box
CAT 6330-MG	Magnesium	24/box
CAT 6330-NH <sub>3</sub>	Ammonia	24/box + NH <sub>3</sub> control
CAT 6330-PHOS	Phosphorous	24/box
CAT 6330-TBILI	Total Bilirubin	24/box
CAT 6330-TP	Total Protein	24/box
CAT 6330-TRIG	Triglycerides	24/box
CAT 6330-UA	Uric Acid	24/box
CAT 6330-LYTES	Electrolytes	24/box
CAT 6330-PRESURG/EWRAP	Pre-Surgical Panel (ALP, ALT, BUN, CREA, GLU, TP)	72 slides/box (12 panels/box)
CAT 6330-EQ	Equine Panel (ALB, AST, BUN, CA, CK, CREA, GGT, GLU, LDH, PHOS, TP, T-BILI)	24 slides/box (2 panels/box)
CAT 6330-KIDNEY	Kidney Panel (ALB, BUN, CA, CREA, PHOS, TP)	24 slides/box (4 panels/box)
CAT 6330-LIVER	Liver Panel (ALB, ALP, ALT, GGT, GLU, T-BILI)	24 slides/box (4 panels/box)
CAT 6330-COMP/EWRAP	Comprehensive Panel (ALP, ALT, BUN, CREA, GLU, TP, T-BILI, ALB, PHOS, CA, CHOL, GGT)	72 slides/box (6 panels/box)
CAT 6330-PLUS	Plus Panel (LIP, AMY, MG, TRIG, AST, LYTES)	24 slides/box (4 panels/box)

