

Galaxy



CHECK LIST FOR ALL MAKES OF ROBOTS

- First time start-up settings done?
- Is sampler level?
- Is the milk line connected?
- Is air pressure to the shuttle correct?
- Are there enough bottles in the rack?
- Is spoon set in Position 1? End position should be number 119.
- If there is more than 1 robot, are the racks numbered accordingly (i.e. 1,2,3,4)?
- Is the rack type correct (i.e. 60 bottle)?
- After the first sample is taken, is there the proper amount of milk in the bottle?
- Is the robot off Pause?



Galaxy Procedures

1. In the Robot room, set wall switch to **Manual**.
2. Wait until milk pump is finished pumping and set milkbox to **Service**.
3. To open valve, set switch inside cabinet to **Service**.
4. Take plug out of rubber coupler, just below receiver jar.
5. *Before* placing shuttle, feed milkline through valve and place in hole of coupler.
6. Connect air hose.
7. Level and place shuttle.
8. Put switch in cabinet back to **Auto**.
9. Open the Saturnus program at computer and go to the **Sampling** screen.
10. Click on **Survey Sample** tab and click on the **Negative** sign to clear previous sampling (only way to create new date, program does this automatically).
11. Turn sample switch on the wall to **On**.
12. At the computer, click the refresh button and enter the date, time, rack (unique number) and first position.
13. To open gate for cows to come in, set milkbox switch to **Automatic**.
14. To release the robot arm, set wall switch back to **Automatic**.

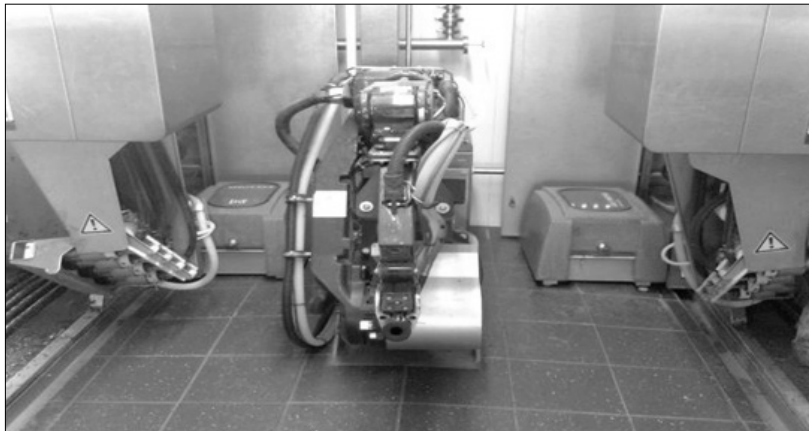
Note: When sampling is complete, be sure to wash out the milk hose in robot.



Shuttles Hookup



When entering the Robot room, let the arm finish attaching and then put switch into **MANUAL MODE**. This will park the arm and allow the cow to finish milking. For safety reasons, always put the robot in **MANUAL** or **PAUSE MODE** (see above).



Open the stainless panel door and place the shuttle next to the milk control box, in behind the robot arm as shown above.

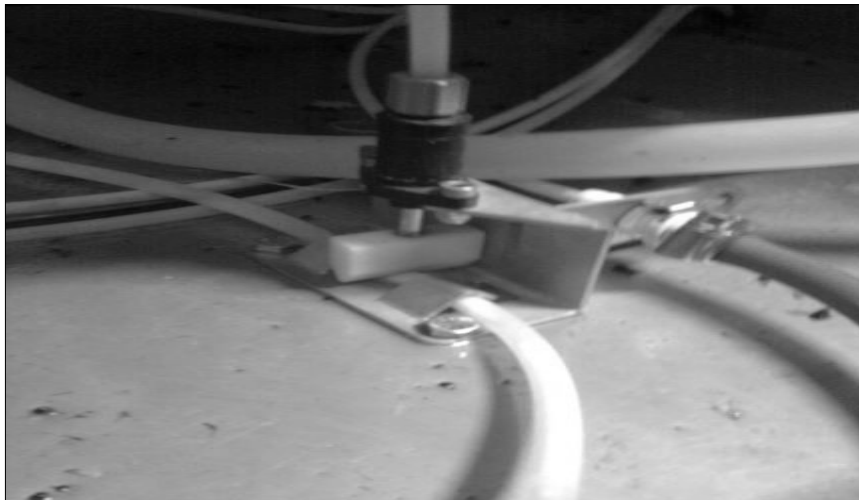
To Open Valve



Put the service switch located on the milk box in **SERVICE MODE** by pointing it towards the robot. See top of picture above (service switch is underneath the switch box).

Locate and activate a second switch inside the milk box cabinet door, about eye level height. This will open the valve and allow you to insert the milk hose (see below). If valve does not open, force open with a flat screw driver to insert the hose.

Attach to the bottom of the receiver jar by removing the plug (pliers maybe necessary to pull this out. This plug is not visible, and will have to be done by feel.) An open plug will be available that connects the hose to the jar. Hook up the air hose as shown below. Put both switches back to **NORMAL**.



One Time Setup for the Shuttle

Set the spoon movement in the robot to handle a 60 bottle, 2 notch/dump move between cows. You will find a small computer screen behind the milk box door that has 4 buttons and various menus on it. From the main menu in System Setup, use the up and down buttons, and look for Sample Dump. Press the OK button to highlight it and then set that to 22 2D using the arrow keys and OK button to accept.



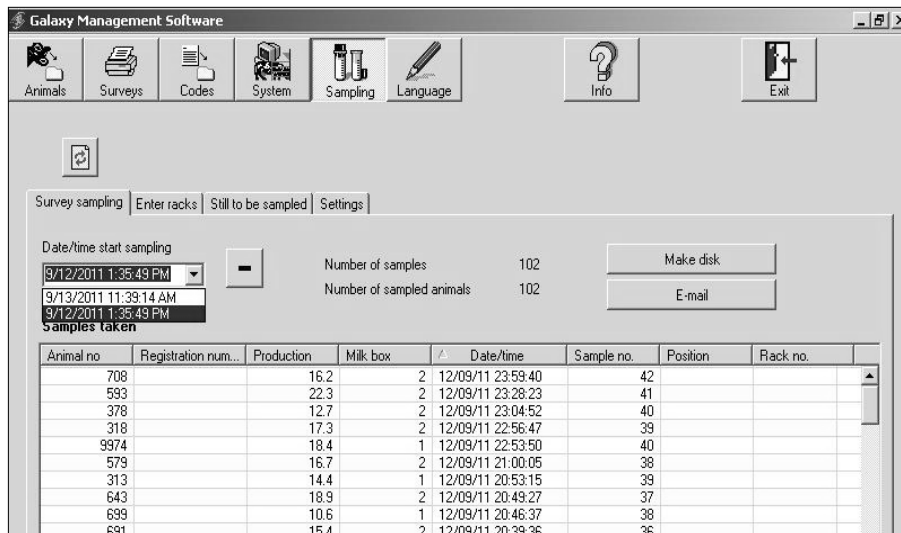


Raise the default for Sample Valve open time from 2.0 seconds to anywhere from 10.0 to 20.0 seconds, to allow the valve to open and let milk to flow into the spoon. This may need adjusting until the sample volume is correct (see above). The Stir time and Stir interval can be left at 10 and 40 seconds.

One Time Setup in the HJC Box

The HJC box (Hardware Jogging Control) box is located in the mechanical room and contains some system setup features. Look for Parlour Setup Submenu and an item called "Samples in Rack". This needs to be set at 0 to disable or at 58 or 59 in a 60 sample rack to set off the alarm.

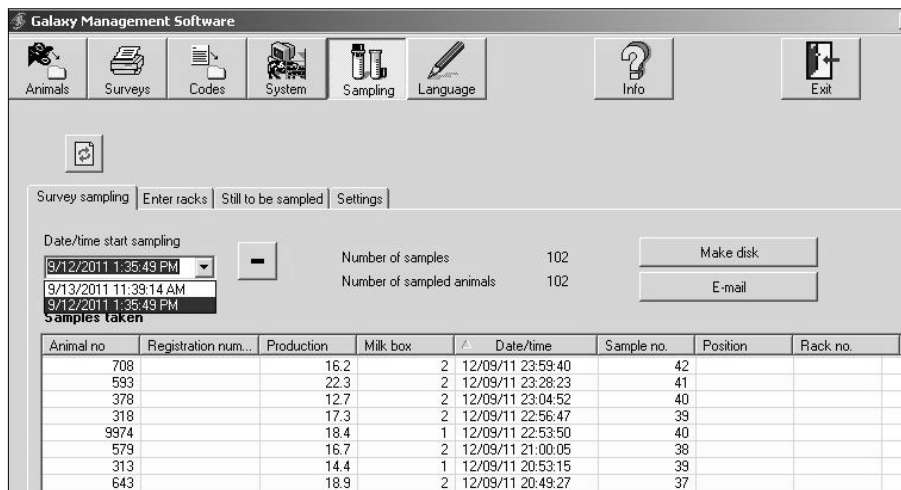
Begin Sampling



At the main computer, click on the **SAMPLING** icon. Highlight the date and click on the negative sign (-) to delete any previous sampling. Use the Reset Sample Time feature to restart a sampling session on the same day. It erases all rack info and allows cows to be re-sampled.

Enter Racks

Enter the rack numbers by clicking on the plus sign (+) sign and then check mark to accept. Do not enter the last position. Samples are unique and sequential (i.e. after bottle 60, it will go to 61, 62, etc.)



Activate the switch to Sampling On by the room entrance, to finally initiate the sampling process. Check your sampling screens (rack report) on the first cow sampled to ensure data is being captured. When the first cows are milked, switch the safety to **MANUAL** position in the doorway and determine if milk is flowing into the spoon and bottles. If insufficient milk, then check hose for restrictions and/or increase the sample open time by 5 seconds until correct.

Determine if you are going to have more than 60 samples (full rack). If yes, you may want to sample 5-10 cows, pull those samples and reset spoon back to position 1 in the shuttle and let the sampling continue. **DO NOT TOUCH** the SAMPLING ON switch or a new test will be started.



Re-sampling Cows

Animal no	Registration num...	Production	Milk box	Date/time	Sample no.	Position	Rack no.
708		16.2	2	12/09/11 23:59:40	42		
593		22.3	2	12/09/11 23:28:23	41		
378		12.7	2	12/09/11 23:04:52	40		
318		17.3	2	12/09/11 22:56:47	39		
9974		18.4	1	12/09/11 22:53:50	40		
579		16.7	2	12/09/11 21:00:05	38		
313		14.4	1	12/09/11 20:53:15	39		
643		18.9	2	12/09/11 20:49:27	37		
699		10.6	1	12/09/11 20:46:27	38		

If for some reason you want to re-sample a cow, then this is done under the animal icon.

Ending a Sampling Period

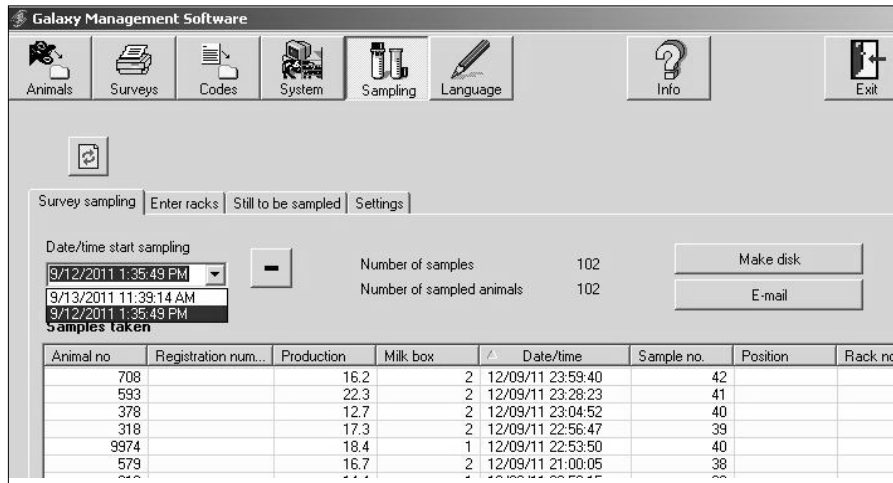
During the test, refer to the tab **STILL TO BE SAMPLED** to track the sampling progress. Ensure all cows pass through the robot before the sampling session is finished.

Milk Weights

Animal no	Registration num...	Production	Milk box	Date/time	Sample no.	Position	Rack no.
708		16.2	2	12/09/11 23:59:40	42		
593		22.3	2	12/09/11 23:28:23	41		

A milk weight report is found under the **SURVEYS** tab.





Print off the sample report and use the 24 milk yield for inputting into DHI. Compare it to the previous days production and the 10 day average for verification.

Using the rack report, assign the samples to the corresponding cow.

Ending the Sampling

Set the switch on the entrance door to **NO SAMPLING** and **MANUAL** as you disconnect the shuttle. You will need to open the valve using the service switches to remove the milk hose.

