Dohrect Enject 1010 Series
Reference Guide

Determining your Harvest Rate

1. By reading across, find the weight of your load.
   a. If the weight of your load is not listed, please round up to the next weight listed.
2. By reading down, find the time (in minutes) to load/unload.
   a. If the exact time to load/unload is not listed, please round up to the faster time listed.

Silage – Tons per Minute

		Tons per Load										
		4	6	8	10	12	14	16	18	20	22	24	26
Minutes to Load/Unload	10		0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6
	9		0.7	0.9	1.1	1.3	1.6	1.8	2.0	2.2	2.4	2.7	2.9
	8	0.5	0.8	1.0	1.3	1.5	1.8	2.0	2.3	2.5	2.8	3.0	3.3
	7	0.6	0.9	1.1	1.4	1.7	2.0	2.3	2.6	2.9	3.1	3.4	3.7
	6	0.7	1.0	1.3	1.7	2.0	2.3	2.7	3.0	3.3	3.7	4.0	4.3
	5	0.8	1.2	1.6	2.0	2.4	2.8	3.2	3.6	4.0	4.4	4.8	5.2
	4	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
	3	1.3	2.0	2.7	3.3	4.0	4.7	5.3	6.0	6.7	7.3	8.0	8.7
	2	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	
	1	4.0	6.0	8.0	10.0	12.0							

Tube Selection

1. After determining your harvest rate using the chart above, locate your mix rate on the top of the chart to the right.

2. Reading down, find your harvest rate best fitting within the range of one of the tubes.

3. After installing the proper tube size, be sure to change the tube setting on the console accordingly.

Mix Rates

Tube Size			100 Ton/Gal (1.28 oz/ton)	50 Ton/Gal (2.56 oz/ton)	25 Ton/Gal (5.12 oz/ton)	20 Ton/Gal (6.4 oz/ton)	10 Ton/Gal (12.8 oz/ton)
Orange	Low Ton/Min		2	1	0.5	0.5	X
	High Ton/Min		7	3.5	1.8	1.4	
Green	Low Ton/Min		3.3	1.7	0.7	0.6	0.5
	High Ton/Min		12	6.5	3.2	2.7	1.3
Yellow	Low Ton/Min		X	6	3	2.4	1.2
	High Ton/Min			12	9	7	3.5

Soft Key Functions

• Run/Hold key will toggle the Console **between** Run and Hold.

• Used to Start and Stop Calibrate.

• In the Rate Mode the operator may temporarily adjust the Mix Rate. The Console can be in either Run or Hold.

• In the Calibrate Mode, the DEC key is pressed to increase each Calibrate value and the longer the key is pressed the faster the value will change.

• In Hold and a counter (Total Volume, Total Tons) is selected, it can be cleared by holding the "-"/Reset for 1 second.

• In the Rate Mode the operator may temporarily adjust the Mix Rate. The Console can be in either Run or Hold.

• In the Calibrate Mode, the INC key is pressed to increase each Calibrate value and the longer the key is pressed the faster the value will change.

NOTE: TUBE SIZE (and TONS/MINUTE) must be entered before entering the Mix Rate because it is used to limit the range of Mix Rate based on the TUBE SIZE and TONS/MINUTE.
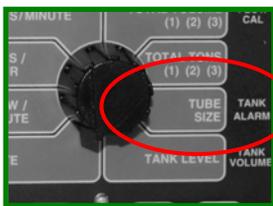

To Select Tube Size

Turn Rotary Switch to TUBE SIZE. While in HOLD (or Remote Hold) press the + **or** –⎸ RESET keys to select.

Setting/Adjusting Harvest Rate in Tons/Minute

To set/change TONS/MINUTE Turn Rotary Switch to TONS/MINUTE. While in HOLD or Run press the + **or** -⎸ RESET keys to change the value from 0.5 to 12.0 (fixed one decimal place) so the console can compute how much chemical to inject. If TONS/MINUTE is changed in the field the user must be careful not to exceed the limits for a particular TUBE SIZE.
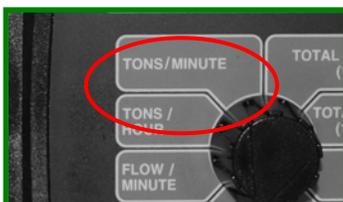
Harvest Rate in Tons/Hour

Turn Rotary Switch to TONS/HOUR mode displays the output from the Chopper in TONS/HOUR or TONNES/HOUR.

Selecting Mix Rate

Place console in HOLD. Press CAL for one second. Turn Rotary Dial to RATE. Press the + **or** -⎸ RESET keys to select one of the five available Target Mix Rate values. Press CAL for one second to save settings and exit.

Setting Tank Alarm

Place console in HOLD. Press CAL for one second. Turn Rotary Dial to TANK ALARM. Use the + **or** -│RESET keys to adjust the Alarm Set Point or to turn the Set Point to OFF. Press CAL for one second to save settings and exit. When OFF no alarm will be given as the Tank is emptied. Cycling power or going to HOLD (or Remote Hold) will not clear the alarm. The user can only clear the alarm by adjusting the Tank level above the Set Point or by turning the Set Point to OFF.
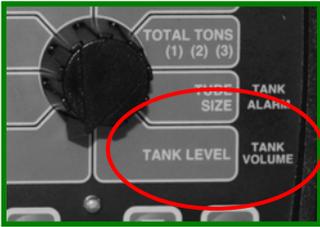
Setting/Adjusting Tank Volume

Place console in HOLD. Press CAL for one second. Turn Rotary Dial to TANK VOLUME. If a Tank Volume is specified, pressing both the + **and** -│RESET keys while in TANK LEVEL mode will make the Tank value jump to the filled TANK VOLUME value. The + **or** -│RESET keys can be used to adjust Tank to any value. Press CAL for one second to save settings and exit.

Flush Switch

When in HOLD (or Remote Hold) press and release the toggle switch. The console will turn on the clean water valve and run the pump at Maximum PWM for 60 seconds. It will display FLUSH in all rotary positions while it is flushing. Pressing the momentary Flush toggle while it is already displaying FLUSH, or holding the Flush toggle, will continuously reset the timer to 60 seconds and it will continue to flush for 60 seconds after the toggle is released.
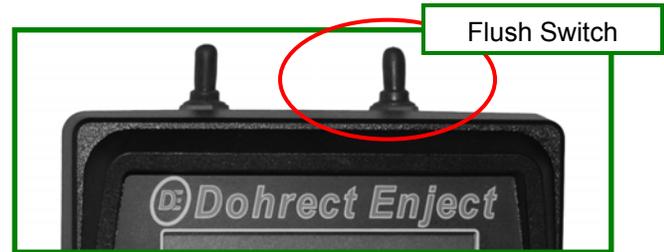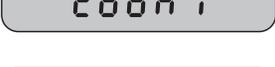
Flush Switch

Changing the Pumping Tube

On the cooler, turn the three way valve up to draw air and turn the applicator on to drain product out of the pump unit **or** for faster draining, disconnect the flush bottle from the pump unit and engage the Flush Switch. Once the unit has been drained, open the pump unit enclosure. Pull the front of the pump head towards you to access the pumping tube. On both sides of the motor, press the release tabs at the ends of the pumping tube. Remove the old pumping tube. Set the new pumping tube in place and insert the ends into their ports until it clicks. Once in place, push the front of the pump head closed. Close the enclosure door and remember to turn the three way valve back to draw from the cooler or reconnect the flush bottle hose to the unit.

Fine Tuning Flow Cal

To Fine Tune the Flow Cal Value
1. Make sure the English units are selected.
2. Set up a calibrated container (in tenths of Ounces) to capture the flow.
3. Turn the Controller on and enter the correct Tons/Minute while in Hold.
4. Select the TUBE SIZE (Orange, Green or Yellow) to be fine tuned.
5. Empty the calibrated container.
6. Clear a Volume counter by selecting the Total Volume position and pressing -│RESET key for 1 second (while still in HOLD).
7. Select the CAL mode and select the correct MIX RATE.
8. Select the Flow Cal position and the current Flow Cal value will be displayed. Press the CAL key to toggle the display to show Volume counter (in tenths of Ounces). The CAL icon should be flashing at this time and the Volume counter should read zero Ounces.
9. While still in Cal Mode go to Run to turn the pump on and capture the flow. The Volume counter with increment (in tenths of Ounces).
10. When the calibrated container is full (or at the desired level), select HOLD and the Volume will stop accumulating.
11. Use the + **and** -│RESET keys to adjust the Volume counter until it matches the actual volume in the calibrated container. This will automatically fine-tune the Flow Cal value.
12. Press the CAL key again to toggle the display to show the Flow Cal value and write it down for future reference. Exit CAL mode and the displayed Flow Cal value will be stored as the default for that TUBE SIZE.
13. Repeat Steps 1-12 for other TUBE SIZES if desired.
14. When finished Fine Tuning then clear the selected Volume counter since it will contain Ounces from the above procedure (not tenths of Gallons).

Display	Description
`Abort`	User has aborted the Flush operation.
`bAd` CAL	EEPROM check sum equals zero or fails at power up.
`CLEAr`	Warning than the user is about to Clear a counter.
`donE`	Finished initializing user defined Flow Cal defaults.
`EStoP`	Emergency Stop
`FILL`	Chemical Tank is below "Tank Alarm level.
`FLUSH`	Performing a Flush operation.
`Lo P`	Low Power.
`LOAd`	Default Cal Factors have been loaded.
`noFLo`	Warning that system is pumping air. *To override warning, press - │RESET key.
`noPunnP`	Console in RATE and in RUN but no Pump Tach is detected.
`OFF`	User is disabling the no Flo message.
`OFL`	Overflow in any display (greater than 99999).
`PULSE`	Shown at power up as a reminder this is a PWM Drive Controller.
`SPEC`	In "Special" Calibrate mode, unused position.
`tooHi`	Trying to enter a Tons/Minute or Tons/Hour that is too high.
`tooLo`	Trying to enter a Tons/Minute or Tons/Hour that is too low.
✳	Warn LED flashes when the Application Rate error is over 10%. On steady when in CAL mode.