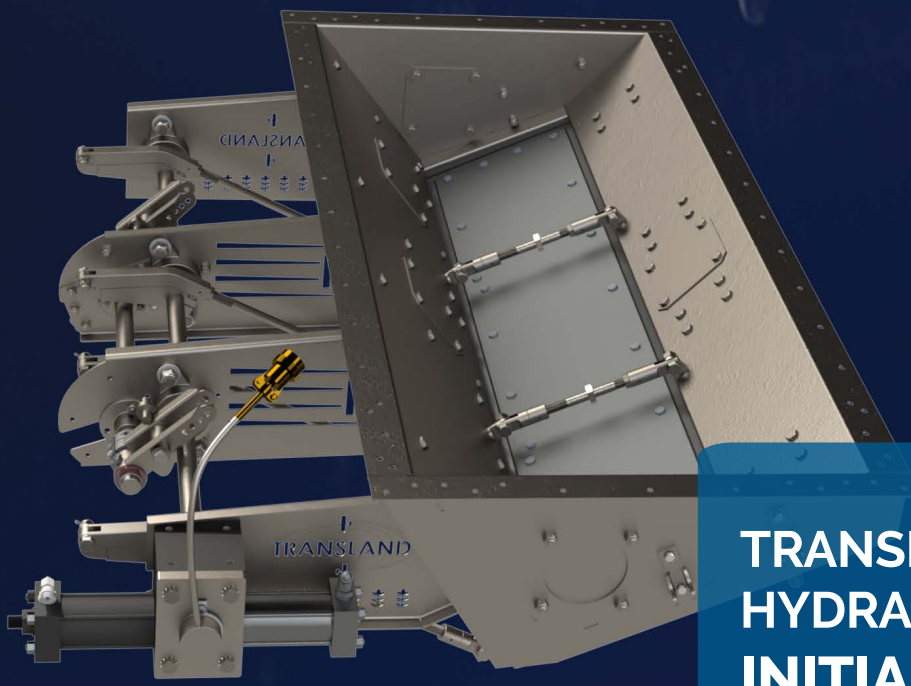
SATLOC® FALCON PRO



TRANSLAND HYDRAULIC GATE BOX **INITIAL SETUP** WITH SATLOC FALCON PRO

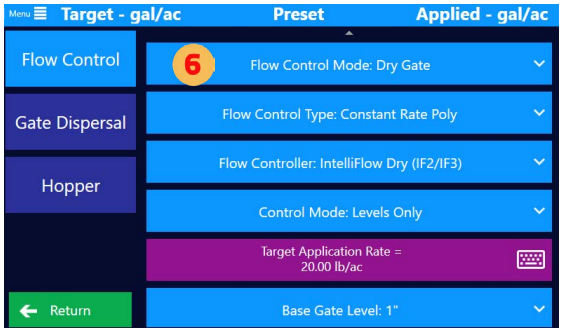
EXCERPT FROM
FALCON USER MANUAL
PN 875-3010-000, Rev B1

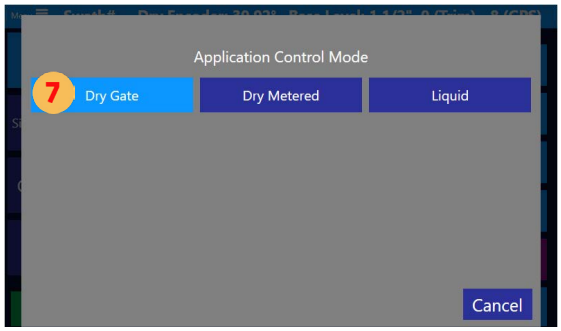
4.7 HYDRAULIC GATE BOX INITIAL SETUP

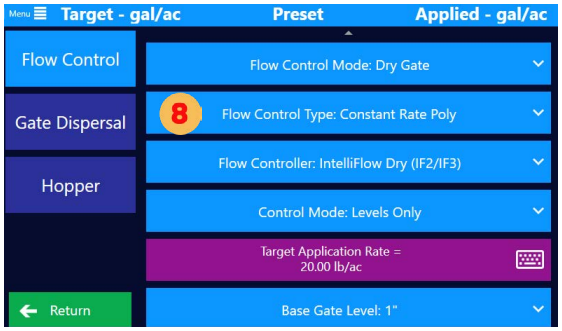
Selecting Flow Control Mode

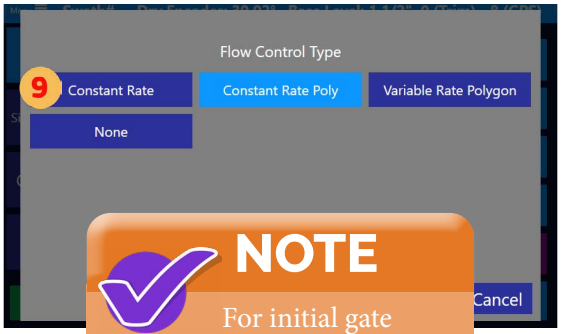
Note: This section only applies to Falcon Pro systems.

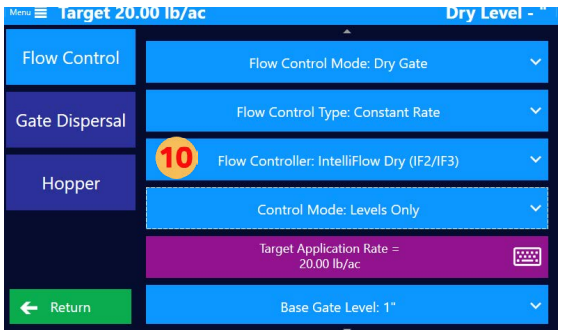
1. Tap 'Advanced'
2. Tap 'Visibility'
3. Tap 'Falcon Features'
4. Click the box for 'Control Mode: Dry Gate'
5. Go to Main Menu and tap 'Applications'
6. Tap 'Flow Control Mode'
7. Tap 'Dry Gate'
8. Tap 'Flow Control Type'
9. Tap 'Constant Rate'
10. Tap 'Flow Controller'
11. Tap 'IntelliFlow Dry (IF2/IF3)'





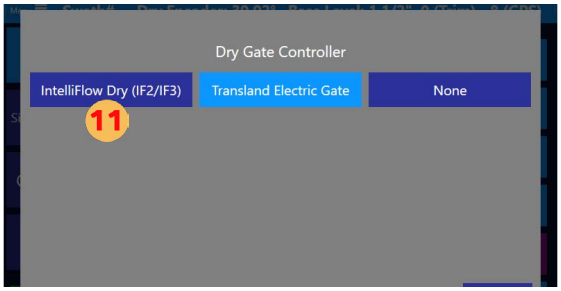






NOTE

For initial gate setup, select "Constant Rate." If your jobs contain polys, after initial setup, please change to "Constant Rate Poly."



Calibration

Note: This section requires two people.

12 Go to Main Menu and tap 'Devices'

13 Tap 'Gate Setup'

14 Tap 'Latched Encoder'

15 With the gate latched/locked closed, adjust encoder on the gate until the encoder range for the min value is 130-145. If value is not in that range, adjust position sensor to be within that range. The encoder value is adjusted by loosening the screws on the position sensor and rotating it until it is in the min value range.

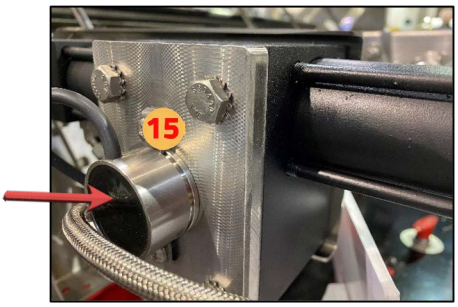
16 Set Latched Encoder number to match actual encoder value. Then, tap 'OK.'

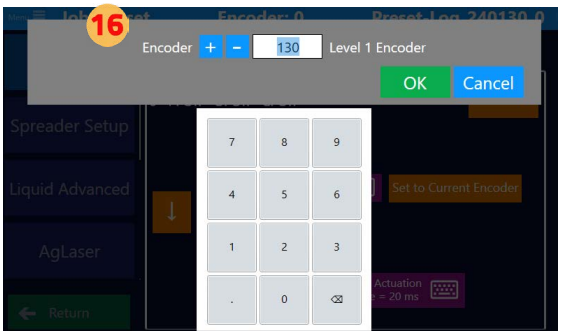
17 Tap 'Gate Calibration'

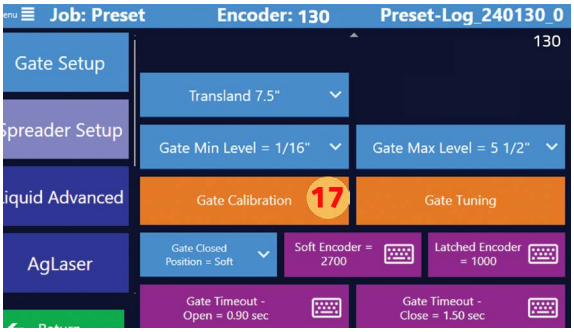
18 Tap 'Change'

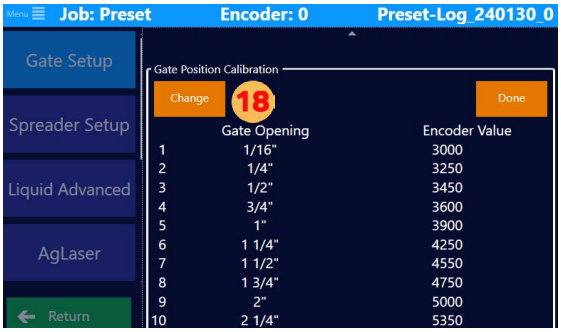
19 Tap 'Gate Actuation Time'

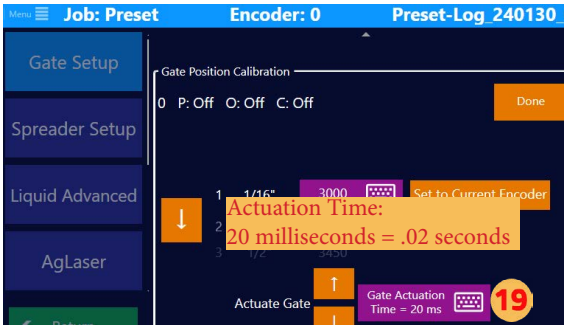
20 Set gate actuation time. Then, tap 'OK.'

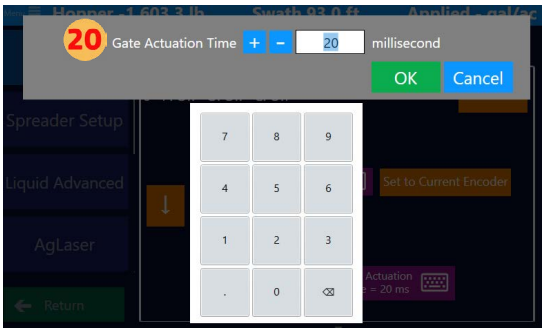












NOTE

The "Gate Actuation Time' button can decrease or increase the amount of time sending the command to the pump. Adjusting the time will allow less or more time to get the correct position.

21 In the cockpit, flip on the arm and pump switches.

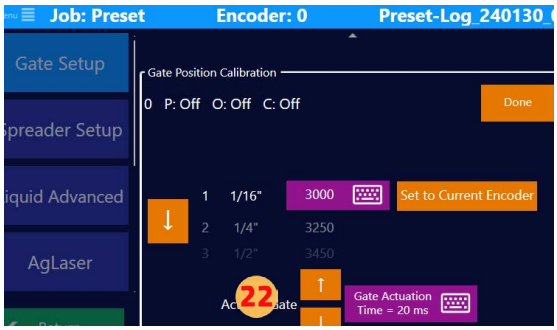
22 Tap the actuate arrows to actuate the gate box.

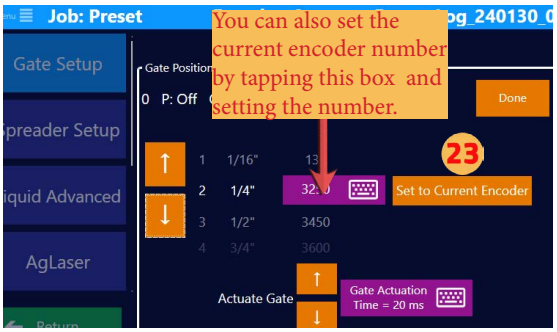
23 Set the gate box to match the current openings. To apply, tap 'Set to Current Encoder.'

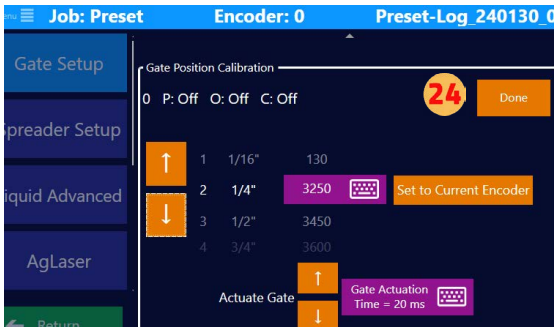
Tap side arrows to change openings or tap the encoder value button to make changes. Note: Repeat for each opening.

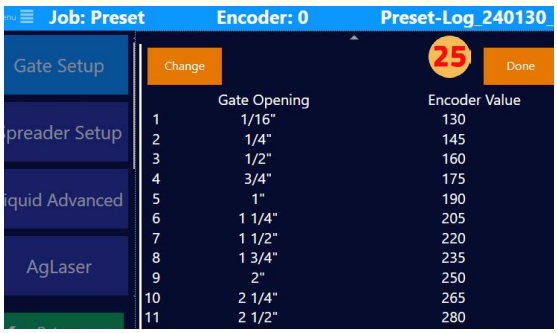
24 Tap 'Done' when each position is set.

25 Tap 'Done'









NOTE

It is optional to disconnect hydraulics and then manually adjust the gate. There is a hydraulic disconnect in the cockpit, which is usually a red knob.

NOTE

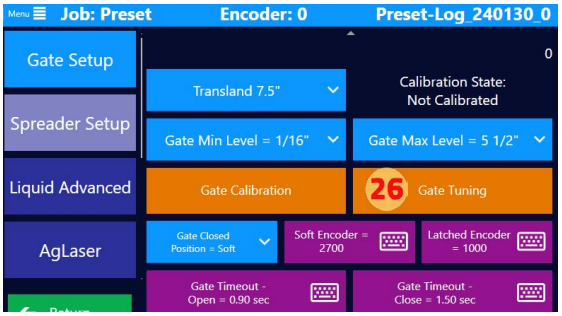
There are two ways to tune hydraulic gate: Auto Tuning and Manual Tuning.

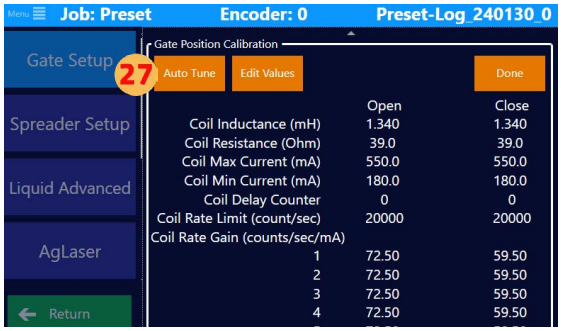
Auto Tuning

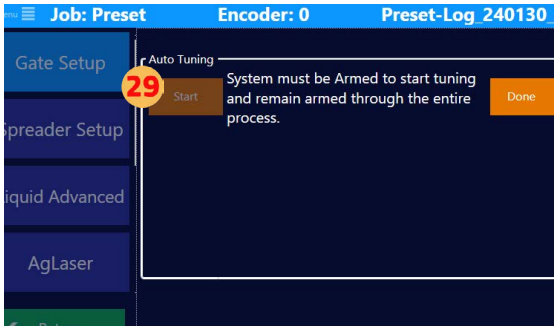
WARNING Gate will move automatically and without warning during this process. All people need to stay clear of the gate during this process.

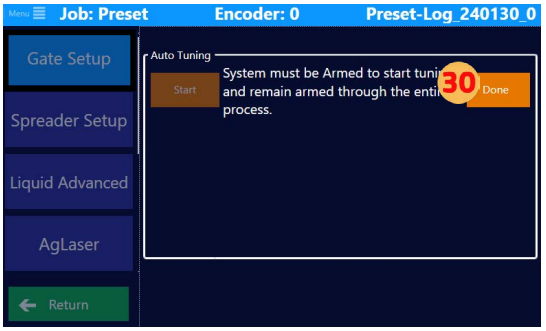
26. Tap 'Gate Tuning'
27. Tap 'Auto Tune'
28. In the cockpit, flip on the arm and pump switches.
29. Tap 'Start

    This will take a few minutes. When a bar is complete, it will turn completely blue.
30. Tap 'Done'
31. Unarm Gate





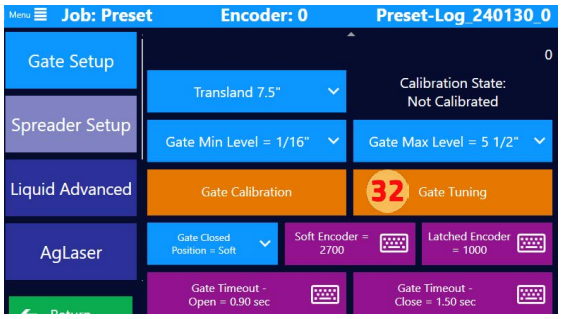


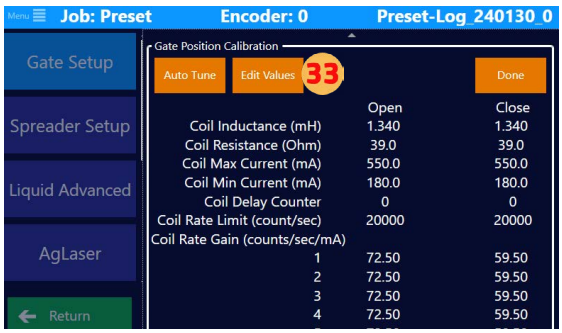


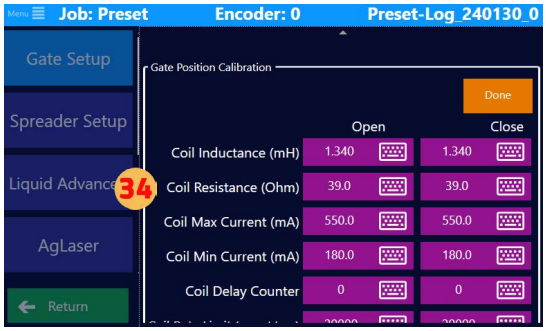
Manual Tuning

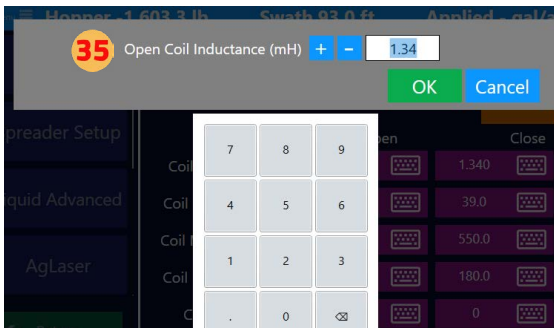
32. Tap 'Gate Tuning'
33. Tap 'Edit Values'
34. Manually set coil values by tapping a value and then editing it.
35. Input value. Then, tap 'OK.'

    Note: Repeat Steps 35 and 36 for every value you want to set.



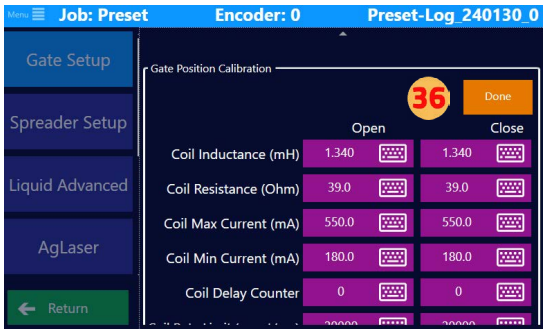


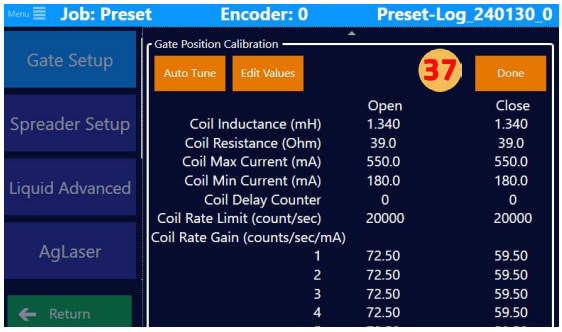




36 Tap ‘Done’ when all values are set

37 Tap ‘Done’





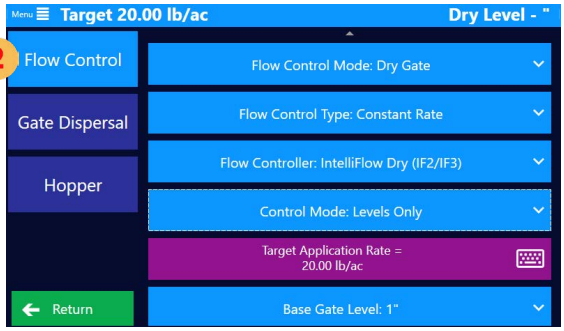
4.8 LEVELS SETUP FOR HYDRAULIC GATE

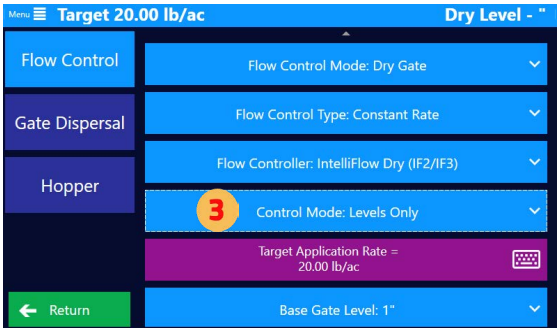
Key Differences in Levels vs. Single Profiles

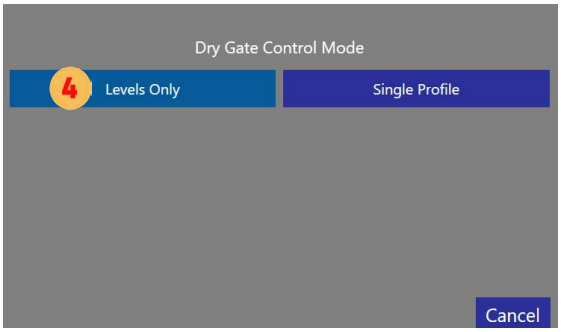
- Standardization vs. Customization: Levels are more about standard, preset options, while single profiles offer more room for customization and fine-tuning.
- Ease of Use vs. Precision: Levels provide ease of use and quick selection, useful in general or less sensitive applications. Single profiles, on the other hand, offer greater precision, which is beneficial in more specialized or sensitive applications.
- Application Scope: Levels might be sufficient for general agricultural needs, while single profiles could be necessary for tasks requiring more precise control over material distribution, such as in areas near sensitive ecosystems or when applying high-value or highly potent materials. There are multiple single profiles built within the Falcon software that can be used or edited to a pilot's preferences.

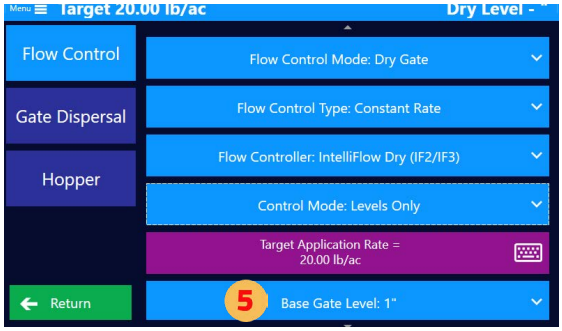
1. Tap 'Application'
2. Tap 'Flow Control'
3. Tap 'Control Mode'
4. Tap 'Levels Only'
5. Tap 'Base Gate Level' and set it
6. Select the 'Target Application Rate'

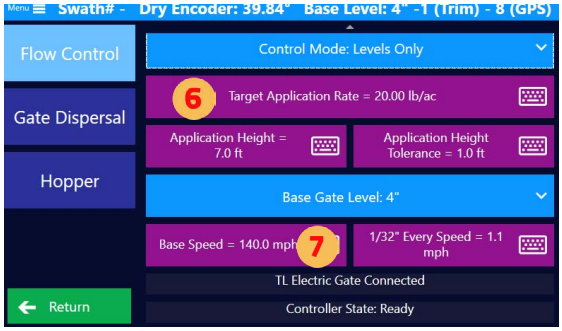
   Selecting the target gate level will automatically set a 'default every speed.'
7. If you want to change the base speed, Tap 'Base Speed' and set it.











NOTE

Target Application Rate

The target application rate is the input to the hopper calculation for the remaining product.

Reset Dry Gate Area & Total Dry Gate Time

At the bottom of the dry gate flow control screen, a pilot can reset the total dry gate area and the total dry gate time.

TIP

If Ag Laser and Wind Offset are turned on in your aircraft, you can set 'Application Height' and 'Application Height Tolerance.'

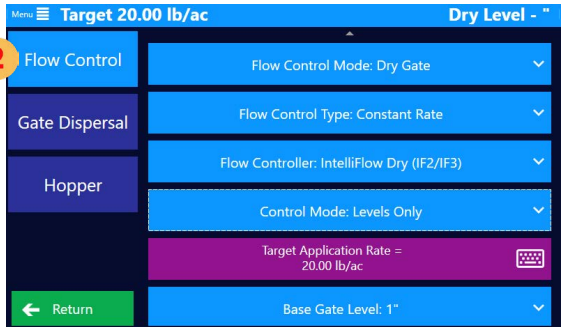
4.9 SINGLE PROFILE SETUP FOR HYDRAULIC GATE

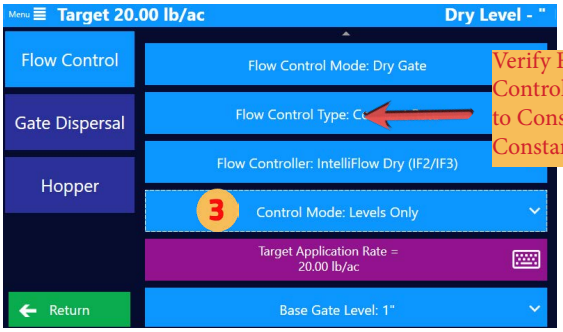
Key Differences in Levels vs. Single Profiles

- Standardization vs. Customization: Levels are more about standard, preset options, while single profiles offer more room for customization and fine-tuning.
- Ease of Use vs. Precision: Levels provide ease of use and quick selection, useful in general or less sensitive applications. Single profiles, on the other hand, offer greater precision, which is beneficial in more specialized or sensitive applications.
- Application Scope: Levels might be sufficient for general agricultural needs, while single profiles could be necessary for tasks requiring more precise control over material distribution, such as in areas near sensitive ecosystems or when applying high-value or highly potent materials. There are multiple single profiles built within the Falcon software that can be used or edited to a pilot's preferences.

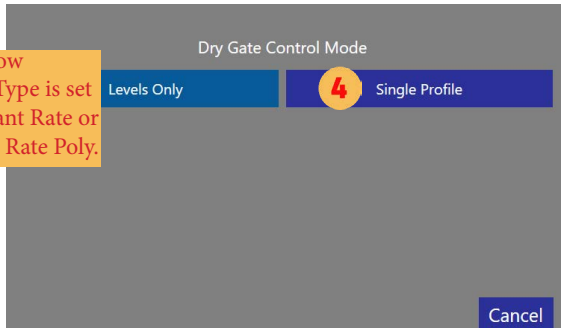
1. Tap 'Application'
2. Tap 'Flow Control'
3. Tap 'Control Mode'
4. Tap 'Single Profile'
5. If you want to alter the product that is selected for the single profile in any way, tap 'Single Profile Settings.'

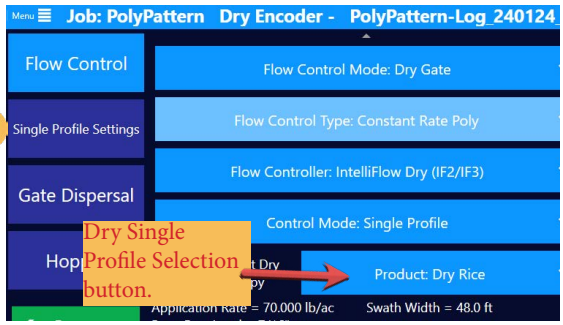
   You will need to copy a default dry profile into an editable profile.
6. Tap 'Edit Profiles'
7. Tap 'Copy'
8. Name the Dry Product Profile and tap 'OK.'



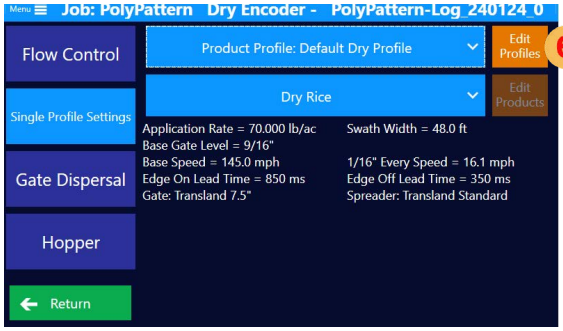


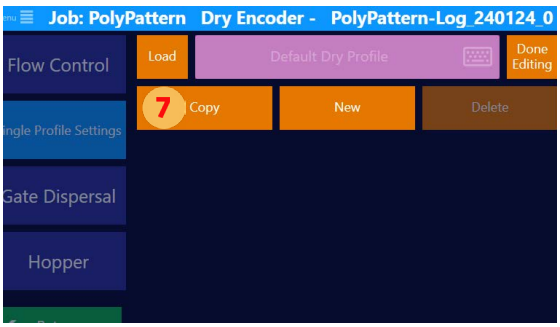
Verify Flow Control Type is set to Constant Rate or Constant Rate Poly.

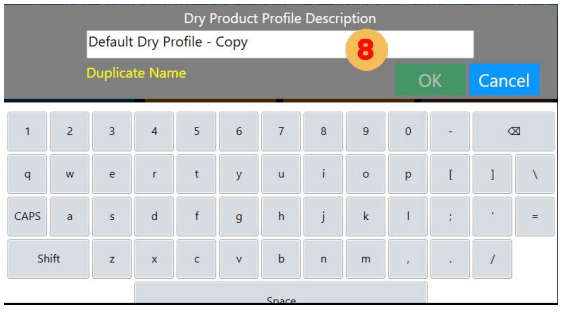




Dry Single Profile Selection button.







9 Tap 'Done Editing'

10 Tap 'Edit Products'

11 Load the Product you want

12 Edit the various settings per usage preferences