## Sentinel Flow Adjustment - fine-tuning the Sentinel flowmeters

Rate Setup Prior to Version 1.3.0	
Prod Setting Pate Smoothing   1 Avg 5.00 10 % V   Presets Presets V	
2 Avg 🗘 5.00 10 %	
3 Avg \$ 5.66 10 %	
4 Avg \$ 5.88 10 %	
Flow AdjustmentProd1Prod2Prod3Prod41.001.001.001.00	12:06pm
Product 2 2-Product 2	
Rate Mode Rate Rate Smooth   User Def 5.00 10 %   Flow Adjustment Reset For Smooth   1.00 10 % ✓	ABCD
User Defined Manual Rates 5.00 10.00 15.00 First Last	DCBA
Outside Row Rates X 1.0 X 1.0 Control Integral (Ki) 0.10	
Interplant Mode Disabled	5
Version 1.3.0	11:22am
Sentinel	
Row Detail Prod # 1 Row # 4	
Flow GPA: 0.0 Voltage: 13.5 Flow Oz/Min: 0.0 Temperature Flow LPM: 0.0 DEG F: 89.6	
Filow Entropy   0.00 Reference     Error Code:   0x00 Value.   0     Row Error %:   0.0 Flow Adj:   1.00     Flow Total:   0.00 GAL	
ENABLED SN: Flow Override ManByVer: ManByVer:	
Control Module Debug Information Valve Error: 0 Motor Spd%: 0.00	
SP Err(mL): 0.0	
Vlv Open %: 0.0 Curr Counts: 0	9:47am

## When Sentinel Row Monitoring is being used, at times there may be a slight discrepancy between the flow or rate shown by the main flowmeter on the Rate Control system and the Sentinel flowmeter modules on the row. First, be sure the main

flowmeter is measuring accurately.

**Flow Adjustment** - Use this to synchronize the Sentinel flowmeter modules with the main system flowmeter. Once the accuracy of the main flowmeter has been confirmed, change the Flow Adjustment factor as needed to synchronize the Sentinel reading with the main flowmeter reading.

Main Flowmeter GPM (or GPA)

Sentinel Total Flow GPM (or GPA) =

## Flow Adjustment Factor

(If different from 1.00, this should not be much different. Generally, will be between 0.95 and 1.05.)

Beginning with version 1.3.0, Sentinel has the ability to fine-tune the flowmeter on each row.

## An example might be like this while using **Row** Monitoring:

Row 7 always shows that it is a little low. Do a catch test with Row 7 and several other rows to verify if it is actually low. If it is low, check the plumbing and take steps to increase the flow on that row.

If the catch test shows that Row 7 actually is putting out the same as the other rows, go to the **Row Detail Screen and Pause Row Scan** and use the *Flow Adj* feature. Increase the Flow Adj. Factor from 1.00 to 1.05. Adjust as needed to get that Row to display correctly.

For Sentinel Row Control: If catch tests show that a row is not putting out the right amount, go to the Row Detail Screen, pause Row Scan, and change the Flow Adj number. Increase the number if that row needs to put out more. Decrease the number if that row needs to put out less.