

ce Company of Iowa Crop Year:



| Farm Name:     | Harvest                        | Harvested Crop:             |                                 | Scale Source:                    |                            | el: Monitor Type:  |
|----------------|--------------------------------|-----------------------------|---------------------------------|----------------------------------|----------------------------|--|
| Multi-Point    |                                | Single Poi                  | nt [                            | Self-Ca                          | librating                  | <ul> <li>Remember</li> <li>You must calibrate at the start of harvest</li> <li>Indicate which calibration you've performed via the appropriate checkbox</li> <li>Only reference Machine Speed column for multi-point calibrations</li> </ul> |
| Machine Speed  | Machine<br>Displayed<br>Weight | Scale<br>Measured<br>Weight | +/- Difference<br>(Weight/Pct.) | Avg. Crop<br>Moisture<br>Percent | Calibration<br>Time & Date |  |
|                |                                |                             |                                 |                                  | Time                       |  |
| +0.5 MPH       |                                |                             |                                 |                                  | Date                       | Single Point or Self-Calibrating: FINAL calibration or calibration check must be within 3.0% at  |
| Normal Harvest |                                |                             |                                 |                                  | Time                       | each speed   |
| Speed          |                                |                             |                                 |                                  | Date                       | Multi-Point: FINAL calibration check for each speed used must be within 3.0%   |
|                |                                |                             |                                 |                                  | Time                       |  |
| -0.5 MPH       |                                |                             |                                 |                                  | Date                       | After Harvest 1. Review precision harvest data   |
|                |                                |                             |                                 |                                  | Time                       | 2. Submit harvest data and copies of your  |
| -1.0 MPH       |                                |                             |                                 |                                  | Date                       | calibration reports to your FMH agent through<br>your FMH Policyholder Center account.   |
|                |                                |                             |                                 |                                  | Time                       | 3. Submit planting data if you haven't already.  |
| -1.5 MPH       |                                |                             |                                 |                                  | Date                       | See www.FMH.com  |
|                |                                |                             |                                 |                                  | Time                       | Policyholder Login<br>Crop Insurance Required Documents<br>In the event of a claim or APH review, please note  |
| -2.0 MPH       |                                |                             |                                 |                                  | Date                       |  |
|                |                                |                             |                                 |                                  | Time                       |  |
| -2.5 MPH       |                                |                             |                                 |                                  | Date                       | FMH will furnish copies of any maps or completed<br>calibration reports you provide if you send the<br>data electronically via your Policyholder Center  |
|                |                                |                             |                                 |                                  | Time                       | account.   |
| MPH            |                                |                             |                                 |                                  | Date                       | <ul><li>Plant map</li><li>Harvest map</li></ul>  |
|                |                                |                             |                                 |                                  | Time                       | Combine calibration reports  |
| MPH            |                                |                             |                                 |                                  | Date                       | Difference Percentage Calculation for<br>Weight Accuracy Check   |
|                |                                |                             | 1                               |                                  | Time                       |  |
| MPH            |                                |                             |                                 |                                  | Date                       | 100 x (Machine-Displayed Weight – Scale-Measured<br>Weight) / Scale-Measured Weight = Difference %   |



# **Calibration Checklist**

# FMH PRECISION SOLUTIONS

Questions? Contact FMH's Precision Support Team at (800) 260-8366

# Instructions

This document will help you perform the steps necessary to properly calibrate single point, multipoint or verify self-calibrating combine yield monitor systems. **The final calibration must be within 3.0% accuracy.** For multi-point systems, each speed used must be calibrated within 3.0% accuracy.

**Complete weight calibrations when you begin harvesting each new crop.** The previously recorded data will not be adjusted to reflect the new calibration.

IMPORTANT! Refer to your manufacturer specifications prior to completing the Calibration Checklist! Please check each applicable box to confirm you have performed the necessary steps.

# **Acceptable Scales**

- 1. Non-portable on-farm scales
- 2. Commercial elevator scales
- 3. Stationary Grain Carts, provided the grain cart meets the specifications outlined in the Loss Adjustment Manual Standards Handbook



#### **Best Practice Recommendations**

#### **Single Point**

**Before calibrating, ensure the combine grain tank and unloading auger tube are empty**. Also ensure that the weigh wagon or truck is empty.

**Operators must maintain a consistent ground speed and keep the combine at full capacity during Standard Calibration**. While completing this calibration (i.e. High Flow), operate the combine at the maximum speed you expect to drive in that crop and condition. Calibration loads should weigh at least 3,000 pounds. To achieve the best results possible, ensure that the scale source has also been calibrated.

**The Standard Calibration procedure must be performed for each crop harvested**. In addition, the optional Low Flow Calibration procedure may be performed to improve the accuracy in situations of large variations in grain flow.

# **Multi-Point**

**Perform 5 to 7 calibration loads at the beginning of the season for each crop harvested.** Doing so provides the system the ability to capture a range of grain flows at different machine speeds, and better interpret non-calibration grain flow rates throughout the season.

**Ensure the machine speed (flow rate) is consistent during the calibration load, and harvest at least 3,000 pounds.** Calibration loads must be uniform in size - for best results, consider harvesting no more than 8,000 pound calibration loads.

**Recalibrate and/or confirm calibrations if you experience anomalies in your load values** (i.e. if the test weight changes are more than 6-8 pounds, or the moisture changes are more than 8-10 points on average). To ensure this, complete the calibration process in a representative area of the field using a properly calibrated weigh wagon.

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# **Verification Checklist**

## 1. Temperature Calibration

- Complete this step once annually.
- Do not perform temperature calibration when sensor is in direct sunlight.

## 2. Mass Flow Vibration Calibration

- Calibrate to manufacturer specifications.
- Complete this step for each harvested crop.
- This calibration will be saved in the combine setup under the identified crop. Be sure to select the current crop.

#### 3. Moisture Sensor Correction

- Complete this step once per season for each harvested crop.
- Temperature calibration should be completed before this correction. Be sure to set the moisture correction value to 0.0 before beginning the process.

## 4. Weight Calibration/Accuracy Check

- RMA requires the monitor displayed weight be within 3.0% accuracy. To verify the accuracy of the monitor, check the machine displayed weight against another scale source and track on the verification report on the reverse side of this form. If the checked weight is not within the 3% tolderance, continue to weigh loads and track them until the monitor is within the tolerance. Once you are within the tolerance, no further accuracy checks are required for that crop for the remainder of the year.
- Difference Percentage Calculation for Weight Accuracy Check. To determine accuracy, you must calculate the difference percentage. Use the following calculation on the reverse side of this form: 100 x (Machine-Displayed Weight -Scale-Measured Weight) / Scale-Measured Weight = Difference %

\*Check the box on the reverse side to indicate which calibration or verification you've performed (e.g. multipoint, single point, or self-calibrating verification)