

Multi-Point Calibration Checklist



Farmers Mutual Hail
Insurance Company of Iowa

Instructions

This document will help you perform the steps necessary to calibrate a multi-point combine yield monitor system. This document does not outline the steps for a single point combine yield monitor system. For these, please contact your agent for the appropriate calibration report.

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

Best Practice Recommendations

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.

For FMH policyholders, **maintain a calibration report each year to be able to provide proper documentation in the event of a claim.** On the reverse side of this document, you will find a log that can be used to capture the required information for each load, as determined by loss procedures.

Calibration Checklist

- ☐ **1. Temperature Calibration**
 - Perform 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 under the crop identified in the combine setup. 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**
 - Complete this step for each harvested crop.
 - Calibration loads must be uniform in size and weigh over 3,000 pounds.
 - Mass Flow Vibration and Moisture Sensor Temperature calibration must be completed before Weight calibration.
 - Ensure 5 to 7 calibration loads are 'checked' on the monitor before performing the calibration.

Multi-Point Calibration Report



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Crop Year:	Harvested Crop:	Scale Source:	S-Series Model:	Farm Name:
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Calibration Date & Time	Field Name	Machine Speed	Machine Displayed Weight	Scale Measured Weight	+/- Difference (Weight/Pct.)		Avg. Crop Moisture Percent
		+0.5 MPH					
		Normal Harvest Speed					
		-0.5 MPH					
		-1.0 MPH					
		-1.5 MPH					
		-2.0 MPH					
		-2.5 MPH					
		____ MPH					
		____ MPH					
		____ MPH					

Single Point Calibration Checklist



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Instructions

This document will help you perform the steps necessary to properly calibrate a single point combine yield monitor system. This document does not outline the steps for a multi-point combine yield monitor system. For this, please contact your agent for the appropriate calibration report.

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

Best Practice Recommendations

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

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 rate.

For FMH policyholders, **maintain a calibration report each year to be able to provide proper documentation in the event of a claim.** On the reverse side of this document, you will find a log that can be used to capture the required information for each load, as determined by loss procedures.

Calibration Checklist

- ☐ **1. Moisture Sensor Calibration**
 - Complete this step once per season for each crop harvested.
- ☐ **2. Yield Calibration – Standard**
 - Calibrate to manufacturer specifications.
 - Perform for each crop harvested.
 - Calibrate at normal harvest speed in consistent conditions and uniform yields, and avoid harvesting end or point rows.
- ☐ **3. Yield Calibration – Low Flow**
 - This step is optional and is not required by the manufacturer's recommendations.
 - The procedure should be performed at approximately one-half to two-thirds of ground speed at which the Standard Calibration procedure for this crop and condition was performed, as well as in an area that is reasonably level and uniform in yield.
 - Be sure to record the original and new "Flow Comp Number" found on the display – this is different from the Standard Calibration procedure.

Single Point Calibration Checklist



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Crop Year:	Harvested Crop:	Scale Source:	Combine Model:	Farm Name:
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