



# Installation & Guidance

71 MADE IN BRITAIN

# Welcome



# TIPS FOR OPTIMUM ACCURACY

FeedAlert Silo monitoring provides reliable data based on the basic set-up process however there are techniques that can further improve the accuracy.

**FeedAlert Inventory Control Solutions have been** designed for low-cost silo monitoring, timely alerts aid feed management for just in time, optimised deliveries.

Capture and Envision provide reliable data, accuracy is reliant on a successful installation and there are techniques you can follow to enhance this, installation time allowing, so please take the time to read the guidance in this manual for optimum set-up.

### What's in this booklet

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- 9 10 Silo set-up can be undertaken via the App or local display

After the initial set-up, all you need to do is use the silo and monitor the data.

If you're not getting the desired accuracy, get in touch with the team on 01995 606 451 and we'll review your installation.

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### HE SOONER YOU ZERO THE BETTER

- As soon as the silo becomes empty, zero it!
- The zero continues to run until it identifies a fill.
- / If the system can zero a full 24 hours or more, during this period the gauge evaluates a range of environmental conditions to establish the best data point.



### FIRST FILL

On the first fill ensure the delivered load is greater than 50% of the overall silo capacity, the bigger the load relative to silo capacity, the better.

#### ፳ IF TIME ALLOWS

Allow a full 24 hours for the zero, pre fill, as above and when the silo has been filled, leave it to settle and calibrate the silo in the evening conditions, prior to discharge.

Post fill; Silo operation best practice recommends to draw off some material from the silo as soon as possible to de-layer the material after the filling process, discharge can be monitored and calibration weight adjusted accordingly to retain accuracy.

### **GOING FORWARD**

Just top up your silo as required, you don't need to do anything, the App or Display will add the delivered load to the remaining product at the next daily weight capture.

#### $\bigcirc$ BEST PRACTICE

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Make sure the product saved in the App is what is being stored in the silo, as product density is relative to what weight of feed will fit in the free space.

/ If your silo becomes empty it is always good practice to zero and re-calibrate, realigning the system, ensuring accuracy and reliability.

#### **TERMINOLOGY EXPLAINED**

- / Zero Zeroing a silo sets an empty point, so when product is added, it is only that which is being weighed.
- **Calibrate** Calibration is the process of aligning the accuracy of the unit. You calibrate using the known weight of product delivered into the silo, this determines the scale for future readings.

### TOP TIPS

Once you're up and running in the app it's a good time to...

- / Rename your silos
- Check the correct feed type is saved for each silo
- Share data with your team and invite users



# Preparation



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The guidance cards will give you step by step instructions for best practice installation of your FeedAlert system.

Identify which leg you are going to install the system on, where possible choose a leg clear of obstructions such as a filler or exhaust. See reverse for the guide to hardware positioning.



Once you've identified where the hardware will be positioned, clean the surface to remove any build-up of dirt. It is important that the surface the sensor is being mounted to is flat and clear of any dirt in order for the sensor to make good contact with the silo leg.



Follow the installation relevant to your leg structure, flat or round, to fit the hardware.



Once installation is complete, follow the Quick Start Set-up Guide to get the silo ready for use.

The silo needs to be:

- / Zeroed prior to filling
- / Filled with max weight possible, this must be greater than 50% of capacity
- / Calibrated 15-30minutes after filling with known delivery weight

5 You're ready to monitor, simply check the display or for added convenience the FeedAlert App.

### Collinson leg

Mark the position for your hardware.

- / The sensor should be mounted between 1m & 2m from ground level and be centered between the first horizontal strut and the angle brace below.
- / Ensure the distance between the unit and sensor is no greater than the connecting cable length.
- / The Capture system display can be positioned in a convenient location for visual access.



FEED

### Other manufacturers leg

Mark the position for your hardware.

- / Support legs fitted to other manufacturers silos may be made from either round or square tubular section, RSA or roll formed sheet steel.
- On these silos the sensor should be positioned mid-point or as close as possible to a midpoint between 2 horizontal or diagonal braces low enough down on the structure to enable easy access.



# Installation FLAT LEG



Feed 2 x zip ties through slots on mounting bracket and wrap around silo leg or horizontal strut. Pull zip ties tight to secure in place.



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Position FeedAlert unit over mounting bracket and secure using screws provided.





### **Sensor Installation**



Mark a centre line on the silo leg which the sensor will be mounted to then place the adhesive drilling template on the centre of the silo leg. Ensure the sensor and enclosure position is no greater then the connecting cable length.



Use the centre punch and a hammer to mark a drill point on the centre of the 4 crosses through to the leg. Drill through the leg with the 6.5mm drill bit. Peel off the template and carefully debur the holes on both sides. Make sure the leg is clean and dry before moving onto the next step.



Mount the sensor using the 4x 6mm cap head screws and the captive nut plates.



Tighten the fixings, finger tight initially, and then gradually increase the tightness evenly using the hex key in a diagonal pattern.

The aim is to have the sensor clamped firmly to the silo leg without inducing any tension in the sensor through uneven tightening of the fixings.



The final stages of tightening should see the hex key deflect approx. 10° once the screw has stopped turning under normal hand pressure without any additional leverage being applied.

Alternatively, you can set the final torque to 16Nm -20Nm using a torque wrench.



Plug the sensor into Port 1 on the FeedAlert unit. Follow the Quick Start to set your system up, ready for use.

# Installation ROUND LEG





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Feed 2 x zip ties through slots on mounting bracket and wrap around silo leg or crossbrace, model dependent. Pull zip ties tight to secure in place.



Position FeedAlert unit over mounting bracket and secure using screws provided.





### **Sensor Installation**



Fasten 2x U-bolts and 2x fixing clamps to the silo leg. Fasten alignment plate to the fixing clamps using the hex head screws. Ensure the sensor and enclosure position is no greater than the connecting cable length. Loosely tighten locknuts using a 13mm spanner until resistance is felt.



Remove the alignment plate and fasteners – replace with sensor and socket head screws. Finger tighten until resistance is felt.



Fully tighten locknuts in a diagonal pattern.



Use the hex key to gradually increase the tightness of the socket cap screws evenly in a diagonal pattern.

The aim is to have the sensor clamped firmly to the fixing clamps without inducing any tension in the sensor through uneven tightening of the fixings.



The final stages of tightening should see the hex key deflect approx  $10^{\circ}$  once the screw has stopped turning under normal hand pressure without any additional leverage being applied

Alternatively, you can set the final torque to 16-20 Nm using a torque wrench.



Plug the sensor into Port 1 on the FeedAlert unit. Follow the Quick Start to set your system up, eady for use.

# **Quick Start Guide** Let's get ready to monitor

The hardware can be installed at any time. The silo must be completely empty to start the set-up procedure. When you're ready, power the system up and follow these simple steps to get up and running. This can be done via the App or, if you have one, the local display.





# Download the App and access data 24/7.





### Work smarter not harder. #SmartSilo

If you need us we're here to help. Get in touch on **01995 606 451** 

