Technote 19008

Product Calibration Errors

20 January 2022

Symptoms

Belt sensor or Wheel speed sensor issues

Product Cal factor is unknown

Product Cal factor variations, caused by moisture and/or other environmental factors

Using a fertiliser that is not in the preset list

Using a product that is a blend e.g 50% Urea and 50% MOP

Notes

If Belt speed and Wheel speed sensors are functioning correctly, run Static Calibration Test

(See *Technote 19009- Proximity sensor reading incorrect*)

Procedure

Should be done with spreader parked up against the pile

WARNING:

PLEASE MAINTAIN ADEQUATE DISTANCE FROM THE REAR OF THE MACHINE AND THE CONVEYOR SYSTEM DURING ANY MACHINE OPERATION

From the menu screen tap **MACHINE->PRODUCT** Make sure the correct product has been selected and the spread width and door height are entered

You must prime the belt before starting the test, e.g there must be fertiliser falling evenly off the belt onto the spinner

To prime the belt, **CHECKS->BELT**

Turn on the hydraulic flow to the belt

Send a manual command of 100, the belt will start to turn. Run the belt for 2-3 seconds to prime the belt. When the fertiliser is falling evenly onto the spinner, cancel the manual command, the belt will stop.

Turn on the spinners and reduce spinner speed to 50-100 RPM to spread the fertiliser back into the pile.

Tap **CHECKS**, write down the **DISPLAY WEIGHT KG** from the list. This is the initial hopper weight

Tap **PRODUCT** and then tap **NEW SAMPLE**

Tap **CHECKS->BELT**

Enter a simulated ground speed and target application rate

Turn **ON** the master switch, the belt will start to move the fertiliser will be dispensed from the hopper.

Continue to run the test for 5 minutes, whilst maintaining a spinner speed of 100 RPM to remove any fertiliser that is sitting on the spinners. (SEE NOTE 1 and 2)

Turn **OFF** the master switch, and tap **CANCEL** to end the test.

Tap **LOADCELLS,** record the final **DISPLAY WEIGHT KG**, subtract the initial contents from the final contents
Tap **PRODUCT**
Enter the amount dispensed in the box, the controller will re-calculate the fertiliser calibration factor.

NOTES

1. The longer the static test is run for the more accurate the calibration. For lime, gypsum and other non granulated fertiliisers it is recommended to run out a full hopper to take into account how the product flows off the hopper walls and through the hopper door.
2. Due to the accuracy of the loadcell system, +/- 10kg at full scale, to achieve an accurate calibration with granular products such as Urea, Superphosphate, Potash etc, it is recommended that 500kg is dispensed during the static test.