JULY, 2024

# THE NEWS

CropScanAg Newsletter

### MEASURE MANAGE GROW





## AGRITECHNICA 2023

Held every 2 years in Hanover, Germany, Agritechnica is the world's largest agricultural trade fair of the planet. Around 450,000 people attended

Victoria Morris, Ed Scott and Phil Clancy from CropScanAg, exhibited at Agritechnica 2023, where we had a 5 x 4 meter stand in the Precision Agriculture pavilion, Hall 8. We were amongst all the major PA suppliers from around the world, including, Trimble, Bayer Ag, TopCon, Raven, AgLeader and more. We may not have had a big stand but we presented the CropScan 4000VT ISOBUS Integrated On Combine Analyser and the CropScan 3000X On Farm Grain Analyser with style. Victoria generated an amazing set of back drop images that told our story immediately.

There were only a handful of Australian exhibitors but there were a lot of Aussies in attendance. We had a great response to both the CropScan analysers. We had more than 200 enquiries off the stand and there were a at least 60 good leads to follow up

One of the most exciting aspects of the show was that so many attendees knew about NIR spectroscopy and understood the significance of the on combine grain analyser. Ed Scott made the comment that it was so refreshing to have people come to the stand already knowing what our technology offered. For years, we have been attending shows where the bulk of attendees come up an ask, "What do you guys do?"

Agritechnica is very much a B2B show. We have been able to sign up 5 new dealers around the world and we made some excellent contacts with the Ag Equipment manufacturers. We are looking forward to going back in 2025.

#### NEWSLETTER HIGHLIGHTS

Agritechnica 2023

CropScan 4000VT Product Release

CropScan 3000X Product Release

CropScan In Canada

**Tech Note** 

#### Upcoming Events

Next Instruments trading as CropScanAg B1 366 Edgar Street, Condell Park NSW, 2200 Australia www.cropscanag.com

## New Product Release: CropScan 4000VT ISOBUS Integrated On Combine Analyser

CropScanAg released the CropScan 4000VT On Combine NIR Grain Analyser at Agritechnica 2023.

The CropScan 4000VT is the first fully integrated version of the CropScan analysers. The system is ISOBUS compatible with the latest CASE IH and New Holland brand of combines. The CropScan 4000VT runs a Virtual Terminal within the CNHi Pro 700 and Intelliview IV combine monitors.

Based on 10 years of development through the CropScan 3000H and 3300H On Combine Analysers, the CropScan 4000VT includes a remote Sample Head that is fitted to the clean grain elevator of the combine, a Fiber Optic Cable, Communications Cable and a waterproof and dustproof NIR Spectrometer that is mounted on the wall of the combine outside the cabin. The NIR Spectrometer includes an ECU (Electronic Control Unit) that runs the CropScan software and reads the combine's CANBUS messages. The CAN messages for Yield, GPS, Crop Type, Grower-Farm-Field, Rotor Engage and more are read by the CropScan ECU to control operation and data collection.

The CropScan is fully integrated into the CNHi Pro 700 and Intelliview IV monitors using a purpose designed VT screen for the CropScan 4000VT. Once the ignition is turned ON, the CropScan 4000VT screen is available on the Pro 700 and Intelliview IV monitors. The operator simply selects the Crop Type and Grower-Farm-Field menus. Once the Rotor is engaged by the operator, the CropScan begins to analyse the grain as it is collected in the Remote Sample Head. The Protein, Moisture, Oil, Starch and Fibre (depending on the crop type selected) are calculated and combined with the Yield and GPS data from the CANBUS messages and then sent to the VT screen. Results are displayed on the VT screen every 3-4 seconds.

The field data is stored in the CropScan ECU and then sent to the CropScanAg Cloud Server, where farmers can access Grain Logistics, Field Maps and advanced analytics and performance maps using the N-GAUGE Apps on their mobile phone or tablet.

The CropScan 4000VT Sample Head has been designed to increase the sample cycle rate from small to large seeds including high moisture corn/maize and beans. The new design flow through cell allows the grains to flow faster through the chamber thus increasing the scan speed. The faster the flow, the higher the field map spatial density for Protein, Moisture, Oil, Starch, Fiber and Yield data. The CropScan 4000VT maps the data approximately every 4-6 meters. The new NIR Spectrometer has been ruggedised with a new enclosure for outside mounting and new operating platform running on a Linux OS to the in-cab App for Apple and Android OS.

The CropScan 4000VT has been bundled to include the N-GAUGE Harvest Manager App and SIM card subscription for 5 years streamlining all the data connectivity. Together the CropScan and N-GAUGE offers CASE IH and New Holland combine owners with a complete solution for measuring the Quality (Protein, Oil and Starch) and the Quantity (Yield and Tank Weight) in a seamless and fully integrated system.

## New Product Release: CropScan 3000X On Farm Grain Analyser

The CropScan 3000X has been introduced as a replacement of the CropScan 1000H Whole Grain Analyser which has been popular with grain farmers. The Cr3000X has been designed as a "little brother" to the popular CropScan 3000B and 3000BT. Using exactly the same optics and electronics, the Cr3000X provides excellent performance and a very simple user interface for measuring Protein, Moisture, Oil and Starch in wheat, barley, oats, sorghum, corn, soybean, canola, lupins, peas and others.

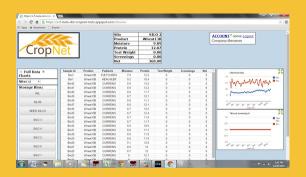


The most unique feature of the Cr3000X is the manually adjusted pathlength cell. Different grains require different pathlengths. The previous system, the Cr1000H, used a set of inserts or spacers to change the pathlength inside the grain flow cell. The Cr3000X uses a dial up mechanism which allows the operator to select the appropriate pathlength. The software prompts the operator to select the appropriate pathlength depending on the grain or oil seed to be analysed. This simple system has been copied from the Cr3000B which automatically adjusts the pathlength using a stepper motor.

The other advantage of the Cr3000X over the Cr1000H is the 7-inch Touch Screen PC user interface. The simple GIU provides operators the ability to select unlimited products with up to 5 constituents for each product, i.e., Protein, Oil, Moisture, Starch, Fibre and others. As well the built in Touch Screen PC has 8 GByte of storage, RS232, Ethernet and USB ports. The CropScan 3000X can also be used with our CropNet Grain Data Management software on a second monitor. The in-built PC runs the CropScan 3000X software and CropNet simultaneously. When the Cr3000X predicts the Protein, Moisture, Oil etc results, it transfers the results to the CropNet software. The spreadsheet like format allows the operator to enter additional information including Field, Silo, Farm, Truck ID, Weight, Test Weight, Screenings, Retention, Variety, Grade and more. A virtual farm or silo complex is setup in the CropNet software that displays all silos, sheds, bins, bags or any other storage system. As grains are segregated into each storage system, the running average for each constituent and the tonnage are stored and updated. As loads are shipped out the running average and tonnage are adjusted down. Simply click on any silo or bin and the running averages and tonnage will be displayed along with graphics options to show the content of each load of grain in and out of the silo.



The CropScan 3000X is the most powerful NIR grain analyser available at a price to suit medium to large farms. As business guru Peter Druker once said. "You cannot improve something unless you can measure it." The CropScan 3000X and CropNet software provides the complete set of on farm data at the click of a button.



## CropScanAg in Canada:

RME (Rocky Mountain Equipment) has joined CropScanAg as a major Canadian dealer. RME currently has 45 dealer locations within the three western Canadian provinces of Alberta, Saskatchewan and Manitoba. RME sells the full CNHi line of equipment. Currently 18 RME locations are actively selling CropScanAg units with 2 more joining them prior to summer 2024.

Webbs Machinery, is a New Holland dealer in Alberta, Canada. They operate 6 stores across the central grain belt. An Australian, Vernon ......, works for Webbs Machinery and has been a great advocate for us.

Dean Scrivens, Technical Sales Specialist, Western Canada, has been exhibiting the CropScan 3300H and the 4000VT throughout western Canada. In 2023 several RME and Webb's Equipment combine days were attended as well as the AgSmart show at Olds College and the AgriTrade show in Red Deer, both in Alberta. Booth visitors were able discuss the technology with Dean and see grain going through the unit along with the resulting protein and moisture data being shown on the Pro700 screen

#### New Corn Calibration:

Corn23H.bin is now available for all Cr3000H, 3300H and 4000VT analysers. This new version provides a more stable prediction for Moisture in corn and maize across a wider range of temperatures and concentration.

#### 2024 Calibrations to be released:

Updates for Wheat, Barley and Canola calibrations will be released in August 2024. Users of the Cr3000H, 3300H and 4000VT can download these updated calibrations from the CropScanAg Portal.



We were then able to show the visitors real protein/nitrogen maps on a large screen and explained how this enabled them to accurately move into variable rate fertilizer application on their whole farm.

Many progressive farmers were incredibly interested in the data that would enable them to save money by cutting fertilizer where it was not needed, increase yields by moving fertilizer from over-fertilized areas of the field as well as helping to deal with environmental concerns regarding wasted fertilizer that may end up in lakes and rivers.

#### Tech Notes and Bulletins:

Technical Bulletins and Technical Notes can be downloaded from the CropScanAg Portal, www.cropscanag.com

Tech Bulletin S0060: 3300H Analysis Software Release, V5.1.14\_64 Bit Firmware 58.1 & 2 CropScan 3300H Analysis Software Version 5.1.14 has been released to add minor improvements and bug fixes for the 2024 harvest. The version release is available via the Dealer CropScanAg Cloud Portal or using the direct CropScan Display Cloud Software Import feature (Released 2022).

Tech Bulletin D0088: CropScan 3300H Upgrade to 19V Tablet PC.

This document provides a step-by-step procedure to upgrade a Cr3300H using 12V tablet PC to a 19V tablet PC.

## Upcoming Events

CropScanAg will be at the following shows this year (2024): Ag in Motion Webb's Machinery Farm Show, AgriTrade Equipment Expo, Eyre Peninsula Field Days AgQuip Dowerin Field Days Henty Field Days

Ag in MotionSaskatoon, Saskatchewan, Canada, July 16-18Webb's Machinery Farm Show, Vegreville, AB, Canada, June 11 – 12AgriTrade Equipment ExpoNevember 13 – 15

November 13 – 15. Claire, SA, Aug 13-15 Gunnedah, NSW, Aug 20-22 Dowerin, WA, Aug 28-29 Henty, NSW, Sept 17-19