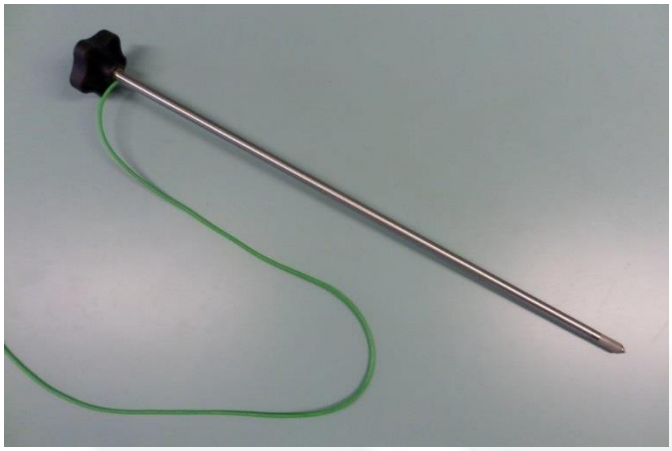
AMS sensor

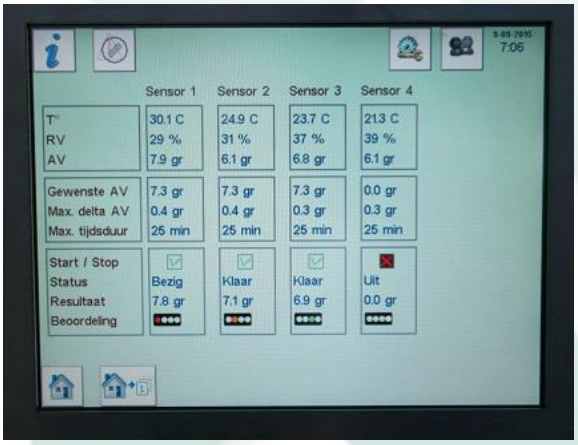
When using the AMS sensor in combination with the ABC processor, you are able to check the moisture content of the (incoming) seed easily. After the measurement you will receive information directly concerning the moisture content of the seed and if it complies with the standards. All measurement values are automatically registered and logged on your PC.



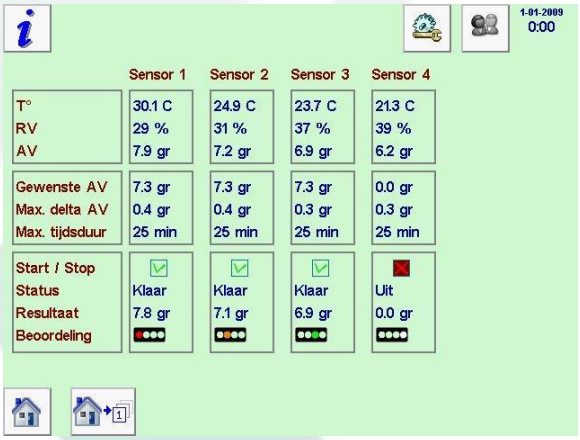
AMS sensor for seed with connection to ABC processor

Introduce the AMS sensor into the seed to measure the temperature and the RH of the air around the seed, and calculate the Absolute moisture content (AH) of the air. Press 'Start' and the measurement of the sensor is activated.

The AH value of the air is compared to the configured AH value at which the moisture in the seed is in equilibrium with the air (equilibrium moisture content). The operator receives information directly to know if the seed has been dried sufficiently, thanks to the color of the LED lamp.



ABC touchscreen



Overview configuration and measured values

Enter the desired AH on the ABC processor. Furthermore, enter the maximum tolerance and the minimum AH. After the measurement values (RH and T°) are stabilised, the AH will be compared to the desired AH, and the result will be displayed:

- **Red:** Too much moisture
- **Orange:** Moist but within the limits of tolerance.
- **Green:** Desired value
- **White:** Too dry.

The measurement values can be read from the ABC touchscreen and can be displayed directly on your PC, using the PC software.

Measurement of RH+T° at the tip of the sensor

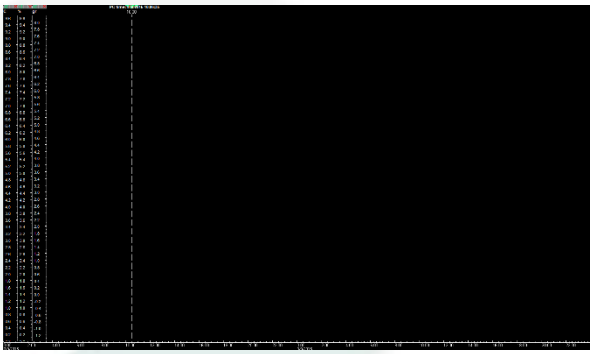
AMS sensor

At the top of the sensor, a double electronically T°+RH sensor is placed. The sensor is protected by a fine stainless steel filter. A blunt tip enables the sensor to be introduced into the seed easily, without damaging the seed.

Note: The sensor has a high accuracy thank to the double electronical measurement. The ABC processor is used to inform when one of the measurement elements has a defect.

All measurement values are displayed directly on the touchscreen and as a graphic on the PC. All the measurement values can be saved as an Excel archive for general use.

Using the ABC-PC software, the measurement values are directly available online to share the information with the responsible parties.



ABSOLUTE MOISTURE CONTENT OF AIR (g moisture/kg air)

T°\HR>	10	20	30	40	50	60	70	80	90	100
5	0,54	1,08	1,62	2,16	2,70	3,24	3,78	4,32	4,86	5,40
10	0,76	1,52	2,29	3,05	3,81	4,57	5,33	6,10	6,86	7,62
15	1,06	2,13	3,19	4,26	5,32	6,38	7,45	8,51	9,58	10,64
20	1,47	2,94	4,40	5,87	7,34	8,81	10,28	11,74	13,21	14,68
25	2,01	4,01	6,02	8,02	10,03	12,04	14,04	16,05	18,05	20,06
30	2,72	5,43	8,15	10,87	13,59	16,30	19,02	21,74	24,45	27,17
35	3,65	7,31	10,96	14,62	18,27	21,29	25,58	29,23	32,89	36,54
40	4,84	9,69	14,53	19,38	24,22	29,06	33,91	38,75	43,60	48,44

Table with moisture content (AH), with measured RH and T°

Why AH and not only RH?

The equilibrium moisture content of seed is mostly determined at 25°C. In combination with the measured RH, the moisture content in the air is calculated; With a desired RH of **40%**, the air at **25°C** contains **8 grams** of moisture. When the T° decreases or increases, the RH of the air changes; The RH of this air decreases to **30%** when the temperature increases to **30°C** and the RH increases to ca. **55%** when the temperature decreases to **20°C**. The seed does stay in equilibrium during the various RH values, thanks to the constant AH. Only RH measurement is not sufficient. The AH gives a reliable value.

The advantages:

- Simultaneous measurement of moisture contents of all incoming seed lots, using several AMS sensors.
- High reliability thanks to direct registration of the measurement values.
- Time and cost effective; no waiting periods or manual processing of the forms with measurement results.
- Information directly online to the responsible parties, thanks to ABC PC software.