Mobile collection of all your harvest data.

WINTERSTEIGER also places an emphasis on future-oriented solutions in the field of mobile data collection. Only state of the art systems specially developed for agricultural research are used in our harvesting machines.

Automatic harvest data logging takes the following parameters into consideration (depending on the harvesting data system):

- Plot weight with maximum precision up to a slope of 10 %
- Moisture content of harvested material
- Volumetric weight

Easy Harvest Harvesting Software.

Collecting, managing and protecting data have become the focus of the processes of agricultural field trials. Easy Harvest is used on the harvester in connection with a mobile harvesting data system and enables highest precision weighing and moisture measuring. Above all, Easy Harvest offers the advantages of high operational reliability and allows you to harvest several trials in a field in a single operation.

Your benefits summed up:

Easy and convenient operation

- Clear and user-friendly menu-driven operation in different languages
- Simple creation of field maps and trial arrangements
- Harvesting of several trials in a field in a single operation
- Additional information can be added to the plots as notes
- Precalibrated moisture curves
- Simple import and export of data

High precision, reliability, traceability

- Precise weighing result and moisture measurement
- Integrated sampling control
- Integrated label designer and label printer
- Data protection through backup file (e.g. USB stick)
- Ability to manually control the processes
- Error diagnosis system
- Allows for several users with different rights

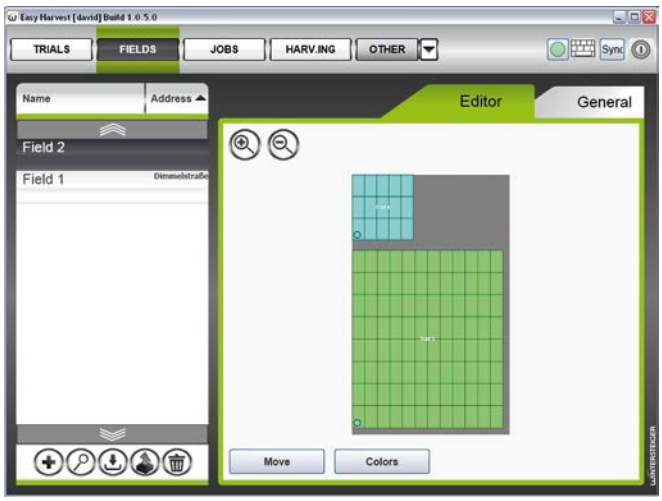
Preparation.

Trials can be either imported or created in the software.

Data can also be synchronized. Fields can be freely arranged and then positioned.

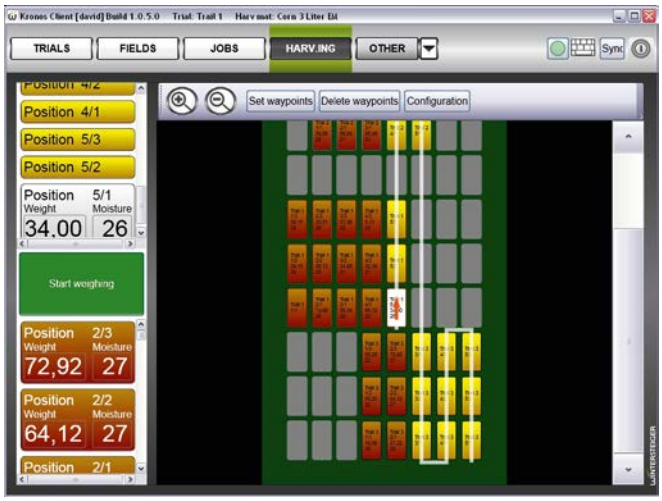
Trial is set up

Trials and field maps can also be imported



Several trials can be arranged in a field and then positioned

Harvest.
In harvest mode, you can at all times see your position, which plots have already been harvested and the corresponding results. The samples can also be labeled.



Simple navigation in the field

Data export.
The data can be either synchronized or exported as a CSV file for further processing.

	A	B	C	D	E	F	G	H
1	Reihen	Spalten	Gewicht	Feuchtigkeit	Datum	Time	Lfd. Nr	CustomId
2	1	1	6,165	10,6	03.09.2011	10:27:18	1	195101
3	1	2	6,251	12,2	03.09.2011	10:42:44	2	195102
4	1	1	5,472	10,7	03.09.2011	10:53:08	1	195101
5	1	1	7,823	12,8	03.09.2011	11:28:35	1	195101
6	1	2	7,413	14,1	03.09.2011	11:29:46	2	195102
7	1	1	6,057	15,7	03.09.2011	11:33:24	1	195101
8	1	2	5,318	16,1	03.09.2011	11:36:14	2	195102
9	1	3	4,328	15,1	03.09.2011	11:44:14	3	195103
10	2	1	5,328	14,3	03.09.2011	11:53:45	4	192001
11	2	2	7,072	11,1	03.09.2011	11:57:53	5	192026
12	2	3	6,284	12,5	03.09.2011	11:58:59	6	192051
13	3	1	5,671	12,7	03.09.2011	12:01:53	7	192002
14	3	2	6,165	11,7	03.09.2011	12:02:56	8	192027
15	3	3	6,251	12,1	03.09.2011	12:04:13	9	192052
16	4	1	5,472	10,6	03.09.2011	12:05:14	10	192003
17	4	2	7,823	12,3	03.09.2011	12:07:01	11	192028
18	4	3	6,585	11,3	03.09.2011	12:10:04	12	192053
19	5	1	6,211	12,1	03.09.2011	12:11:10	13	192004
20	5	2	3,679	11,3	03.09.2011	12:12:01	14	192029
21	5	3	6,994	13	03.09.2011	12:13:34	15	192054
22	6	1	5,315	12,7	03.09.2011	12:14:18	16	192005
23	6	2	6,917	13,4	03.09.2011	12:15:01	17	192030
24	6	3	7,418	12,1	03.09.2011	12:15:58	18	192055
25	7	1	6,391	10,7	03.09.2011	12:16:59	19	192006
26	7	2	5,21	11,5	03.09.2011	12:17:39	20	192031
27	7	3	8,316	11,3	03.09.2011	12:18:42	21	192056

Mobile harvesting data system Classic GrainGage™.

This harvesting data system is perfectly suited for measuring the weight, moisture and hectoliter weight. In addition to this, in case of plot yield of 900 g or more where best possible measuring accuracy is required, and when deploying the software Easy Harvest for application of field maps, storing measured data, and exporting the resulting data.

The sequence is as follows during harvesting:

- The Classic GrainGage™ comprises a 3-chamber system. The first chamber is a holding hopper with a filling level sensor. Moisture and weight measurements are taken in the second and third chambers
- Once the filling level sensor on the harvesting data system has sufficient material for weighing, the measurement starts automatically in the plot while the harvester is moving
- At the end of the plot, the remaining material is then weighed
- The individual sub-weights are added and the mean value of the acquired moisture data and the hectoliter weight are calculated
- The data is stored on an industrial PC
- Optional label printer to print label directly in the field
- Manual acknowledgment closes the weighing cycle. You can then continue to harvest the next plot

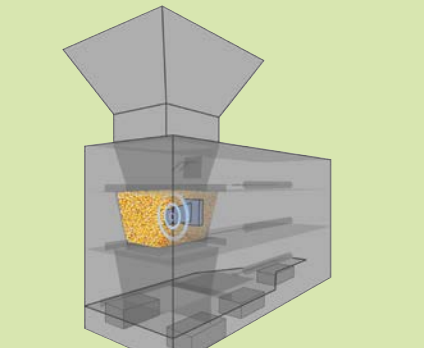
Your benefits summed up:

- **Precision electronics:** The new HM800 electronics link the weight and moisture sensors by means of a CAN bus data line. The core of the new data collection system is the „HM800 Analog and Actuator Module". This avoids the need for long or bulky cables
- **Slope and motion sensor:** Improves weighing precision and reduces errors caused by vibrations and the harvester moving. This enables weighing while the harvester is moving through the plot and measurements on slopes of up to 10 %
- **Moisture sensor:** Highly precise measurements are possible even for high levels of moisture (up to 35 %). The mean values of the sub-samples provide representative results
- **Continuous harvesting** of long plots is supported
- Use of **Easy Harvest Software**

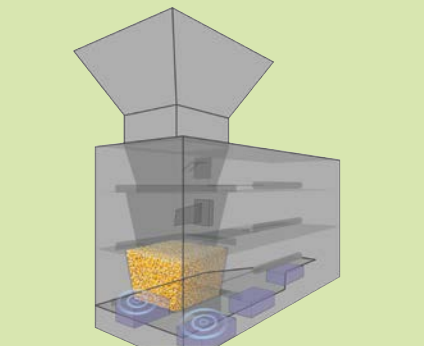
Technical data

Weighing system	
Dimensions (W x D x H)	736 x 356 x 533 mm
Weight	45 kg
Capacity	3.00 liters - approx. 2.5 kg wheat 1.50 liters - approx. 1.2 kg wheat 0.75 liters - approx. 0.6 kg wheat
Grain discharge opening	152.4 x 215.9 mm
Grain inlet opening	114.3 x 190.5 mm
Actuator	Precision pneumatics
Measuring precision	
Weight	+/- 0.4 % Full Scale or +/-10 g absolute per weighing
Hectoliter weight	+/- 0.68 kg/HL
Moisture	+/- 0.5 % - 25 % (wet weight basis - wwb), +/- 0.9 % - 35 %
Minimal quantity for moisture measurement	At least a full partial weighing, 3.00 / 1.50 / 0.75 liters
Speed	Approx. 4 sec. per partial weighing
HM 800 Electronic	
Protection class	Water and dust proof to IP67
Operating temperature	-20°C to +50°C
Power supply	9 - 17 V DC
Interface	CAN Bus – 4 wire
Connection	Con X all connectors

We reserve the right to make technical alterations.



Moisture sensor



Weighing cells

Mobile harvesting data system Single High Capacity GrainGage™.

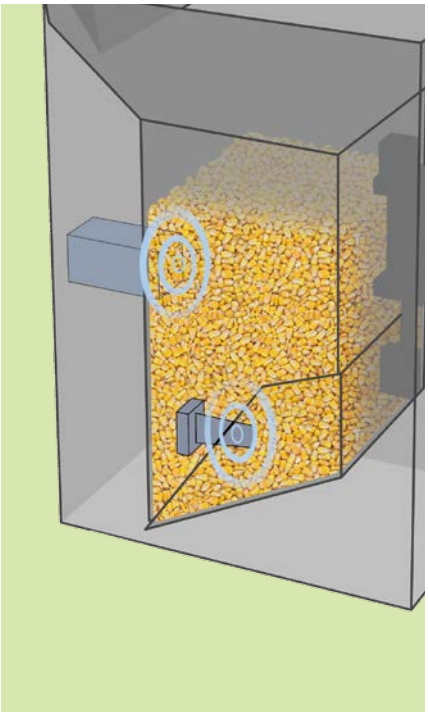
This harvesting data system is perfectly suited for weighing in situations where a large volume of harvested material needs to be weighed (e.g. maize/corn), for moisture measurements when rapid weighing cycles with high yields are required, and when using the software Easy Harvest for field map deployment, storage of acquired data and data export of the results.

The sequence is as follows during harvesting:

- The weighing system comprises a weighing bucket, which in turn contains the required sensor for weight and moisture measurement
- The harvested material is harvested directly into the weighing bucket
- The weighing cycle is triggered manually at the end of the plot by pressing a button
- The data is stored on an industrial PC
- Optional label printer to print label directly in the field
- Additionally, this weighing system has a countdown timer to determine the optimal weighing point

Your benefits summed up:

- The **single-chamber system** guarantees a fast cycle time
- **Precision electronics:** The new HM800 electronics link the weight and moisture sensors by means of a CAN bus data line. The core of the new data collection system is the „HM800 Analog and Actuator Module". This avoids the need for long or bulky cables
- **Slope and motion sensor:** Improves weighing precision and reduces errors caused by vibrations and the harvester moving. This enables weighing while the harvester is moving through the plot and measurements on slopes of up to 10 %
- **Moisture sensor:** Highly precise measurements are possible even for high levels of moisture
- **Continuous harvesting** of long plots is supported
- Use of **Easy Harvest Software**



Moisture and weight measurement in HCGG

Technical data

Weighing system	
Dimensions (W x D x H)	508 x 483 x 560 mm
Weight	46 kg
Capacity	Approx. 20 kg maize
Grain discharge opening	457 mm
Actuator	Precision pneumatics
Measuring precision/speed	
Weight	+/- 80g absolute
Hectoliter weight	+/- 1.2 kg/100 l for over 95 % of samples
Moisture	+/- 0.5 % to 25 % (wet weight basis - wwb), +/- 0.9 % to 35 %
Minimum quantity for moisture content measuring	Approx. 7 liters Approx. 2 liters with "HCGG Insert" (baffle insert)
Speed cycle time	Approx. 6 sec. – System ready / data recorded
HM 800 Electronic	
Protection class	Water and dust proof to IP67
Operating temperature	-20°C to +50°C
Power supply	9 - 17 V DC
Interface	CAN Bus – 4 wire
Connection	Con X all connectors

We reserve the right to make technical alterations.