





## Intelligent machines for global challenges.

WINTERSTEIGER has established itself at the top of a niche market which will continue to gain significance in future. Agronomists and plant breeders today face the challenge of introducing new developments to make a decisive contribution towards sustainable food and energy supplies for the world.

WINTERSTEIGER supplies the technology needed to do this. The WINTERSTEIGER Delta plot combine fulfills all the requirements for fast, mix-free harvesting from experimental plots to small seed increases. This ensures optimum conditions for research, breeding, testing and propagation of field crops including specialty crops to exacting standards.

Read the following pages to discover in detail what the global market leader offers you.



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## Delta

Plot combine.

### High performance harvesting with modular flexibility.

The Delta plot combine fulfills all the requirements for an efficient, clean harvest, from experimental plots to small seed increases. The Delta stands out due to exceptional stability and ruggedness thus ensuring reliability of use, even under difficult harvesting conditions. Thanks to its modular system, the combine is suitable for all harvesting conditions and customer requirements.



## Your benefits summed up:

### Powerful machine for yield trials and propagations

- Powerful engine for the highest throughput requirements
- Powerful threshing and cleaning system
- Highest level of sample purity thanks to patented post-cleaning
- Best-in-class traction and ground clearance thanks to large tires
- Balanced weight distribution thanks to central grain tank position
- Generously dimensioned grain tank

### Comprehensive equipment program for all popular crop types

- Comprehensive cutting table variants for all requirements
- Intelligent grain logistics and sample storage solutions

### Compact dimensions

- No removal work needed for transport thanks to low overall height
- Center row threshing ability thanks to foldaway steps

### Precise data collection technologies

- High-performance Harvestmaster® weighing systems
- Integrated NIR data collection



## Basic machine for peak performance.

The WINTERSTEIGER Delta has a hydrostatic drive with powerful wheel hub motors. The 63 kW water cooled Deutz diesel engine (86 HP) is designed for maximum performance and operational safety. Speed ranges: forward/reverse 0 – 18 km/h (0 – 11 mph) in 2 steps.

Optional all-wheel drive can be activated from the driver's seat on difficult terrain including a differential lock. The Delta can be equipped with a full track system for harvesting rice in muddy ground conditions. The Delta can also be supplied with larger diameter tires (1047 mm) on request. This provides 7 cm more ground

clearance. Reduced sensitivity to unevenness in terrain, less tendency to sink in and enhanced traction result in greater stability while in motion.

### Accessories:

- Compressor with air hose for cleaning the machine's exterior
- Electro-hydraulically controlled differential lock acting on front-wheel hub motors: can be switched on and off from the cockpit (option)
- Underbody protection against thick stems (sunflower and corn harvesting, option)
- Rotary light (option)



Delta with larger tires



Delta with full track system for rice harvesting

## Perfect view.

The WINTERSTEIGER Delta convinces owners with a number of benefits, but in particular due to a clear-cut layout of the control panel, easy and simple operation and a wide range of settings accessible from the driver's seat. On top of this, the cockpit gives the driver a perfect view of all functional areas. The spring mounted, ergonomic seat can be adjusted to match the driver's weight.

The driver and optional second operator have the choice between a cabin with air-conditioning and heating, or a cockpit with a safety rail and a sunroof. Thanks to the special cabin construction – the cabin is uncoupled from the basic machine – and to noise insulation measures, noise and vibrations have been minimized to ~ 80 dB (A).



Gives the driver a perfect view of all functional areas

### All controls and displays are clearly laid out and easily accessible:

- Input and control functions are directly on the operator's platform
- Hydraulic steering
- Hydraulic setting of cutting table and reel height
- Stepless hydraulic reel speed adjustment from 0 – 45 rpm
- Fast stop for cutting table, reel and feed auger

### A multifunction lever combines all driving and harvesting controls in your hand:

- Driving operations forward/backward stepless
- Raise/lower cutting table
- Raise/lower reel
- Reel forward/backward (option)
- Reel speed
- Weighing system: weighing cycle start
- Cleaning cycle start



Multifunction lever

An optional Stop&Go foot pedal lets you drive and stop the machine without changing the position of the multifunction lever. This simplifies operation and improves the harvesting efficiency.



Foldaway steps



## Foldaway steps (option).

The optimal solution for harvesting center plots: the new, automatic foldaway steps. When the cabin door is closed, the steps automatically fold up pneumatically, which prevents plants from being trapped in the steps during harvesting. This is clearly a benefit!

When the cabin door is opened, the steps automatically fold down again, thus guaranteeing the driver a safe exit.

The external width of the machine is reduced by 170 mm compared with the standard steps.

## A variety of headers are available.

### The following headers are available for the Delta:

- Cutting table with conveyor belt (cutting width: 150 mm)
- Cutting table with feeder house (cutting widths 150, 175, 200 and 240 cm)
- Header for harvesting 2 or 3 rows of corn
- Row-crop header for harvesting 2 rows of soybeans
- Header for harvesting sunflowers
- Tine cloth pick-up device for swath harvesting



### Cutting table with conveyor belt and feeding auger.

This cutting table is a combination of a conveyor belt, feeding auger and a transfer drum. Continuous straw feed and the large distance between the cutter and between the cutting bar and the feeding auger guarantee minimal seed

losses. Side air nozzles on the cutting table guarantee an absolutely mix-free harvesting. This cutting table makes the Delta a high performance combine for harvesting breeding and variety plots.

### The cutting table has the following characteristics:

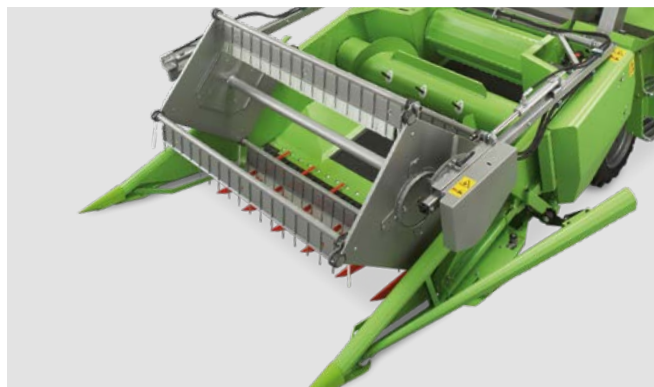
- Consistent feed and high harvesting capacity
- Mix-free harvesting thanks to fully covered cutting knife and conveyor belt, anti-static rubber conveyor belt and pneumatic clean out system
- Adjustable cutting skids guarantee an even cutting height
- Fast stop system for the cutting table and reel prevents the intake of foreign objects
- Outstanding results, even under difficult harvesting conditions, on account of the crop lifters and extra-long row dividers

### Accessories (options):

- 2 reel brushes or rubber flaps for a grain-free cutting table without manual cleaning
- Hydraulic horizontal reel adjustment
- Underbody protection for cutting table to prevent damage to the conveyor belt by sunflower stalks, bean stubble etc.
- Extra-long row dividers for perfect splitting of plots with long stem grains from the full crop
- Crop lifters for harvesting lodged crops
- Vertical cutter bar on the right in place of the outer divider for rapeseed, beet, bean and vegetable plots to minimize losses at the separating lines
- Vertical cutter bar on the left in addition to the vertical cutting table on the right for harvesting only the center of plots



Conveyor belt



Header with conveyor belt and feeding auger



## Cutting table with feeding auger and feeder house.

This cutting table is a high-performance alternative solution for the Delta. It comprises an auger that feeds the cut harvested material to the center, and a chain to feed the

grain to the threshing unit. The cutting table has proven itself under the most difficult harvesting conditions, such as lodged, heavy, or bulky crops with high moisture levels.

### The cutting table has the following characteristics:

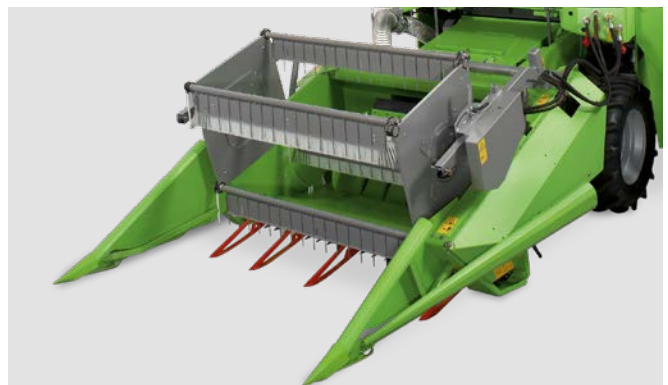
- Consistent intake and best harvesting performance
- Mix-free harvesting due to standard clean out systems
- Excellent harvesting results even in difficult harvesting conditions, on account of the crop lifters and extra-long outer dividers
- Easily dismantled (e.g. for converting to corn)

### Accessories (options):

- Reel brushes for a grain free cutting table
- Crop lifters for harvesting lodged crops
- Fine seed option
- Hydraulic horizontal reel adjustment
- Additional air cleaning of the feeder house
- Speed adjustment for feeder house chain
- Cutting table extensions and vertical cutter bars for rapeseed harvesting
- 6-part reel e.g. for harvesting rice
- Vertical cutter bar



Feeder house



Header with feeding auger and feeder house



## Header for harvesting 2 or 3 rows of corn.

**Thanks to its sturdy and rugged construction, the WINTERSTEIGER Delta is the perfect machine for harvesting corn and has the following convincing characteristics:**

- Sturdy picking frame ensures excellent cutting performance with low power requirement
- Special corn intake chains ensure even transport to the threshing units without damaging the grains
- Minimal seed loss
- Narrow construction enables harvesting of 2 center rows
- Hydraulic adjustment of picker bars with ground clearance display in cockpit
- Available types:
  - 2-row: row spacing of 75 and 96 cm (30" and 38")
  - 3-row: row spacing of 50 and 60 cm (20" and 24")
  - Other row spacings are available on request
- Quick attachment frame in case of crop changes thanks to hydraulically driven system

### **Accessories (options):**

- Integrated chopper for chopping stalks
- Sunflower accessory for corn picking header



3-row corn picking header

## Row-crop header for harvesting 2 rows of soybeans.

**For high-performance and clean harvesting of soybeans in rows, the row crop header offers the following characteristics:**

- Handling of the harvested crop without damaging the grains due to intake conveyor belts and conveyor belt
- Mix-free thanks to conveyor belt and sealing of corners and edges
- Minimal seed loss
- Operator-friendly thanks to step-less hydraulic adjustment of intake speed and cutting height
- Fast stop device avoids intake of foreign bodies
- Row spacing 75 cm (other row spacing on request)
- Low cutting height



Row-crop header

## Tine cloth pick-up device for swath harvesting.

Tine cloth pick-up devices are used for harvesting material from swath. A belt mounted on the cutting table with integrated plastic tines carefully picks up the swath without any waste. The belt is hydraulically driven.

The advantage compared to pick up with a normal cutting table is that there is no need to deploy an active cutting knife that additionally cuts the standing stalks thus inadvertently feeding residue material into the harvester.



Delta with tine cloth pick-up device

Delta with full track system harvesting rice



## Mix-free pneumatic seed transport, gentle to seeds.



### Grain transport elements:

- 1 Cyclone
  - 2 Weighing system
  - 3 Side mounted bagging
  - 4 Sampling
- Transporting of harvested material from the sieve box
  - Optional transport directly to the grain tank
  - Transport to the cyclone/weighing system
  - Material flow through the cyclone/weighing system
  - Optional side mounted bagging
  - Transports of the harvested material downstream of the weighing system
  - Optional transport directly to the grain tank
  - Sampling (subsampling, remainder is bagged in cabin or grain tank)

WINTERSTEIGER offers the right solution for the job in hand:

## Sampling.

**The system has an extremely simple and clear-cut design. The machine can be equipped as follows for sampling:**

- Bagging of total plot in the cabin
- Bagging of 0 – 600 ml of plot (adjustable) in the cabin
- Bagging of 700 – 2000 ml of plot (adjustable) in the cabin
- Discharging of a homogenous subsample (volume adjustable on the machine) of up to 1000 ml in the cabin (not for CGG weighing system)

For all other sampling variants the remaining harvested material can either be bagged or fed to the grain tank.

### Additional option:

- Bagging platform at side (120 x 80 cm)



Sampling in the cabin



Side sampling

## Side mounted bagging.

With a 2-person harvesting process, bagging takes place on the side of the machine using pneumatic seed delivery, adjustable blower, injector sluice, cyclone and bag holder.

If you use a mobile harvesting data system, you can bag the complete plot at the side, unless it is fed into the grain tank or you are working with NIR.



Side mounted bagging, left-hand side

## Sample storage box at side.

For easy storage of sample bags. Volume approx. 200 liters. Filling occurs by depositing the bags on the

roller conveyer. The side wall of the box folds away. The box can be easily removed.



Sample storage box at side

## Bagging in the cabin.

With a 1-person or 2-person harvesting process, bagging is carried out in the cabin either by the driver or a second operator using pneumatic seed delivery, adjustable blower, injector sluice, cyclone and bag holder. The pneumatic seed delivery system ensures mix-free and gentle seed transport.



Bagging in cabin

## Side mounted bag storage.

This option was developed to store a larger number of samples in tear proof bags on the combine (min. 1 kg and max. 7 kg per sample bag). The box has a width of approx. 450 mm and the total capacity is approx. 550 liters.

**Sequence:** Once the bagging has taken place and the bags have been closed, they are placed on the roller conveyor located behind the cabin. The bags are dropped into the storage box by a lift which transports the bags upward. The side panel can be folded up to allow the full box to be emptied. When the combine is being transported, the empty box can be easily removed without using tools. The ground clearance below the box is approx. 85 cm, which prevents damage to neighboring plots.



Side mounted bag storage

## Skid-based bagging.

Skid-based bagging is used for subsampling to 20 hoppers of 4 liters each, where standard boxes can be replaced quickly. You can take mixed samples with several repetitions of one crop type as the hoppers can be accessed multiple times for filling of subsamples.

The subsamples are blown by the existing sampling system into the cyclone above the positioning system. A 2-axial positioning system then accesses the selected sample hopper, and the subsample flows into the hopper.



Skid-based bagging

## Delta sample conveyor belt.

The sample conveyor belt was developed to support more efficient storage of samples on the Delta plot combine. Samples are collected, depending on the desired sample size, in the cabin during harvesting. The samples are transported, by way of a flap in the cabin rear wall, to a roller conveyor, from where the samples drop onto the sample conveyor belt.



Sample conveyor belt during filling

The conveyor belt is situated 200 mm lower than the roller conveyor, is fitted with 250 mm (9.8") high walls and is 300 mm wide and 2.3 m (90.6") long. The depositing capacity is thus approx. 170 l.

Correspondingly, depending on sample size, from 120 (1400 ml) to 850 (200 ml) samples can be deposited. The conveyor belt is advanced during loading by means of a sensor in the cabin, allowing it to be filled completely.



Adjustable height for emptying the sample conveyor belt

The sample conveyor belt is mounted at a height of 1 m (39.4"). It can be additionally fitted with deflectors if required. The transport width is 2.55 m (100.4") with the sample conveyor belt folded in.

The sample conveyor belt can be pivoted or the height adjusted hydraulically in order to position it as required during emptying. It can be pivoted by up to 90°. The height can be adjusted to between 0.75 m (29.5") and 1.8 m (70.9") for emptying.

## Grain tank.

The grain tank is filled pneumatically, emptying is done by an auger. By operating a switch valve, it is possible to choose between delivering the grain to the bagging unit, weighing system, or into the grain tank. Emp-

tying through the floor flap ensures fast, complete cleaning of the grain tank. The hydraulically driven emptying auger enables fast emptying of the grain tank. The standard machine has a 1,100 l grain tank.

### Options:

- Grain tank extension to 1,500 l
- Unloading height: 3,700 mm
- Electric grain tank level gage

# Perfect threshing for a clean harvest.

- 1 Cross auger
- 2 Intake bars on the feeder house
- 3 Threshing drum
- 4 Concave
- 5 Transport belt
- 6 Beater drum
- 7 Shakers



Pneumatic clean out of header and/or conveyor belt intake, threshing drum, shaker, sieve, cleaning fan – perfect synchronization of critical components combined with pneumatic seed delivery guarantee mix-free harvesting and excellent threshing performance

Sophisticated threshing technology, seed delivery and sealed corners and edges guarantee short threshing cycles, best straw throughput and a mix free and clean sample. Controls and adjustments are carried out from the driver's seat.

## A high level of purity of the harvested sample is guaranteed by:

- Various shakers and cleaning sieves
- Optimum distribution of air at the cleaning sieve
- Air deflector plates on the cleaning sieve
- Specific air distribution in the blower

When automatic cleaning is activated, the cutting table is first blown clean, then cleaning fan speed is raised to the maximum speed for a period of time to blow out the sieve areas.



## Threshing drum variator.

The threshing drum variator enables stepless threshing drum speed adjustment from 330 – 1900 rpm. The threshing drum speed is displayed on the operator's platform. Advantages: easy adjustment to suit different crops and harvesting conditions. It is also possible to adjust the distance between the concave and the threshing drum as well as the angle of the concave.

## Concaves.

A universal concave is suitable for harvesting almost all crop types. It is possible to attach up to five operator-friendly de-awner bars from the outside. A specially sized concave is available for harvesting large seed crops. A spiked drum and concave is optionally available for rice.

## Beater drum.

The machine can optionally be equipped with a rubberized beater drum for gentle threshing of bean crops.



Spiked drum

## Shakers.

The two-stage shaker is also universally usable. The surface shaker is mix-free, is capable of working on slopes and has an exceptional ability to open up straw. A high-power corn shaker is available for harvesting corn, and a special rapeseed shaker for harvesting rapeseed. The various shakers are fitted with a quick change system.



Shakers with double sieve system

## Straw chopper (option).

The straw chopper distributes the chopped straw evenly over the whole width of the cut. The straw chopper can also be folded up during swath depositing.



Straw chopper

## Top sieves.

An adjustable sieve, or a Graepel sieve, is used as the top sieve to ensure the highest level of purity and mix-free harvested material.

## Bottom sieves.

Using a quick change system (no tools needed), the machine can be converted within minutes to deal with different harvesting conditions and crop types.

## Variable sieve box setting (option).

The sieve box inclination can optionally be set manually. This improves performance while at the same time reducing grain loss, especially for small grains such as e.g. rapeseed.



## Electrical adjustable sieve setting (option).

In combination with the grain loss display option, the driver can set the adjustable sieve angle electronically from the cabin or from the rear via pushbuttons. This ensures maximum cleaning performance while at the same time minimizing grain loss.

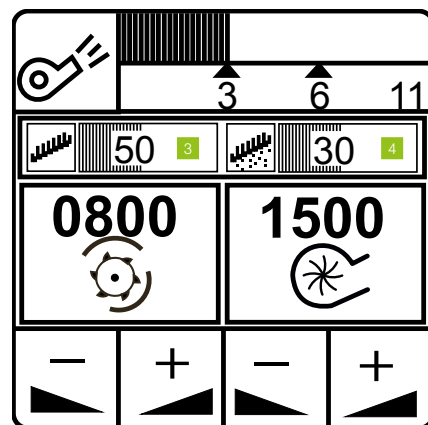
Additionally, during cleaning at the end of the plot, the adjustable sieve is automatically opened for cleaning thus ensuring that awns from crops such as triticale, barley or wheat are dislodged.

## Grain loss display (option).

Grain loss is measured by an acoustic grain loss sensor which is placed at the end of the sieve. The measured grain loss is displayed in the Delta's cabin. If needed, the cleaning fan speed (standard) and the adjustable sieve angle (option) can be set from the cabin.



1 Electrical adjustable sieve setting 2 Grain loss sensor



3 Opening width of sieve in % 4 Current grain loss (%) in relation to the preset maximum value

# Mobile collection of all your harvest data.

Precise and reliable collection and management of the harvest data takes top priority in field trials. WINTER-STEIGER therefore relies on future-oriented solutions in this area as well. Only state-of-the-art, high-performance systems specially developed for agricultural research are used in our harvesters.

## 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

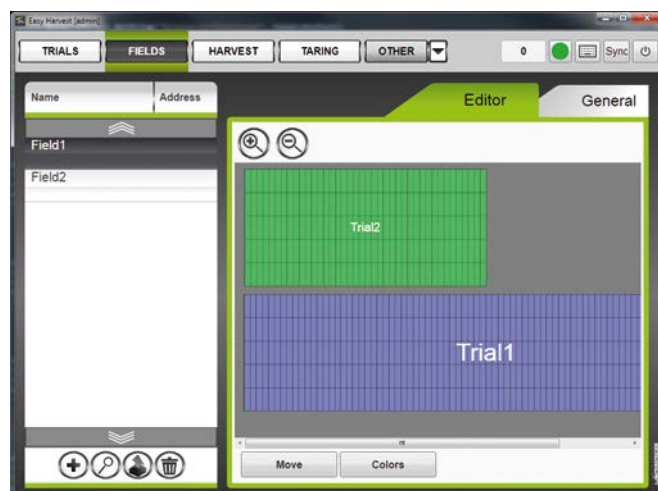
### Preparation.

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 can be positioned on the field and processed

## Harvest.

In harvest mode, you can at all times see your position, which plots have already been harvested and the corresponding

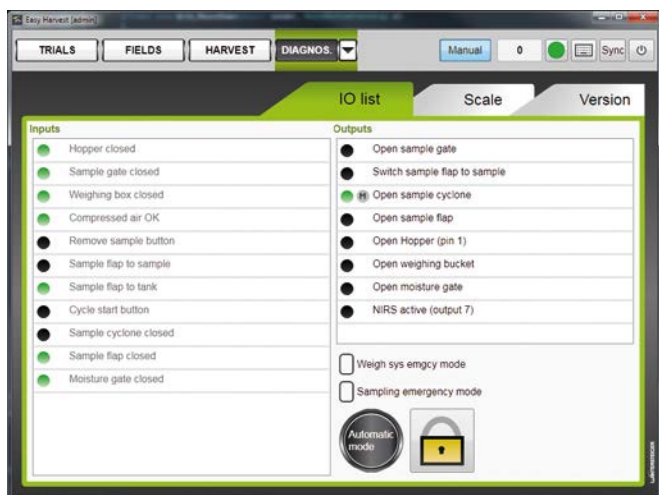
ponding results. The samples can also be labeled.



Harvest mode



Harvest mode



Simple navigation in the field



Convenient creation of notes

## NIR system solution for crop analysis.

The presentation of the harvested material has a significant influence on the quality of the NIR analysis data. The important advantage of the NIR system solution is a result of the controlled passage of the harvested material past the NIR measuring head. This ensures that a representative analysis of the entire plot can be secured. The presentation of harvested material is suited for all kinds of crops from rapeseed to grain and legumes to

corn. Subsequently, the Easy Harvest crop software automatically allocates the NIR analysis information to the respective plot and stores the data.

As a standard, the WINTERSTEIGER NIR system solution is equipped with POLYTEC contact measuring instruments. Other NIR measuring instruments are available upon request.



NIR system solution for crop analysis

# High-precision harvest data collection systems.

WINTERSTEIGER offers weighing and data collection solutions that are individually tailored to customer requirements. Here are the opportunities and benefits at a glance:

	Classic GrainGage™	High Capacity GrainGage™	Bucket system
System	3 chambers	1 container	1 container
Number of weighing cells	3	2	1
Performance (plot yield x cycle time)	Small and medium plot yields	Medium and large plot yields	Small, medium and large plot yields
Evaluation	Partial measurements	Individual measurement	Individual measurement
Weight measurement	■	■	■
Moisture recording	■	■	
Moisture measurement to grain moisture	35 %	35 %	
Hectoliter weight measurement	■ (Standard)	■ (Option)	
Data transfer to NIR systems	■	■	■
Use of Easy Harvest harvesting software	■	■	■
Operation with other harvesting software	■	■	
Interface to other databases	■	■	■
Continuous harvesting of long plots	■ (Standard)	■ (Option)	
Slope and motion sensor to reduce errors caused by vibration or movement of the harvester	■	■	■
Weighing function for slope gradients of up to	10 %	10 %	10 %

## Classic GrainGage™.

This harvesting data system is perfectly suited for measuring the weight, moisture and hectoliter weight, and also for plot yields of 900 g or more, where best possible measuring accuracy is required. Best results are achieved by using the Easy Harvest software to deploy field maps, store measured data and export 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
- If a sampler is present, labels can be optionally printed directly in the field
- Manual acknowledgment closes the weighing cycle. You can then continue to harvest the next plot

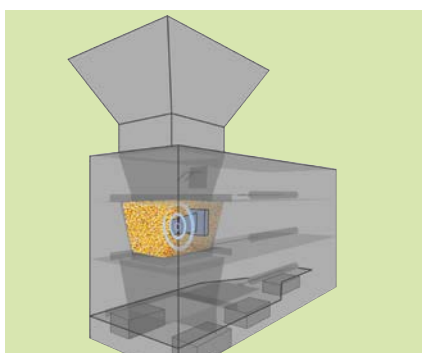
## Technical data Classic GrainGage™

Weighing system	
<b>Dimensions (W x D x H)</b>	736 x 356 x 533 mm (29 x 14 x 21")
<b>Capacity</b>	3.00 liters – approx. 2.5 kg wheat 1.50 liters – approx. 1.2 kg wheat 0.75 liters – approx. 0.6 kg wheat
Measuring precision	
<b>Weight</b>	+/- 0.4 % Full Scale or +/-10 g absolute per weighing
<b>Hectoliter weight</b>	+/- 1.25 kg/HL
<b>Moisture</b>	+/- 0.5 % – 25 % (wet weight basis – ww), +/- 0.9 % – 35 %
<b>Minimal quantity for moisture measurement</b>	At least a full partial weighing, 3.00 / 1.50 / 0.75 liters
<b>Speed</b>	Approx. 4 sec. per partial weighing

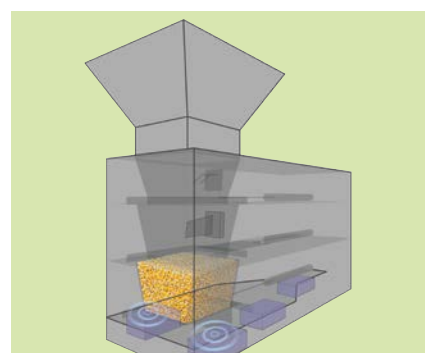
We reserve the right to make technical alterations.



Classic GrainGage™



Moisture sensor



Weighing cells

## Single High Capacity GrainGage™.

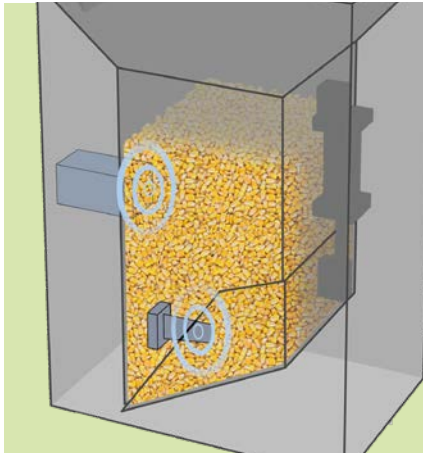
This harvesting data system is perfectly suited for weighing in situations where a large volume of harvested material needs to be weighed (e.g. corn), for moisture measurements when rapid weighing cycles with high yields are required, and when using the software Easy Harvest for field map deployment, 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
- If a sampler is present, labels can be optionally printed directly in the field
- Additionally, this weighing system has a countdown timer to determine the optimal weighing point



Single High Capacity GrainGage™



Moisture and weight measurement in HCGG

#### Technical data Single High Capacity GrainGage™

Weighing system	
Dimensions (W x D x H)	508 x 483 x 560 mm (20 x 19 x 22")
Capacity	Approx. 20 kg corn
Measuring precision/speed	
Weight	+/- 80 g absolute
Hectoliter weight	+/- 1.2 kg / 100 l for over 95 % of samples
Moisture	+/- 0.5 % to 25 % (wet weight basis – ww), +/- 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

We reserve the right to make technical alterations.

## Bucket weigh system.

This weighing system is designed to record the plot weight and for integrating the NIR analysis. Excellent measuring precision for plot weights up to 30 kg characterize this harvest data collection system. The patented stabilization of the weighing bucket on leaf springs ensures it can be operated with one load cell.

The sequence is as follows during harvesting:

- The weighing system comprises a weighing bucket with a weighing sensor and a holding hopper
- The harvested material is stored in the holding hopper
- The weighing cycle is triggered manually at the end of the plot by pressing a button
- The data is stored on an industrial PC
- If a sampler is present, labels can be optionally printed directly in the field
- Additionally, this weighing system has a countdown timer to determine the optimal weighing point



Bucket system (container weighing system)



#### Technical data bucket system

Weighing system	
Dimensions (W x D x H)	580 x 450 x 625 mm (22.8" x 17.7" x 24.6")
Capacity	Up to approx. 30 kg
Measuring precision/speed	
Weighing precision	+/-80 g absolute
Cycle time	Approx. 6 sec. (system ready, until data recorded)

We reserve the right to make technical alterations.

# Delta

## Figures. Data. Facts.

### Technical data

Basic machine						
Deutz diesel engine	63 kW (86 HP), water cooled, 3.6 l capacity, turbo					
Fuel tank capacity	100 l, Option: 178 l					
Hydrostatic drive	Gear 1: 0 – 10 km/h (5.5 mph) / gear 2: 0 – 18 km/h (11 mph) for standard tires					
Steering	Hydraulic					
Service brake	Hydrostatic					
Parking brake	Hydraulic multiple disc brake					
Ground clearance	290 – 240 mm (11.4" – 9.5") depending on tire dimensions)					
Wheel base	2590 mm (102")					
Cabin	Cabin with powerful air conditioning (6.8 kW)					

Front tires	Standard tires		Terra tires		Large tires	
Type	11.5/80-15.3		Terra 400/55-17.5		340/80 R 20 AS	
Tire width	290 mm (11.5")		400 mm (15.5")		353 mm (14")	
Track width	1287 mm (50.5")		1457 mm (57")		1504 mm (59")	
External wheel width	1577 mm (62")		1857 mm (73")		1857 mm (73")	

Rear tires	Standard tires		Terra tires		Large tires	
Type	200/60-14.5 2WD	7.00-12 4WD	Terra 26x12.00-12 2WD	Terra 26x12.00-12 4WD	10.0/75-15.3 AS 2WD	10.0/75-15.3 AS 4WD
Tire width	210 mm (8.5")	200 mm (8")	312 mm (12")	312 mm (12")	264 mm (10")	264 mm (10")
Track width	1200 mm (47")	1355 mm (53.5")	1400 mm (55")	1455 mm (57")	1500 mm (59")	1438 mm (56.5")
External wheel width	1410 mm (55.5")	1555 mm (61")	1712 mm (67")	1767 mm (69.6")	1764 mm (69.4")	1715 mm (67.5")

Full track system		
Track width	1430 mm (56")	1480 mm (58")
Track belt width	400 mm (16")	500 mm (20")
External width full track system	1830 mm (72")	1930 mm (76")
Internal width full track system	1030 mm (40.5")	930 mm (36.5")

Headers and accessories	
Cutting tables feeder house	Feed auger with feeder house and blow-out device, hydraulically reversible and with emergency stop device, cutting widths: 1500 mm, 1750 mm, 2000 mm, 2400 mm
Cutting tables belt	Cutting table with belt feeder, cutting width: 1500 mm, options for fine seeds
Reel	4-part pick-up reel, hydraulically driven, 6-part reel (option for feeder house), 5-part reel (option for cutting table with belt feeder)
Outer divider	Left and right; extra long outer dividers (option)
Crop lifters	5 – 7 units
Cutting height setting	Hydraulically from -100 to +960 mm in case of feeder house, -200 to +800 mm in case of belt intake
Horizontal reel adjustment	Mechanical and/or hydraulic (option)
Corn picking header	2-row (75/96 cm), option: 3-row (50/60 cm)
Sunflower attachments	Mounted independently of row on the cutting table, 2-row sunflower attachment on corn picking header mounted
Row-Crop-Header	2-row for row harvesting of soybeans or sorghum
Cutting table extension	For rapeseed
Vertical cutter bar	For rapeseed: electrical on left, mechanical on right
Tine cloth pick-up device	For swath harvesting

Grain collection and transport	
Grain transport	Pneumatic conveyor system
Bagging method	Side mounted bagging on left side, bagging in driver's cabin, bagging in cockpit
Grain tank	1100 l (standard) or 1500 l (option), overload height: 3000 mm or 3700 mm (option)
Sampling	In the cabin, on the driver's platform, or side-bagging on the machine
Compressor	Included in standard scope

Threshing and Cleaning	
Concave	10 concave bars
De-awner bars	5 units may be inserted from the side
Threshing drum diameter	350 mm (14")
Threshing drum width	780 mm (31")
Coverage angle	117°
Speed adjustment	Electrically adjustable variator: 330 – 1900 rpm stepless
Beater bars	6 units
Shakers	Area: 1.8 m², 2 drop stages, including suspended guide plates
Cleaning blower	Hydraulically driven
Rpm	Stepless electrical speed adjustment
Cleaning sieve	Top sieve: adjustable sieve, Bottom sieve: mesh or adjustable sieve, cleaning program, total sieve area: 2.18 m²
Options	
	Without cabin, sunroof, filling level display for grain tank, spiked drum and concave for rice, full track system for rice harvesting, all-wheel drive including differential lock, differential lock, foot pedal for stop & go operation, straw chopper, electrical adjustable sieve adjustment, variable sieve box settings, grain loss display, seed grinder, foldable steps, safety rail, working lights, camera system (1 or 3)
Dimensions	
Dimensions	Length: approx. 6000 mm (236") Width: approx. 1800 mm (70.9") with 1500 mm (59") wide cutting table Height: approx. 2500 mm (98.4") without cabin, approx. 2950 mm (116") with cabin
Weight	From 3500 kg (7700 lbs), with cabin from 3750 kg (8250 lbs)

We reserve the right to make technical alterations.



Thanks to the compact construction, the machine is easy to transport without removing components (maximum transport height: 2950 mm)

# WINTERSTEIGER After Sales Service. The delivery is just the start of our service.

**The best time to evaluate the quality of an investment is several years after delivery.  
That is why WINTERSTEIGER has set up a worldwide After Sales Service.**

## **Commissioning and training**

WINTERSTEIGER ensures both with its experts worldwide and of course on site.

## **Proactive maintenance**

Maintenance and preventive exchange of pre-defined parts subject to wear and tear at pre-set times eliminate problems before they arise. For example, during our customers' annual holiday to keep maintenance costs as low as possible.

## **On-Call-Help-Desk**

This service underlines our high claims for service for our partners worldwide. It ensures first class support even outside our own hours of business.

## **Strong customer service team**

A large team of extremely well trained service staff provides comprehensive care for:

- Installation and commissioning
- Training
- Preventive maintenance
- Conversions
- Modifications
- Clearing faults
- Repairs
- Support
- Rapid supply of replacement parts

## **Advice services**

- Advice from experts on technical equipment for research facilities
- Participation at international seed breeding symposia
- Arranging contacts with experts
- Advice from agricultural consultants in the definition and implementation of projects and technology transfer



## **Intensive guidance and training courses**

WINTERSTEIGER regularly holds guidance and training courses for operating staff, either directly on site, in our original building in Austria or one of our agencies around the world. They are the basis for perfect mastery of the machines and an uninterrupted harvest. This helps avoid down time and saves costs. Both WINTERSTEIGER service engineers and the service engineers from our agencies receive ongoing training and product information about new developments.

## Those who sow also harvest with WINTERSTEIGER.

**WINTERSTEIGER is the world's number one in field research equipment and has established itself at the top of a niche market which will continue to gain significance in future. The big challenge faced by agronomists and plant breeders is introducing new developments that make a decisive contribution towards sustainable food and energy supplies for the world.**

WINTERSTEIGER offers complete solutions for the entire sowing and seed cultivation process. The WINTERSTEIGER „one-stop-shop“ concept provides customers with everything they need from a single source. As application specialists, WINTERSTEIGER's process expertise and proactive services along the entire value chain delights our customers.

The product range includes: plot and multiplication combines, plot forage and silage harvesters, plot seeders and planters, software solutions for data management and note taking, fertilization and crop protection equipment, as well as laboratory equipment.



As complete provider in agricultural testing, WINTERSTEIGER proves itself as strong partner for customers in various fields:

- Agricultural Universities and research centers
- Agricultural ministries and their departments for plant breeding
- National and international institutes for development projects
- National and international companies that research in the field of plant breeding
- Service companies that test for research companies

# WINTERSTEIGER. A Global Player.

**WINTERSTEIGER AG is an international machinery and plant engineering group. Founded in 1953, it has gradually established itself as a leading provider of innovative solutions for customers in technically sophisticated niche markets. The business fields of the company consist of:**

## ■ SEEDMECH

- Turnkey solutions for plant breeding and research

## ■ SPORTS

- One-stop supplier for the rental and servicing of sports products
- Systems for hygienic drying of sports goods and work clothes
- Custom solutions for feet

## ■ WOODTECH

- Process solutions for precision thin-cutting, wood repairs and cosmetics
- Saw blades for wood, food, and metal
- Machines for mobile and stationary sawmills
- Plants and automation solutions

## ■ METALS

- Levelling technology machines and systems



Headquarters at Ried im Innkreis, Upper Austria

Success begins with the right decisions.  
At the right time. We look forward to you!



 **WINTERSTEIGER**  
Worldwide No.1  
in field research equipment.

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