





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. Our plot seeders have been specially developed for precise sowing of trial plots.

This ensures a perfect framework for the research, breeding, testing and propagation of field crops, including specialty crops, at the highest standards.

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



Contents	S
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Basic frame	6
Distribution systems	8
Slope compensation	9
Controls	10
Opener systems	12
Accessories	13
Technical data	14
Satellite navigation for plot seeders (GPS technology)	15
Kubota, small tractor for plot seeders	16
After Sales Service	17
WINTERSTEIGER SEEDMECH	18
WINTERSTEIGER Worldwide	10



Plotseed Plot seeders.

The WINTERSTEIGER plot seeders have been specially developed for precise sowing of trial plots. A variety of distribution systems makes it possible to distribute the seed for a plot over multiple rows. The modular system with its many options allows you to customize the machine for many different applications.



Your benefits summed up:

- Simple controls and excellent visibility for the driver and operator
- Easy track width and row spacing adjustment
- Wide application scope thanks to a variety of feeding variants
- Seed placement for a variety of soil conditions thanks to a selection of opener systems
- XXL frame allows both for direct seeding through the use of heavy direct openers and for a combination with pre-cutters and fertilizer openers



Basic frame.

Each WINTERSTEIGER plot seeder is characterized by a stable frame and easy adjustment of the track width and row spacing. The choice of basic frame influences the track width, transport dimensions and weight of the machine. We recommend the XXL frame for direct seeding.

Plotseed S



Attachment Track Transport width Weight Tractor mounted 3-point 1250 - 1750 mm (49" - 68") 1500 - 2250 mm (59" - 88") 2000 mm (79") 2700 mm (106") 2700 mm (106") (808 lbs)

Plotseed XL



Attachment	Track	Transport width	Weight
Tractor mounted 3-point	1250 - 1800 mm (49" - 70") 1250 - 2100 mm (49" - 83") 1250 - 2600 mm (49" - 102")	2450 mm (100") 2750 mm (108") 3250 mm (128")	Starts at 600 kg (1300 lbs)



Plotseed TC

The basic Plotseed TC machine supports the use of replaceable frames for the following applications:

- Precision spaced planter Monoseed TC
- Single row seeder Rowseed TC
- Plot sprayer
- Plot fertilizer spreader

Plotseed XXL



Attachment	Track	Transport width	Weight
Tractor mounted 3-point	1250 – 1900 mm (49" – 75")	2550 mm (100")	Starts at 1300 kg (2900 lbs)



Attachment	Track	Transport width	Weight
Self propelled	1250 - 1850 mm (49" - 73") 1600 - 2000 mm (49" - 79")	2200 mm (87")	Starts at 1150 kg (2500 lbs)

Distribution systems.

Belted cone.

The belted cone (diameter 195 or 290 mm) is suitable for any kind of sowing, from fine seeds, through grain, to legumes with large seeds.



Belted cone

A combination of distribution systems can also be deployed.

Mounting 2 distribution systems side by side or behind/in front of one another allows for simultaneous sowing of two plots and/or spreading of fertilizer or microgranulate.

The following combinations are supported:

- 2 belted cones behind/in front of one another
- 2 belted cones placed side by side
- 2 cell wheels behind/in front of one another
- 2 cell wheels placed side by side
- Cell wheel and belted cone behind/in front of one another

Cell wheel.

The cell wheel (diameter 265 or 400 mm) is mainly used for smaller seed sizes up to the size of grain.



2 cell wheels and bulk seed sowing



Belted cone and cell wheel distributor



Slope compensation.

Slope compensation ensures even distribution of seed in the belted cone/cell wheel and distributor housing despite sloping ground. If you are sowing on a flat surface, you can work without slope compensation.





Seeder control units.

Two control units are available for the WINTERSTEIGER plot seeders:

While the PDS-E control unit can be regarded as a minimal version, the Global Seed Control (GSC) is the perfect solution for exacting requirements with respect to precision and control.

PDS-E control unit.

- ON/OFF for electrical power supply to seeder
- Actuates the seed distribution system
- Funnel stroke time adjustment
- Horn button for audible signal by operator
- Function monitoring (horn signal in case of malfunction)



PDS-F control unit

Global Seed Control (GSC) control unit.

The GSC combines all features that guarantee best distribution accuracy and precision.

The control unit is characterized by the following features:

Terminal:

- Easy controls via function keys
- Clear, high-contrast display

Setting options:

- User menu language setting
- Easy setting of different plot parameters, such as the plot length, cycle length, selected speed, start length, drive mode, and number of plots per trip
- Distribution system adjustment: selection of distribution system (e.g. belted cone, magazine, etc.) and setting of filling times (e.g. funnel stroke time, seed drop time)

Display:

- Displays the drive train settings required for the selected plot parameters
- Monitoring of all critical functions and malfunction cause display. In plot drilling, this means power monitoring of the rotary distributor so that feeding or the funnel stroke is blocked in case of a malfunction.



Global Seed Control (GSC) unit

	QUICK	QUICK DRILL	
start	plot length fill mode ranges deep	582.0 funne 8	quick
calib- ration	max. deep driving trip mode	2,50 km/h Serpentine Manuel	prog.
select menu	checkhead off start length	49 cm inaktive	machine param
13:04:45			22.04.08

MACHINE PARAMETER		
trip mode telemetric whe filename		
alarm time on error 1. alarm time on warning 0.		
funnel (seedsplitter) open time seed drop down time	0.5 s 0.7 s	

Setting the plot parameters



Measuring wheel

Travel measuring system via measuring wheel.

The measuring wheel greatly facilitates sowing since there is no need for field markers; at the same time, it improves efficiency and precision. The GSC provides the following functions in combination with the measuring wheel:

- The sowing cycle is triggered by a signal from the measuring wheel
- A warning signal occurs in case of excessive speed

Valuable grain deserves careful sowing.



Opener systems.

The following opener systems are available for seed drilling:

For prepared soils:



ISARIA shoe opener, row spacing as of 8 cm (3.2")



NODET shoe opener, row spacing as of $8.5\ cm\ (3.3")$



ACCORD CX single disk opener, row spacing as of 9.5 cm (3.8")



LEMKEN double disk opener, row spacing as of 12.5 cm (4.9")

For direct sowing:



ACRA PLANT double disk opener, row spacing as of 19 cm (7.5")



GREAT PLAINS double disk opener, row spacing as of 15 cm (6")



SUNFLOWER double disk opener



HORWOOD BAGSHAW tyne opener

Other opener systems can be implemented on request.

Accessories.

The following options are available depending on the basic frame:







Microgranulate spreader



Bulk seed sowing



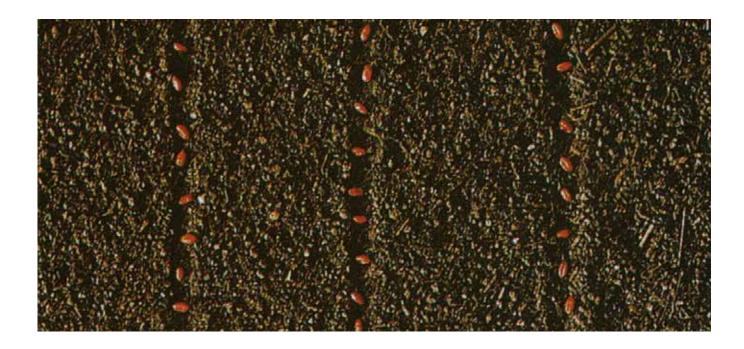
Drillbox



Spring tine harrow

- Anti-static filling funnels for grass and fine seeds
- Sensors for seed monitoring
- Wind and rain protection cabin
- Platform with safety rail
- Track marking

- Track loosener
- Measuring wheel
- Cable trip system



Figures. Data. Facts.

Technical data				
	Plotseed S	Plotseed XL	Plotseed XXL	Plotseed TC
Engine	-	-	-	Kubota diesel engine: 3 cylinders, 1000 ccm, 27 HP (20 kW)
Attachment options		3-point hydraulics on tractor		-
Track/transport width	1250 - 1750 mm / 2000 mm (49" - 68" / 79") 1500 - 2250 mm / 2700 mm (59" - 88" / 160")	1250 - 1800 mm / 2450 mm (49" - 70" / 100") 1250 - 2100 mm / 2750 mm (49" - 83" / 108") 1250 - 2600 mm / 3250 mm (49" - 102" / 128")	1250 – 1900 mm / 2550 mm (49" – 75" / 100")	1250 - 1850 mm / 2200 mm (49" - 73" / 87") 1600 - 2000 mm / 2200 mm (49" - 79" / 87")
Row numbers	2 - 12 rows	2 - 16 rows	2 - 12 rows	2 - 16 rows
Tires	5.00-15AS	5.00-15AS	7.60-15 Impl. R-8 PR	Front: 6.50-80/12 or 29x12.0-15 Rear: 6.00-16 or 18x9.50-8
Weight	Starts at 400 kg (808 lbs)	Starts at 600 kg (1300 lbs)	Starts at 1300 kg (2900 lbs)	Starts at 1150 kg (2500 lbs)
Plot length				
Multi-stage gearbox	2 – 40 m (78" – 1574")	2 – 32 m (78" – 1259")	2 – 32 m (78" – 1259")	2 – 32 m (78" – 1259")
Zero–Max gearbox – continuously variable	-	3 – 37 m (118" – 1456")	-	-
Seed distribution				
Belted cone		290 or	180 mm	
Cell wheel	265 mm	265 mm or 400 mm	265 mm or 400 mm	265 mm or 400 mm
Cont. drilling unit		13 l c	ontent	
Slope compensation				
No slope compensation	Fixed frame			
Manual slope compensation	Via 2 push buttons			
Automatic slope compensation Via sensors				
Control unit				
Variants PDS-E or GSC				
Opener systems				
Shoe opener	ISARIA, NODET	WINTERSTEIGER, NODET	HORWOOD BAGSHAW	WINTERSTEIGER, NODET
Single disk opener	ACCORD CX – ACCORD CX			ACCORD CX
Double disk opener	NODET	NODET, LEMKEN, GREAT PLAINS, ACRA PLANT	ACRA PLANT, SUNFLOWER Opener	NODET, LEMKEN, GREAT PLAINS

We reserve the right to make technical modifications.

GPS Technology

Use of satellite navigation in field trials.

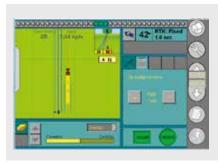
WINTERSTEIGER gives you the option of fitting state of the art GPS technology to any seeder. WINTERSTEIGER cooperates with experienced partners in this area. Together, we have developed a system that is simple to use and supports your field work in a reliable way.

Your benefits summed up:

- Simple use of GPS technology
- Maximum sowing precision for extremely reliable results
- Complicated field marks are no longer needed
- If needed, the funnel on the row unit can be triggered automatically
- Faster sowing speeds than with legacy technology
- Automatic steering system available for maximum tractor accuracy
- Comprehensive documentation available after sowing
- Available for all seeders



Safe and simple sowing with GPS technology $% \left\{ \left\{ 1\right\} \right\} =\left\{ 1\right\} =\left$



Perfect visibility during and after the task at hand



Fitting the control display to the tractor



RTK station for maximum precision sowing

Kubota

Small tractor for plot seeders.

Powerful, versatile tractor.

The Kubota plot tractor is a small tractor that has been specially adapted for the Plotseed S, Rowseed S and Monoseed B/DT/K machines. It has its own attachment frame, sowing drive, and hydraulic sowing PTO to suit it perfectly to your choice of planter. An automatic steering system is available as an option.

Your benefits summed up:

- Variety of front- and rear-mounted applications
- Easy to transport thanks to low deadweight
- Highly maneuverable thanks to compact design





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 has positioned itself at the peak of a niche, which will become more critical in the future. Today, agricultural field research is challenged with providing significant contributions for a lasting food and energy supply to the world through new developments. WINTERSTEIGER provides the necessary technology.

Uniquely designed products offer a range, which covers the entire cycle of field research from the sowing to the harvesting:

Sowing

Precision spaced planters, plot drills, single row seeders and plot tractors for the front and rear planting with seed machines

■ Fertilization and plant protection

Fertilizer distributors, field sprayer and hand-pushed plot sprayer

Data collection

Field PC's for mobile data acquisition

Harvesting

Plot combines, stationary combines and forage harvester

■ Laboratory analysis

Laboratory thresher, laboratory corn sheller, seed dresser, sample chopper and sample divider



Plot combine Split



Plot combine Quantum

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



Precision spaced planter Dynamic Disc



Laboratory thresher LD 350

- 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 Upper Austrian machine building specialist and has focused on niche markets since its foundation in 1953.

The internationalization of the markets and the technological revolutions have become the deciding factors in the global competition. WINTERSTEIGER has always considered such

challenges as opportunities and has taken advantage of them. This has resulted in continuous growth, which is further ensured by the innovative power of its employees and driven through strategic acquisitions. In this way we succeeded in providing the optimal conditions for long-term and stable partnerships with our customers.

The business fields of the company consist of:

SEEDMECH

■ Turnkey solutions for plant breeding and research

SPORTS

- One-stop supplier for ski and snowboard rental and servicing
- Systems for hygienic drying of sports goods and work clothes
- Fit-optimizing solutions and individual sports shoe adjustments

■ WOODTECH

- Process solutions for precision thin-cutting, wood repairs and wood cosmetics
- Saw blades for wood and food

METALS

■ Levelling technology machines and systems

AUTOMATION

■ Plants and automation solutions for industrial manufacturing companies



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





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