





In the earth lies the seed of new growth.

The significance of agricultural research is changing rapidly. Soil erosion, global increase in population, bio energy, and the change in climate are the challenges of the future, in which answers are needed.

With an integrated solution in modern field testing, WINTERSTEIGER already answers one of these questions. This enables research, breeding, testing and seed increases from farmers' crops to specialized agriculture at the highest level.

The overall success of mechanized field trials depends on the best products throughout the whole breeding process. In this brochure, you can therefore expect a large amount of equipment for laboratory preparation – each item conforming to the familiar high quality level of WINTERSTEIGER products.



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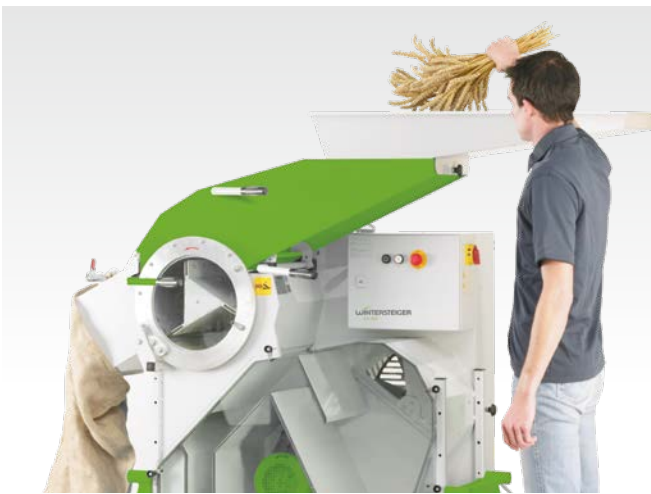
LD 350 Laboratory Thresher

The WINTERSTEIGER LD 350 is a laboratory thresher for use with individual plants, bundles and small plots: a wide range of crops can be threshed from very small vegetable seeds to large beans.

The LD 350 is suitable for threshing, de-awning and cleaning cereals, pulses, vegetable seeds, clover, grass, rice, etc. without breakage, loss of seed or mixing.

Functional principle.

- Bundles of crop are fed into the threshing unit via the loading hopper
- Stepless wind speed adjustment means maximum cleaning of the crop
- Straw is collected in a sack while the smaller chaff particles are separated from the seeds and are collected in two separate drawers
- Stepless variable adjustment of the threshing drum speed, 18 different concaves, de-awners and beaters ensure simple adjustment for different types of crop



Loading



Changing the threshing basket

Options

18 different concaves enable perfect threshing:

1 x 3 mm	for especially fine-grained seed, e.g. clover, grass, flowering crops (cauliflower, cress, vetch, etc.) - if smaller than 1 mm
1,5 x 4,5 mm	for fine-grained seed, e.g. clover, grass, flowering crops (chicory, lettuce, cress, vetch, etc.) - if smaller than 1.5 mm
2 x 6 mm	for clover, grass, flowering crops and fine vegetable seeds (leeks, cauliflower, chicory, cress, vetch, etc.) - if smaller than 2 mm
2,5 x 7,5 mm	for clover, grass, rape seed, flowering crops and fine vegetable seeds (red cabbage, white cabbage, carrots, onions, fennel, broccoli, etc.) - if smaller than 2.5 mm
3 x 9 mm	for clover, grass, rape seed, flowering crops and fine vegetable seeds (cabbage, onions, fennel, broccoli, radish, cress, etc.) - if smaller than 3 mm
4,5 x 13,5 mm	for clover, grass, flowering crops, fine vegetable seeds, cereals, specialized crops (radish, wheat, millet, sorghum, etc.) and all types of seed smaller than 4.5 mm
5 x 15 mm	for medium grain cereals (wheat, oats, sorghum, etc.) and all types of seed smaller than 5 mm
6 x 18 mm	for larger grain cereals (oats, rye, etc.) and all types of seed smaller than 6 mm
3 x 3 mm	for round types of seed, e.g. vegetable seeds and specialized crops (red cabbage, white cabbage, leeks, onions, broccoli, etc.) - if smaller than 3 mm
4 x 4 mm	for round types of seed (radish, spinach, etc.) - if smaller than 4 mm
5 x 5 mm	for round types of seed (sugar beet, etc.) - if smaller than 5 mm
6 x 6 mm	for round types of seed (sugar beet, vetch, etc.) and also cereals (barley, rice, etc.) - if smaller than 6 mm
8 x 8 mm	for round types of seed (peas, chick peas, vetch, etc.) - if smaller than 8 mm
10 x 10 mm	for round types of seed (peas, chick peas, beans, lupin, etc.) and also longish seeds such as cereals - if smaller than 10 mm
12 x 12 mm	for round types of seed (peas, chick peas, beans, soybeans, lupin, etc.) or even longish seeds - if smaller than 12 mm
15 x 15 mm	for large grained types such as peas or chick peas, soybeans, etc. - if smaller than 15 mm
18 x 18 mm	for especially large grained types such as peas or chick peas, large beans, etc. - if smaller than 18 mm
20 x 20 mm	for especially large types such as large beans - if smaller than 20 mm
Hopper thresher basket	for rice

De-awner bars are available as an option.

Options.

The following mobile versions of the WINTERSTEIGER LD 350 are available:



Chassis with 2 wheels



Single axle trailer with light



Chassis with 4 wheels

Technical Data

Three phase motor	3 x 208-240 V, 50/60 Hz, 2.3 kW 3 x 360-415 V, 50/60 Hz, 2.3 kW
Alternating current motor	1 x 208-230 V, 60 Hz, 2.3 kW
Threshing drum	Continuously variable 300 – 1400 rpm
Dimensions	
Measurements	Length: 1850 mm (73") Width: 720 - 1000 mm (28" – 39") Height: 1700 mm (67")
Weight	Approx. 230 kg (507 lbs)
Options	
Petrol engine	2.9 kW (4 PS), 169 ccm
Diesel engine	3.5 kW (5 PS), 230 ccm
Chassis	With 2 wheels With 4 wheels (ø 100 mm or ø 260 mm) (ø 4" or ø 10")
Trailer	Single axle trailer with brake with Tow bar and light

We reserve the right to make technical alterations.



LD 180 Laboratory Thresher

The WINTERSTEIGER LD 180 is a laboratory thresher for cereals, peas, grass and small grain crops. The clear-view screen creates an unobstructed view of the threshing and cleaning process, enabling precise control of the threshing process.

Functional principle.

- The individual heads or bundles up to 18 cm in length can be fed into the threshing drum. Alternatively, the entire stem can be fed into the threshing drum and the empty heads taken out, still on the stems
- A foot pedal is used to open the bottom door of the drum and empty the contents into the seed drawer
- The wind flow can be adjusted so the harvested crop is as clean as possible
- Simple stepless adjustment of the threshing drum speed for different types of crop
- The chaff and the remaining stalks are extracted by a fan into a chaff sack



Loading



Technical Data

Alternating current motor	1 x 220-230 V, 50 Hz, 0.75 kW 1 x 110 V, 60 Hz, 0.75 kW
Threshing drum	Continuously variable 560 – 1400 rpm
Fan	1720 rpm
Dimensions	
Measurements	Length: 750 mm (30") Width: 450 - 750 mm (18" – 30") Height: 1100 mm (43")
Weight	Approx. 60 kg (132 lbs)
Options	
Petrol engine	2.2 kW (3 PS), air cooled with hand starter
Chassis	2 wheels with rubber tyres and transport handle

We reserve the right to make technical alterations.

Hege 16 Laboratory Thresher

The Hege 16 is a laboratory thresher for cereals, peas and small grain crops with optional magazine filling attachment. The clear-view screen creates an unobstructed view of the threshing and cleaning process, enabling precise control of the threshing process.

Functional principle.

- The proven threshing technology of the Hege 16 guarantees fast threshing and grain protection
- The threshed crop is cleaned in the reverse flow wind process and collected in a container or magazine
- Variable adjustment of the threshing drum speed and the central concave, different concaves, deawners and beaters ensure simple adjustment for different types of crop
- Stepless wind adjustment means maximum cleaning of the crop



Loading



Option: Magazine hopper



Technical Data

Three phase motor	3 x 400 V, 50 Hz, 1.1 kW
Alternating current motor	1 x 220-230 V, 50 Hz, 0.75 kW
Threshing drum	Continuously variable 430 – 2400 rpm
Dimensions	
Measurements	Length: 950 mm (37") Width: 600 mm (24") Height: 1200 mm (47")
Weight	Approx. 95 kg (209 lbs)

We reserve the right to make technical alterations.

LS 230 Laboratory Corn Sheller

The WINTERSTEIGER LS 230 laboratory corn sheller is designed for safe and meticulous harvesting of corn kernels.

Functional principle.

- The corn cobs are fed into a hopper past a toothed disc for safe shelling
- A spring guide ensures that both extremely small and very large kernels are thoroughly stripped
- The kernels are passed through a sieve into a drawer and the shelled cobs fall from the machine to be collected in a container



Loading



Collection container and kernel drawer



Technical Data

Three phase motor	3 x 380-415 V, 50 Hz, 0.9 kW
Dimensions	
Measurements	Length: 1000 mm (39") Width: 580 mm (23") Height: 1200 mm (47")
Weight	Approx. 150 kg (331 lbs)

We reserve the right to make technical alterations.

Hege 11 Liquid Seed Treater

With the Hege 11 liquid seed treater it is possible to treat different quantities of seed using three different sizes of seed bowls for small quantities (20 – 3000 g).

Functional principle.

The centrifugal force in the drum pushes the seed onto the outer wall and brings it into circulation and the spinning disc distributes the seed treatment evenly over the seed.

Dosing is by means of:

- Dispensettes for treating seed with one standard dressing
- Varipettes with interchangeable tips for different treatments

The unit is driven by an electric motor.

Performance features.

- Seed bowls easily changed for different quantities
- Suitable for all types of seed
- Accurate dosing of the seed treatment ensures consistently high quality of treatment on every single seed (even with small quantities)
- Preservation of germination ability due to careful treatment
- Easy and complete emptying of the seed bowl tank
- Option: Air-operated unit for complete cleaning of the dressing drum



Dispensette with brown glass bottle



Varipette



Seed bowl small - medium - large



Option: Air-operated unit



Technical Data

Seed quantities / Seed bowl	Small 1 l for 20 - 100 g seed Medium 7 l for 80 - 1000 g seed Large 14.5 l for 500 - 3000 g seed
Emptying	Manually by use of a hand lever
Alternating current motor	1 x 208-230 V, 50/60 Hz 1 x 110 V, 60 Hz
Dimensions	
Measurements	Length: 700 mm (28") Width: 580 mm (23") Height: 1200 mm (47")
Weight	Approx. 60 kg (132 lbs)

We reserve the right to make technical alterations.

Hege 14 Liquid Seed Treater

The Hege 14 liquid seed treater is particularly suitable for batch dressing and coating for larger quantities of seed in batches (up to 10 kg).

Functional principle.

The centrifugal force pushes the seed onto the outer wall and brings it into circulation. The dosing pump sprays the seed treatment onto the spinning disc and distributes it evenly over the seed.

Performance features.

- Suitable for all types of seed
- Accurate dosing of the seed treatment ensures consistently high quality of treatment on every single seed (even with small quantities)
- High output due to short mixing times (1 – 3 batches per minute)
- Preservation of germination ability due to careful treatment
- Easy and complete emptying of the seed dressing tank
- No cleaning times when changing seed types



Dosing pump



Rotary disc



Technical Data

Seed quantities	Up to approx. 10 kg (depending on type of seed)
Emptying	Pneumatically operated emptying flap
Three phase motor	3 x 208-240 V, 50/60 Hz 3 x 360-415 V, 50/60 Hz
Alternating current motor	1 x 110 V, 60 Hz
Dimensions	
Measurements	Length: 800 mm (31") Width: 800 mm (31") Height: 1300 mm (51")
Weight	Approx. 135 kg (298 lbs)

We reserve the right to make technical alterations.

Hege 12 Liquid Seed Treater

The Hege 12 liquid seed treater can be used to dress seed in 12-chamber magazines. 4 and 6-chamber magazines can be used for small quantities.

Functional principle.

The dressing slide is drawn across the magazine. At the same time the seed is set in motion by means of compressed air. A dosing unit sprays an exact pre-metered quantity of seed treatment onto the moving seeds. Dosing is from a 0.5 l reservoir and can be set from 200 to 2000 ml.

Performance features.

- Accurate dosing of the seed treatment and intensive mixing of the seed ensure a consistently high treatment quality
- Extremely precise adjustment of the amount of seed treatment used on the dosing unit
- Easy to operate
- High output: 10 pcs. 12-chamber magazines in approx. 45 seconds



Technical Data

Basic unit	<ul style="list-style-type: none">■ Dressing carriage with dosing unit and integrated air nozzles■ 2 magazine trays for fixing and transporting chamber magazines■ Purging device for cleaning the dosing unit
Dimensions	
Measurements	Length: 115 mm (5") Width: 400 mm (16") Height: 400 mm (16")
Weight	Approx. 16 kg (35 lbs)

We reserve the right to make technical alterations.

Hege 44 Sample Chopper

For chopping up fodder plants for trials, such as all types of clover and grasses, alfalfa, silo corn and catch crop plants.

Functional principle.

The plant sample is put on the conveyor band. By pushing the lever of the press roller, the feeding mechanisms are engaged and the sample is fed to the disc wheel chopper. The feeding roller remains pushed down until the entire sample is chopped.

The chopped material is then discharged into a collecting bin.

Performance features.

- Continuous feed of chopping material through one press roller, two feeder rollers and a band conveyor
- Top feeding roller is positioned by springs and adapts automatically to the plant samples rate and presses the material to be chopped forward
- The disc wheel with 3 specially coated knives guarantees the best chopping quality
- Chopping length is easily changed by a stepless adjustment of the feeding speed
- Tray for chopped material
- Mainly self-cleaning
- Option: Knife grinder



Technical Data

Alternating current motor	1 x 208-240 V, 50/60 Hz 1 x 110 V, 60 Hz
Tray content	Approx. 20 l
Dimensions	
Measurements	Length: 800 mm (31") Width: 600 mm (24") Height: 1050 mm (41")
Weight	Approx. 130 kg (287 lbs)

We reserve the right to make technical alterations.

Hege 6 Sample Divider

For dividing seed into bags or dish.

Functional principle.

- When the funnel is lifted, the seed falls into a multi-chambered conical distributor and is divided into bags or bowls
- Indirect process: 2 – 3 – 4 – 5 – 6 divisions. The samples are joined into one sample from two chutes. This provides precise distribution of seed samples
- Direct process: 4 – 6 – 7 – 8 – 10 – 12 quantities. Here, one chute corresponds to one division. Various distributors are available depending on the required quantities

Performance features.

- Previously weighed quantities of seed are divided into equal quantities in seconds
- Fast and economical method of seed preparation
- Options: Different filling funnels Ø 30 – 50 – 75 mm (Ø 1.18" - 2" - 3")



Hege 7 Sample Divider

For dividing seed into chamber magazines.

Functional principle.

When the filling funnel is lifted the seed falls into a multichambered conical distributor and is divided into quantities by bringing together 2 chutes and then filled into the 4 or 6 chamber magazines.

Performance features.

- Previously weighed quantities of seed are divided into equal quantities in seconds
- Fast and economical method of seed preparation
- Different filling funnels Ø 30 – 50 – 75 mm (Ø 1.18" – 2" – 3")



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

Precious seed deserves a careful harvest.



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!



Worldwide No.1
WINTERSTEIGER
in field research equipment.

Headquarters:

Austria: WINTERSTEIGER AG, 4910 Ried, Austria,
Dimmelstrasse 9, Tel.: +43 7752 919-0, Fax: +43 7752 919-57,
seedmech@wintersteiger.at

International Companies:

Brazil: WINTERSTEIGER South América Comercio de
Maquinas Ltda., Rua dos Cisnes 348, CEP: 88137-300, Palhoça,
SC – Brasilien, Tel./Fax: +55 48 3344 1135,
office@wintersteiger.com.br

China: WINTERSTEIGER China Co. Ltd., RM305, Lunyang
Mansion, No.6 Beisanhuan Middle Road, Xicheng District,
100011 Beijing, Tel.: +86 10 6205 6807, Fax: +86 10 6205 2007,
office@wintersteiger.com.cn

Germany: WINTERSTEIGER AG, 4910 Ried, Austria,
Dimmelstrasse 9, Tel.: +49 2927 1241, seedmech@wintersteiger.at

Great Britain: TRIALS Equipment (UK) Ltd,
CM7 4EH Wethersfield, Hudson's Hill, Hedingham Road,
Tel.: +44 (0) 1371 850793, sales@trialeq.co.uk

France: SKID WINTERSTEIGER S.A.S., 93 Avenue de la Paix,
F-41700 Contres, Tel.: +33 254 790 633, Fax: +33 254 790 744,
alphonse.pascal@wintersteiger.com

Italy: WINTERSTEIGER Italia s.r.l., Strada Ninz, 82,
I-39036 La Villa in Badia (BZ), Tel.: +39 0471 844 186,
Fax: +39 0471 188 1664, info@wintersteiger.it

Canada: WINTERSTEIGER Inc., 851-57 Street East,
Saskatoon, SK S7K-5Z2, Tel.: +1 855 216-6537,
Fax: +1 306 343 8278, mailbox@wintersteiger.com

Russia: OOO „WINTERSTEIGER“, Krzhizhanovskiy Str. 14,
Build. 3, 117218 Moscow, Tel.: +7 495 645 84 91,
Fax: +7 495 645 84 92, office@wintersteiger.ru

USA: WINTERSTEIGER Inc., 4705 Amelia Earhart Drive,
Salt Lake City, UT 84116-2876, Tel.: +1 801 355 6550,
Fax: +1 801 355 6541, mailbox@wintersteiger.com

Representations:

Algeria, Argentina, Australia, Belgium, Bolivia, Bulgaria, Chile, Colombia, Czech Republic, Denmark, Ecuador, Egypt, Great Britain, Greece, Hungary, India, Iran, Ireland, Japan, Kazakhstan, Korea, Mexico, Morocco, Netherlands, New Zealand, Norway, Poland, Romania, Slovakia, South Africa, Spain, Sweden, Syria, Tunisia, Turkey, Ukraine, Uruguay, Venezuela. Contact details for our representatives are available on www.wintersteiger.com/seedmech.