

RRW 400 | RRW 500
Load volume 39 to 50 m³

BERGMANN

...die Spezialisten

Beet Transfer Trailers RRW

Professional technology for superior performance





*Proven quality:
"Made in Goldenstedt"*



BERGMANN, a successful, medium-sized, family-owned company in the third generation, has been firmly linked to its business location in Goldenstedt and its people for over 125 years.

Our actions are determined by an awareness of tradition and our innovative strength. Our state-of-the-art machines for spreading and grassland technology, harvesting and transport logistics meet the highest quality standards and are in use worldwide every day.

As a strong and reliable partner in the agricultural sector, we develop and produce practical agricultural technology for our customers at our company's factory in Goldenstedt. Our company philosophy, our ambition and our commitment are:

Quality "Made in Goldenstedt"





The Beet Transfer Trailers of the RRW series

The beet transfer trailer is the logistical transport link between the constantly moving beet harvesters and the windrows or the transport vehicles at the edge of the field. The use of a beet transfer trailer can considerably increase a beet harvester's performance. BERGMANN beet transfer trailers are extremely stable due to their full-steel structure and are therefore ideally suited for use under difficult conditions. Thanks to the two meters wide transfer conveyor, they have a transfer capacity of up to 2,100 tons per hour. The transfer belt with integrated cleaning function, folds into three sections, making it exceptionally adaptable to all conditions up to a transfer height of more than four meters. Both models have a hydraulic chassis for optimum driving comfort on the field and on the road. Maximum soil protection can be achieved with the optional crab steering system, i.e. offset track driving. A tyre pressure control system is also optionally available. ISOBUS operation is possible.

RRW 400 and RRW 500

Features at a glance

Easy, intuitive operation of the hydraulic functions as standard via PILOTBOX. An additional operator box for operating the scraper floors and discharge belt is optionally available. Operation via ISOBUS is also possible.

Low drawbar with mechanical drawbar suspension. For outstanding driving comfort, a hydropneumatic drawbar suspension is optionally available.

Transfer rate of up to 2,100 t/h with a two meters wide discharge belt that folds in three sections.

The RRW 400 can be emptied in about 45 seconds and the RRW 500 in about 60 seconds.

Good visibility of the cargo space from the driver's seat thanks to a perforated sheet-metal front wall for perfect loading and unloading.

Sturdy full-steel body with 39 m³ (RRW 400) or 50.7 m³ (RRW 500) load volume – ideally sized for taking the bunker volume of the common self-propelled beet harvesters.

Scraper floors and discharge belt are powered by the standard **on-board hydraulics**, which is driven by the tractor's PTO and has a pump rating of 160 l and 400 bars for **extremely short unloading times**.

Spring-actuated air brake and ALB regulator for maximum road safety. **EU type approval (CoC) as standard**; no country-specific national approvals necessary.

Hydraulically driven longitudinal and cross scraper floor with four high-strength plate link chains, which are proven in beet harvesters. **Specially shaped flights** for superior beet protection.

Hydraulic chassis for **superior driving comfort**, difficult operating conditions; large tyres, optionally with tyre pressure control system, for **easy towing and low ground disturbance**.

Follow-up steering as standard. A hydraulic or electronic forced steering is optionally available. To **minimize ground disturbance**, the electronic forced steering can be selected for offset track driving (crab steering).





Ideal drawbar contour

The RRW 400 and RRW 500 are equipped with a mechanical drawbar suspension with low drawbar as standard. The low hitching point makes starting off at high loads easier. The drawbar's slim design also makes for a highly manoeuvrable tractor-trailer combination. For fast, tight turns, e.g. on headlands, an extra small drawbar is available. The slim design of the drawbar eye connection enables very small turning radii, especially in combination with a forced steering.



Easy coupling

Various drawbar eyes are available for coupling. The optional ball coupling offers superior driving comfort at minimum wear and without impacts. The jack stand fully retracts into the drawbar to ensure maximum ground clearance in the field.



Convenient parking

To hitch and unhitch, the drawbar height is simply adjusted with the standard hydraulic jack stand. With its large support plate, it provides an ideal contact surface, so that the RRW is stable even on uneven or wet terrain. Raised, the jack stand engages in the drawbar to ensure maximum ground clearance.



Smooth driving

The optional hydropneumatic drawbar suspension reliably provides for outstanding driving comfort on both road and field also at high driving speeds. Impacts and vibrations are reliably absorbed. The drawbar suspension works with nitrogen accumulators at the hydraulic cylinders. The drawbar height can be easily adjusted hydraulically.

BERGMANN
Beet transfer trailers RRW 400 / RRW 500
 Tandem / tridem | 24,000 – 34,000 kg



For superior performance

The BERGMANN beet transfer trailers RRW 400 and RRW 500 are designed for the top harvesting performance of modern beet harvesters and the high pulling power of large tractors. Due to their load volume of up to 39 m³ and 50.7 m³ respectively, the beet transfer trailers have sufficient buffer capacity to make them a powerful link in the harvest chain. They can handle the large

quantities reliably and quickly thus preventing beet harvester waiting and down times. Furthermore, the transport vehicles can be fully loaded with a single filling, which saves waiting and downtimes at the field edge. This significantly boosts the throughput along the entire harvest chain.



Rugged chassis

The tandem and tridem chassis with hydraulic axle compensation and reinforced axles (150 mm square axle) is designed for even extremely heavy loads and makes for comfortable, smooth driving characteristics both on the field and on the road. The axle centre distance of 1,810 mm ensures sufficient space also for the largest tyre sizes with low ground contact pressure.

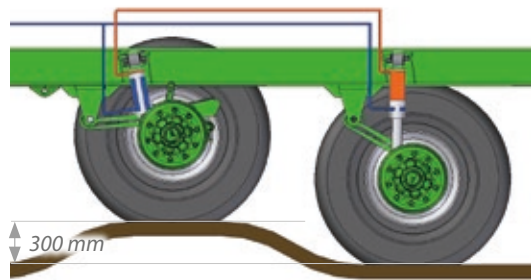


Hydraulic axle compensation

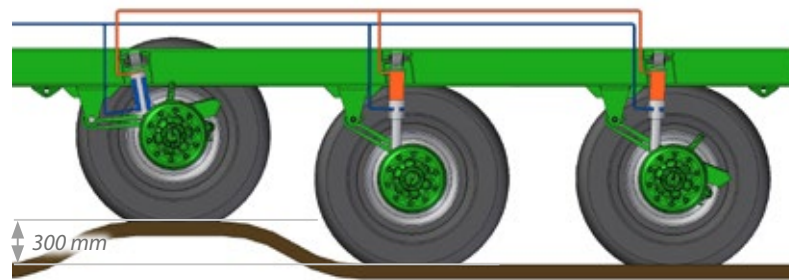
The 300 mm hydraulic axle compensation ensures superior driving characteristics, excellent stability and off-road capability as well as safety both at standstill and while driving. Bumps are reliably compensated, ground contact pressure is significantly reduced and wheel subsidence is minimised. The axle compensation ensures that each axle carries the same load, even on bumpy terrain.



RRW 400



RRW 500



Heavy load connection

Sturdy connection of the axles to the chassis with maintenance-free rubber and metal bearings (silent blocks) in the chassis cylinder. The bearings can absorb both radial and axial forces and provide vibration damping.



Lift axle

The front axle is a lift axle as standard. This saves costs by reducing tyre wear when driving empty and cutting fuel consumption through lower tyre friction. The lift axle can also be used to increase the tongue load on the tractor and thus the tractor's traction. At overload, the lift axle lowers automatically to protect both trailer and tractor.



Follow-up steering

The standard follow-up steering minimises ground disturbance. With the steering axle released, the wheels adapt when cornering. For driving on roads or inclines and for vehicle manoeuvres, the steering axle can be locked. For improved driving comfort, a hydraulic forced steering is optionally available.



Electronic forced steering

The electronic forced steering ensures fully automatic adaptation of the steering intensity to the driving speed. To improve dynamic stability, the steering angle of the steered axles is reduced at higher driving speeds and fully locked at 50 km/h. The compact connection to the tractor provides higher manoeuvrability than with a hydraulic forced steering. The forced steering is operated either via a separate operator terminal or via ISOBUS.



The right tyre for each scenario

For minimising ground disturbance on fields, high-volume tyres with various tread patterns for wheel sizes from 26.5 to 30.5" are available. With their large diameter, the 30.5" tyres offer optimum rolling and rollover characteristics especially under adverse operating conditions. The largest possible tyres are 800/45 R30.5.



Minimum ground disturbance

For both models of the RRW, various tyre pressure control systems are optionally available. Intended for use especially in combination with offset track driving, they are designed to optimize the contact area, thereby minimizing ground pressure.



Brake system

An air brake system with ALB regulator, which automatically regulates the brake pressure according to the load, and a spring-actuated parking brake are also standard. The brake cylinder and brake linkage are arranged above the lower edge of the axle. This ensures that they do not reduce the ground clearance. A hydraulic brake is available for some countries.



Angled mudguards

Material that falls beside when overloaded from the beet harvester onto the RRW slides off the angled mudguards and onto the field, keeping the roads clean after use.



High loads and stability

The body consists of a fully welded all-steel bin for maximum stability and high payload. The right-hand side wall is lower than the left one to provide the driver of the beet harvester with a clear view into the body to simplify transfer. With the smallest tyres, the transfer height is therefore 3,255 mm. The 255 mm



RRW 400

With a load volume of 39 m³, the RRW 400 is ideally sized to take the bunker content of self-propelled twin-axle beet harvesters plus the additional harvested beets.

high rubber lip protects the beet harvester's discharge belt. The discharge belt is integrated at the front left in driving direction.



RRW 500

With a load volume of 50.7 m³, the RRW 500 is ideally sized to take the bunker content of self-propelled three-axle beet harvesters plus the additional harvested beets.



Perfect visibility

The front wall of the body is made of perforated sheet metal to provide the driver with an excellent view into the cargo space. The driver can see the filling level at all times to ensure optimum filling and can align the RRW with the beet harvester's discharge belt. This allows full utilisation of the load volume.



Excellent beet protection

The longitudinal and cross scraper floor is driven by the on-board hydraulics. It consists of four plate link chains each, which have proven their effectiveness in beet harvesters, as well as specially shaped flights for superior beet protection. For even unloading and optimum beet protection, the flights of the longitudinal scraper floor are arranged differently on each side. The step at the transition between longitudinal and cross scraper floor provides additional beet protection and prevents shearing through the change of direction.



Gentle transfer

At the transfer point between cross scraper floor and discharge belt, there is a hydraulically driven transfer roller consisting of octagonal PUR discs. This ensures a gentle transfer and provides additional cleaning of the beet.



Maximum performance

The two meters wide discharge belt is driven by the on-board hydraulics. Thanks to its length and three-section hinged design, it is capable of forming windrows of up to ten meters width and provides optimum filling of transport vehicles at the headlands. During unloading, the beet is additionally cleaned by the discharge belt, which consists of two sifting belts. The PUR flights, which are gentle on the beet, ensure high conveying rates and a short unloading time of about 45 seconds (RRW 400) or 60 seconds (RRW 500). This allows a maximum unloading rate of up to 2,100 t/h.

Compact driving position

For road driving, the discharge belt is brought into driving position and neatly folded into the body.

Powerful on-board hydraulics

The on-board hydraulics of the RRW drive the longitudinal and cross scraper floor as well as the discharge belt. The transfer rate can be infinitely adjusted via the tractor's PTO shaft speed. The pump of the on-board hydraulics delivers 160 l/min at a pressure of up to 400 bars. The pump is driven by the tractor's PTO. All this makes extremely short unloading times possible.



Easy, intuitive operation

All functions of the RRW are controlled via the electronic PILOT-BOX as standard. The operator controls are arranged logically and ergonomically and each have a specific function. The number of functions that can be controlled depends on the vehicle equipment. On the tractor, only a single-acting control unit and an unpressurised return are required. Load sensing is optionally available. In addition to the PILOTBOX, a second operator box can be fitted on the left side of the tractor cab, from which all unloading functions can be ergonomically controlled.



ISOBUS comfort operation

Superior user friendliness and high ease of use with optional ISO-BUS operation. Even inexperienced drivers will have no problem operating the intuitive user interface with the self-explanatory graphics and icons. Thanks to the AEF-certified software, the vehicle can be operated via any ISOBUS terminal. A tractor with its own ISOBUS-compatible terminal does not require an additional terminal in the cab. This means that the driver has a clear

all-round view, which improves road safety and provides a better overview of the field. Additional AUX-N control devices, such as the CCI A 3 multi-function lever, are optionally available. On the tractor, only a single-acting control unit and an unpressurised return are required. Load sensing is optionally available.



ISOBUS terminal CCI 50

The CCI 50 ISOBUS terminal with 5.6" touch screen, 12 function buttons and a scroll wheel can be used with all machine makes. This terminal can be expanded with a Task-Controller for order management and documentation as well as the automatic Section Control.

ISOBUS terminal CCI 800

With its large 8" display, the CCI 800 allows the operator to fully focus on the task at hand. Multi touch in combination with the innovative menu navigation makes it as easy to operate as a smartphone. Functions such as Task-Controller and Section Control can be integrated. A connection to the agrirouter is also possible. For even more convenience, camera images can be displayed in addition to the user interface.

ISOBUS terminal CCI 1200

The CCI 1200 is an ISOBUS terminal with 12.1" display and intuitive multi-touch operation on smartphone level. The large terminal offers plenty of space for the simultaneous view of several apps. It also allows two ISOBUS-capable machines to be displayed and operated at the same time. Apps for automatic section control and variable spreading ensure a precise application. In addition, the CCI 1200 is "ready for agrirouter" and can be used for all machine makes.

Multi-function lever CCI A3

The CCI A3 is an ISOBUS multi-function lever with a unique 3.5" touch screen colour display for the visualisation of up to 30 function symbols. This makes operation much more convenient for the driver, who does no longer have to remember which function is assigned to which button, as is the case with other multi-function levers. The user benefits include the feel of the various interchangeable grids and the vibration feedback with audible signals, which enable the driver to operate the multi-function levers without looking at them.

Exact documentation

The optional, highly accurate weighing system allows exact control of the harvest quantities and loaded mass. The transport vehicles can thus be loaded up to their maximum permissible payload. The load weight is measured with pressure sensors fitted in the chassis hydraulics and the measuring drawbar eye.



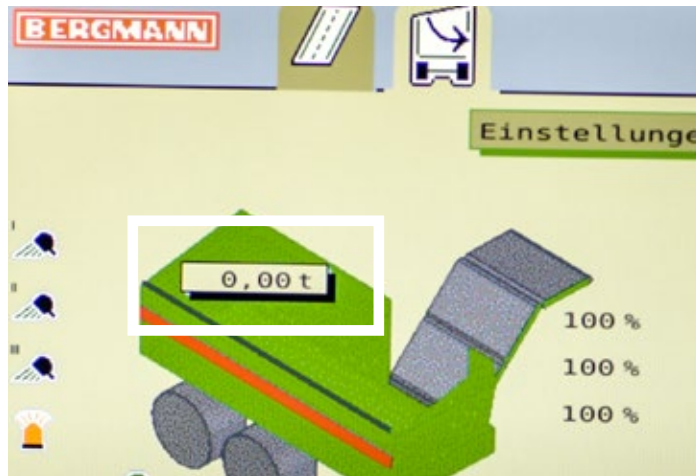
Clear and user-friendly

The SLC 2810 weighing terminal shows the current load. It can be used in combination with a hydraulic weighing system and as an additional, external display on vehicles with weighing system via ISOBUS. It also allows setting and calibration of the associated weighing system.



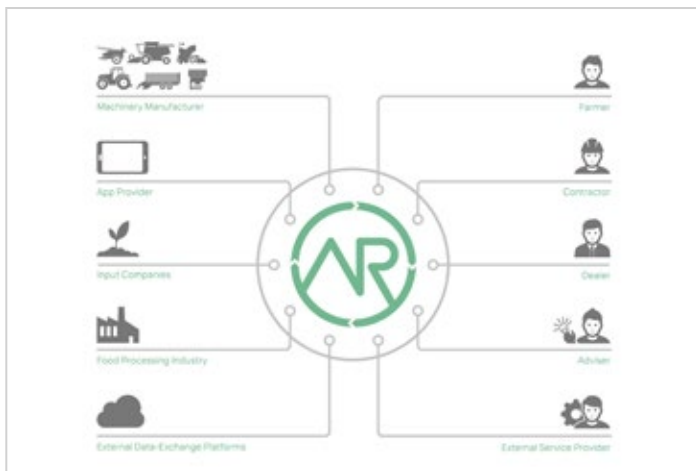
ISOBUS weighing system

The current load and the total transferred mass are indicated directly on the clearly structured ISOBUS user interface. To simplify record-keeping, the automatically created data sets can be saved for each job in a standardised ISO XML format via the ISOBUS Task Controller.



Easy data exchange

The agrirouter is a neutral, generic web-based platform for data exchange between machines and agricultural software. It can, for example, transfer the machine, GPS and order data in ISO XML format from the terminal to the farm's agricultural software.



Everything in sight

The optional cameras at the rear of the vehicle and at the transfer belt provide a clearer overview for enhanced operator convenience. The video system provides the driver with a clear view on all relevant areas. The camera images can optionally be shown on a separate monitor or on the ISOBUS terminal.



Working lights

LED working lights at the rear of the vehicle, at the discharge belt and in the cargo space ensure excellent visibility in the working areas. The optional working lights are operated either from the PILOTBOX or conveniently via the ISOBUS interface.



Easy access

An access ladder is fitted at the rear to allow checking of the cargo space or load from above. The non-slip rungs ensure safe access. To maximise ground clearance, the access ladder can be simply raised for driving on roads or in the field.



Reliable lubrication

The optional central lubrication system automatically lubricates all connected lubrication points at the set intervals. This significantly reduces the time required for the regular maintenance of the RRW.



Good visibility

Further lighting options are available in addition to the required lighting. Instead of the standard rear lights, for example, LED rear lights are available.



Europe-wide approval

Full EU type approval of the RRW series chassis according to the official regulation is standard. The CoC (Certificate of Conformity) papers are also supplied. Especially when reselling within the EU, type approval is an advantage, as it removes the need for individual national approvals.



BERGMANN beet transfer trailer bodies



Chassis VARIO 440 and VARIOSIX plus

Both RRW models are designed as body swap systems as standard. This means they can be mounted on different chassis. The VARIO 440 chassis can hold a spreader body, a forage body and the RRW A 400; the VARIOSIX plus chassis takes a forage body and the RRW A 500.



Beet transfer body RRW A 400 and RRW A 500

The beet transfer bodies RRW A 400 and RRW A 500 are both equipped with on-board hydraulics. Like all body swap systems, they feature jack stands for when they are not in use.

Technical data

Dimensions and weights		RRW 400	RRW 500
Length	mm	9,550	11,950
Width	mm	3,000	
Height	mm	3,900	
Load volume	m ³	39	50.7
Body length	mm	7,800	10,200
Body width	mm	2,800	
Body height, left	mm	2,100	
Body height, right	mm	1,200 + 255 (Rubber lip)	
Load height, left	mm	3,900	
Load height, right	mm	3,000 + 255 (Rubber lip)	
Transfer height	mm	1,700 - 4,200	
Width of transfer belt	mm	2,000	
Transfer rate	t/h	2,100	
Transfer time	s	45	60
Net weight with basic equipment	kg	10,900	13,600
Gross vehicle weight (road)	kg	24,000	34,000
Gross vehicle weight (field)	kg	36,000	52,000
Power demand	kW / HP	from 132 / 180	from 184 / 250

* Dependent on equipment

Optional:

- Hydraulic forced steering
- Electronic forced steering
- Electronic forced steering for offset track driving (crab steering)
- Tyre pressure control system
- Central lubrication system
- Additional operator box for discharge belt
- ISOBUS operation
- Hydraulic weighing system
- Camera system
- LED working lights
- Various lighting possibilities
- Various tyre options
- Mudguard, right

We reserve the right to make changes to dimensions, weights and technical data. Dimensions and weights do not necessarily correspond to series versions and are not binding. Illustrations may contain additional equipment.

Our product range contains the right vehicle for every operation and every application.

- ▶ Manure Spreaders
- ▶ Universal Spreaders
- ▶ Loader Wagons
- ▶ Forage Transport Trailers
- ▶ Body Swap System
- ▶ Grain Transfer Trailers
- ▶ Beet Transfer Trailers
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