TSW 4190 S _ TSW 5210 S _ TSW 5210 W
TSW 6240 S _ TSW 6240 W _ TSW 7340 S

BERGMANN

...the specialists

The Universal Spreaders

A strong line for effective operations

BERGMANN, a successful, medium-sized, familyowned company in the third generation, has been firmly linked to its business location in Goldenstedt and its people for 120 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/Germany"

Sophisticated quality: "Made in Goldenstedt/ Germany"

Powerful spreading technology for continuous professional use

BERGMANN's innovative and proven spreading technology ensures the right technical solutions for all sizes and applications.

Optimum chassis technology and safe drive technology provide for high performance. Our components are subject to strict quality standards for maximum safety, reliability and durability, even under continuous operation. All elements are clearly arranged and carefully coordinated, down to the last detail.

With our state-of-the-art universal spreader units, high-quality materials such as compost, organic sludge, separated fermentation substrate, lime and all types of cow and poultry manure are spread precisely, over large areas with minimum environmental impact.

BERGMANN Universal spreaders are also available as Vario systems.

BERGMANN Universal Spreaders

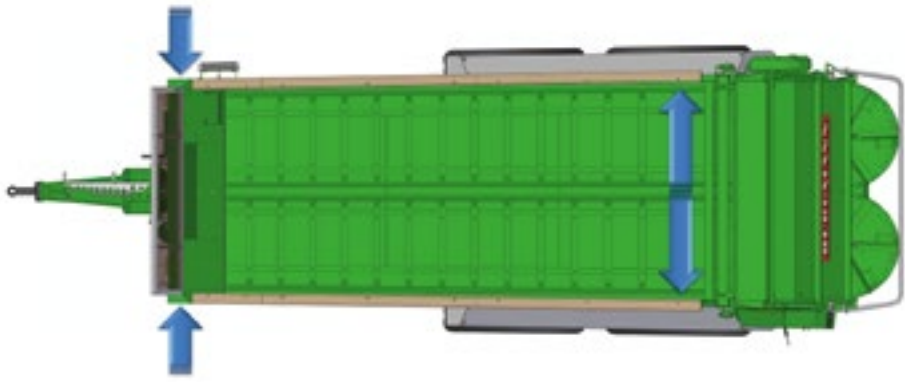
– powerful
– robust
– reliable

DLG tested spreader units – top functionality and quality with outstanding spreading precision

Precise, accurate and standardized application of different spreading materials is one of the most important agricultural tasks and contributes significantly to success. It ensures the quick release and optimum supply of nutrients, promotes homogeneous plant growth and thus increases the harvest yield.

Operating comfort:

Through the optional operation and control components, BERGMANN universal spreaders can be optimally adapted to individual requirements.



Tapered all-steel bin *with extra wide bridge and high load capacity. The inner width increases continuously from the front wall to the spreading unit. The result is no pressure build-up in the cargo space, and the load is evenly transported to the spreader unit. The frame construction is compact. The upper frame, the side panels and stanchions are firmly welded together.*

Advantages for the user:

– high work performance and payload –
– maximum power –
– enormous effective width –
– operating comfort –

– sustainability –
– lower cost factors –
– higher quality of work –
– higher efficiency and precision
– less downtime –
– higher surface coverage –

INCREASED YIELD

BERGMANN Universal Spreader TSW 4190 S

Tandem | 16,000 – 19,000 kg

***Optional high** or **low drawbar** with spring-mounted, height adjustable drawbar for high driving comfort and good driving stability.*

***"Jost" landing gear** for easy coupling as standard equipment.*

*Precise **dosing wall height indicator** as standard equipment. The optional **central lubricating system** provides for a continuous flow of lubricant which is adapted for each individual bearing. This significantly reduces maintenance efforts. The **protective screen** provides for a good view of the scraper floor chains. The cargo space and transport floor can be seen easily through the **window**.*

*With the **automatic tensioning system**, which is visible from the tractor, the four high-strength scraper floor chains can be easily adjusted from the front. This allows for a high degree of safety and smooth operation.*

*All **lubrication points** are easily accessible or grouped into lubrication blocks for quick and easy maintenance.*

*The use of spacers makes it possible to adjust the **drawbar height** for every tractor. Spring elements provide for high driving comfort.*

Chassis
The 4-spring pendulum unit and parabolic springs are standard.

***Lift axle, follow-up steering** and **forced steering** (also available with computer control) are optional.*

Scraper floor with hydraulic drive
*The four **round steel chains** (each 14 × 50 mm, 25 t per chain) are deeply embedded in large chain wheels (little wear and tear). The chains are stretched in pairs. Deflection pulleys with scrapers in the front and rear ensure safe scraper floor chain guidance. The scraper floor bars run on extra wear rails.*

*The large **feed gearbox** provides for sure transport of the most diverse materials to the spreader unit.*

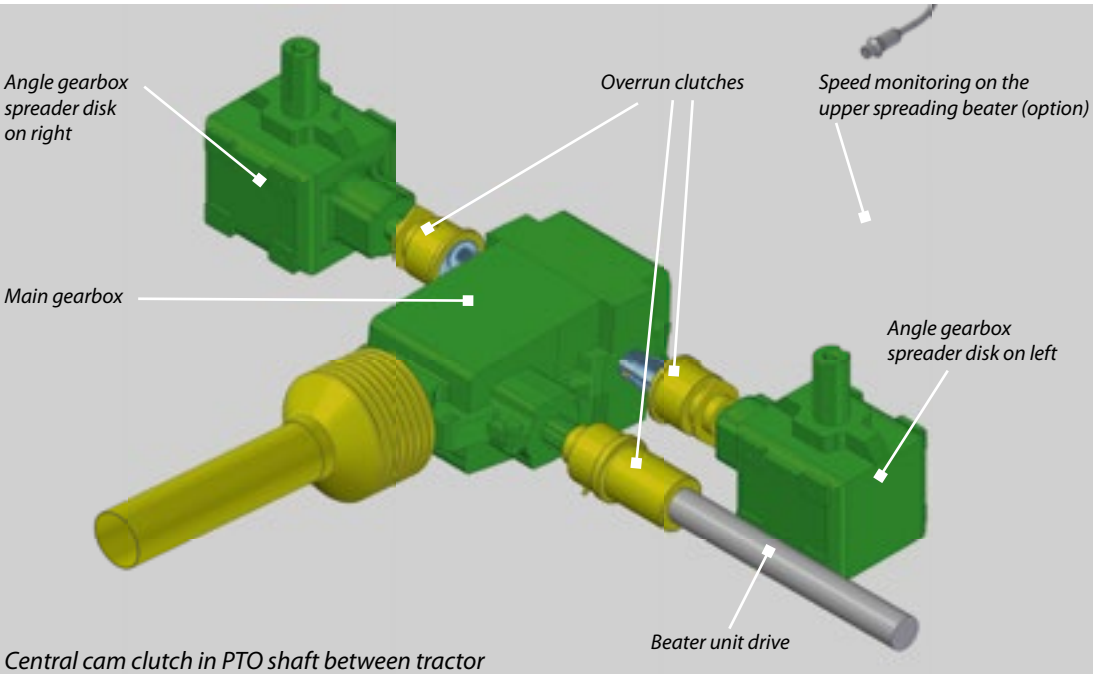
BERGMANN Universal Spreader TSW 4190 S

Tandem | 16,000 – 19,000 kg

***Spreader unit drive** – as standard with two beaters – per roller chain. Springmounted chain tensioners ensure optimum power transmission and low wear (left).*

*The optional **cardanic drive** minimizes maintenance and provides high power reserves.*

Central protection with speed monitoring
The heavy-duty drive train with a central protection and large gearboxes ensures a long service life.



Central cam clutch in PTO shaft between tractor and trailer (on trailer side)

*The **spreader unit** with hydraulic dosing wall and 1,400 mm throughput can be used universally for all types of materials. The milling beaters with bolted double tines made of high-strength, low-wear material allow for high throughput capacity.*

Spreader unit hood
The throughput height and the angle of inclination on the lower part of the tailgate can be manually adjusted for various materials and conditions. This makes it possible to optimally adjust the feed point of the material onto the spreader disk and thus specify the precise output. A spring safety device serves as protection against foreign objects.

BERGMANN Universal Spreader TSW 5210 S/W

Tandem | 16,000 – 22,000 kg

Optional high or low drawbar *with spring-mounted, height adjustable drawbar for high driving comfort and good driving stability.*

The use of spacers makes it possible to ideally adjust the ***drawbar height*** *for every tractor. The spring elements provide for high driving comfort.*

"Jost" *landing gear for easy coupling as standard equipment.*

*Precise **dosing wall height indicator** as standard equipment. The optional **central lubricating system** provides for a continuous flow of lubricant which is adapted for each individual bearing. This significantly reduces maintenance efforts.*
*The **protective screen** provides for a good view of the scraper floor chains. The cargo space and transport floor can be seen easily through the **window**. The **TSW 5210 S** can be optionally equipped with an **hydraulic block** and various control options to increase operational comfort.*

*All **lubrication points** are easily accessible or grouped into lubrication blocks for quick and easy maintenance.*

Scraper floor drive on both sides:
The feed shaft and the scraper floor chains carry an even load – this ensures optimum power transmission and a long service life.

*With the automatic **tensioning system**, which is visible from the tractor, the four high-strength scraper floor chains can be easily adjusted from the front. This allows for a high degree of safety and smooth operation.*

Scraper floor with hydraulic drive
*The four **round steel chains** (each 14 × 50 mm, 25 t per chain) are deeply embedded in large chain wheels (little wear and tear). The chains are stretched in pairs. Deflection pulleys with scrapers in the front and rear ensure safe scraper floor chain guidance. The scraper floor bars run on extra wear rails.*

*The **spreader unit** with hydraulic dosing wall and 1,500 mm throughput can be used universally for all types of materials. The milling beaters with bolted double tines made of high-strength, low-wear material allow for high throughput capacity.*

BERGMANN Universal Spreader TSW 5210 S/W

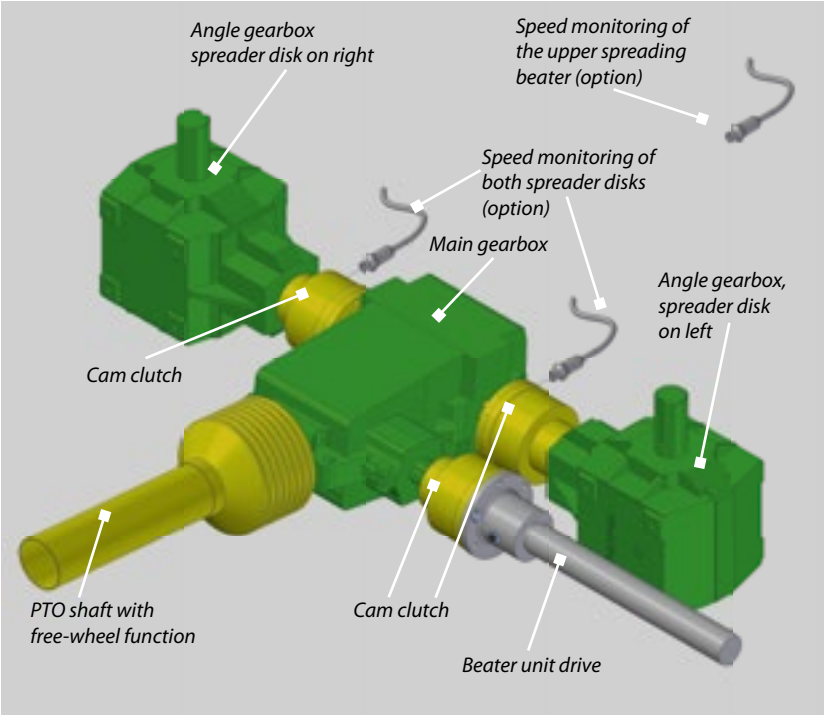
Tandem | 16,000 – 22,000 kg

***Spreader unit drive** – as standard with two, optionally three beaters – per roller chain. Springmounted chain tensioners ensure optimum power transmission and low wear (left).*

*The optionally available **cardanic drive** (for the 2 and 3 beater spreader units) minimizes maintenance requirements and provides for high power reserves.*

Spreader unit hood
The throughput height and the angle of inclination on the lower part of the tailgate can be manually adjusted for various materials and conditions. This makes it possible to optimally adjust the feed point of the material onto the spreader disk and thus specify the precise output. A spring safety device serves as protection against foreign objects.

Separate protection for milling beaters and spreader disk unit
Before each milling unit and before each spreader disk there is an overload clutch to prevent overloading of materials and gearbox. A scraper floor brake interrupts the material feed to both units when sudden speed drops occur (optional). In this way material damage caused by blockages is prevented.



BERGMANN TSW 5210 W (W = Weighing)
The TSW 5210 W as standard with a weighing system with high-resolution weighing bars for high precision.

Chassis
4 spring pendulum unit with parabolic springs, as standard with two braking axles.

Lift axle, follow-up steering and forced steering
(also available with computer control) are optional.

BERGMANN Universal Spreader TSW 6240 S/W

Tandem | 24,000 kg

*Standard, spring-mounted, height adjustable **low drawbar** and **"Jost" landing gear** for easy coupling.*

*The use of spacers makes it possible to ideally adjust the **drawbar height** for every tractor. The spring elements provide for high driving comfort. Hydraulic drawbar suspension is optional.*

*The **TSW 6240 S** can be optionally equipped with an **hydraulic block** and various **control options** to increase operational comfort.*

BERGMANN TSW 6240 W (W = Weighing)
The TSW 6240 W as standard with a weighing system with high-resolution weighing bars for high precision.

*Precise **dosing wall height indicator** as standard equipment. The optional central lubricating system provides for a continuous flow of lubricant which is adapted for each individual bearing. This significantly reduces maintenance efforts.*
*The **protective screen** provides for a good view of the scraper floor chains. The cargo space and transport floor can be seen easily through the **window**.*

*All **lubrication points** are easily accessible or grouped into lubrication blocks for quick and easy maintenance.*

*With an automatic **tensioning system**, which is visible from the tractor, the four scraper floor chains be easily adjusted from the front. This allows for a high degree of safety and smooth operation.*

Scraper floor drive on both sides
The feed shaft and the scraper floor chains carry an even load – this ensures optimum power transmission and a long service life.

Scraper floor with hydraulic drive
The four round steel chains (each 14 × 50 mm, 25 t per chain) are deeply embedded in large chain wheels (little wear and tear). The chains are stretched in pairs. Deflection pulleys with scrapers in the front and rear ensure safe scraper floor chain guidance. The scraper floor bars run on extra wear rails.

*The **spreader unit** with hydraulic dosing wall and 1,500 mm throughput can be used universally for all types of materials. The milling beaters with bolted double tines made of high-strength, low-wear material allow for high throughput capacity.*

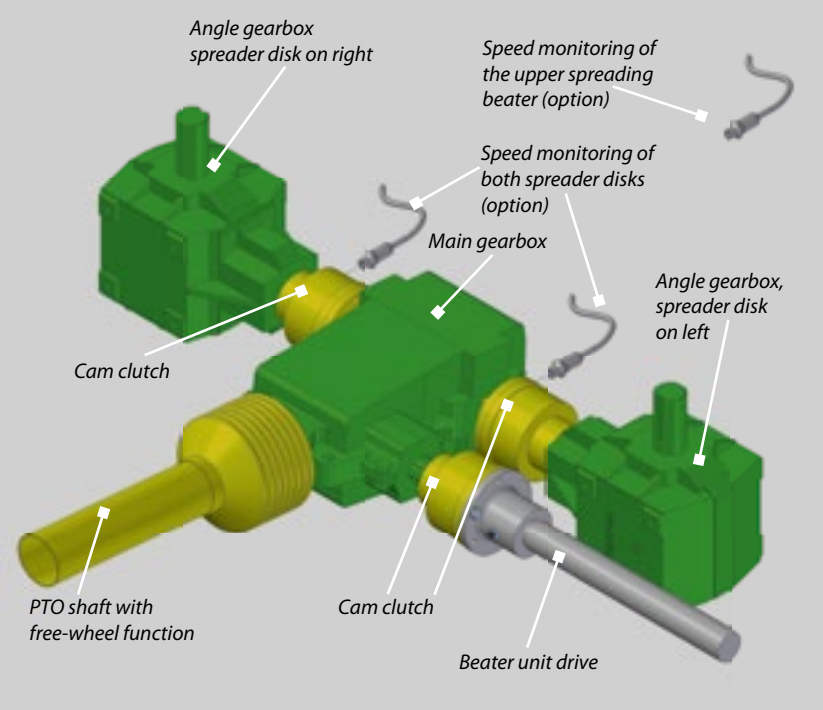
BERGMANN Universal Spreader TSW 6240 S/W
Tandem | 24,000 kg

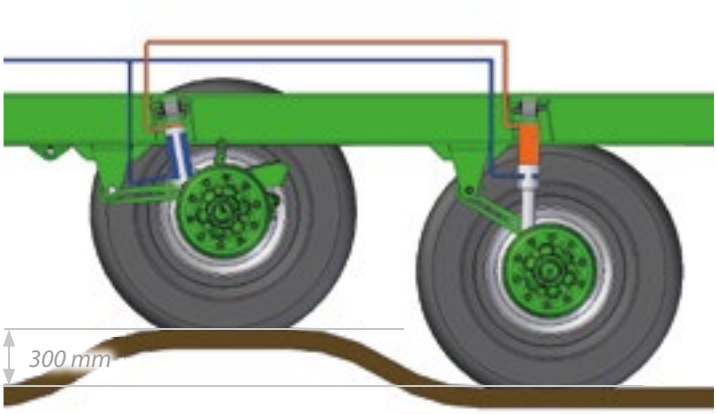
***Spreader unit drive** – as standard with two, optionally three beaters – per roller chain. Springmounted chain tensioners ensure optimum power transmission and low wear.*

*The optionally available **cardanic drive** – (for the 2 and 3 beater spreader units) minimizes maintenance requirements and provides for high power reserves.*

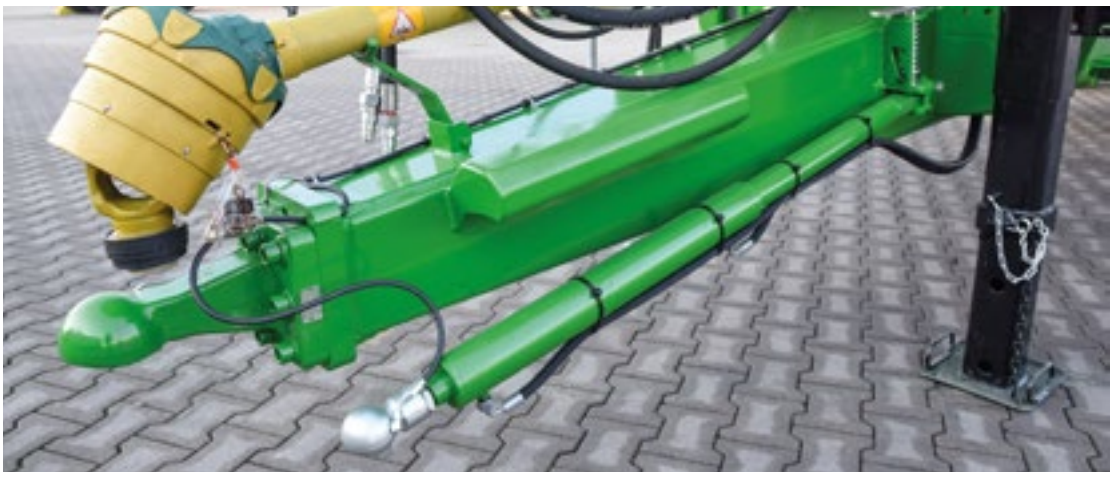
Spreader unit hood
The throughput height and the angle of inclination on the lower part of the tailgate can be manually adjusted for various materials and conditions. This makes it possible to optimally adjust the feed point of the material onto the spreader disk and thus specify the precise output. A spring safety device serves as protection against foreign objects.

Separate protection for milling beaters and spreader disk unit
Before each milling unit and before each spreader disk there is an overload clutch to prevent overloading of materials and gearbox. A scraper floor brake interrupts the material feed to both units when sudden speed drops occur (optional). In this way material damage caused by blockages is prevented.





Hydraulic chassis
The 300 mm hydraulic axle compensation provides for the best driving performance, the highest standing and driving safety, stability and off-road handling. Bumps are reliably absorbed, ground pressure is significantly reduced and the sinking in of the wheels is minimized.



Forced steering
(also available with computer control) is optionally available.

BERGMANN Universal Spreader TSW 7340 S

Tridem | 34,000 kg

*Standard, spring-mounted, height adjustable **low drawbar** and **hydraulic jack stand** in the front.*

*The use of spacers makes it possible to ideally adjust the **drawbar height** for every tractor. The spring elements provide for high driving comfort. Hydraulic drawbar suspension is optional.*

*The **TSW 7340 S** can be optionally equipped with an **hydraulic block** and various control options to increase operational comfort.*

*With the automatic **tensioning system**, which is visible from the tractor, the four high-strength scraper floor chains can be easily adjusted from the front. This allows for a high degree of safety and smooth operation.*

*All **lubrication points** are easily accessible or grouped into lubrication blocks for quick and easy maintenance.*

Scraper floor drive on both sides
The feed shaft and the scraper floor chains carry an even load – this ensures optimum power transmission and a long service life.

Scraper floor with hydraulic drive
*The four **round steel chains** (each 14 × 50 mm, 25 t per chain) are deeply embedded in large chain wheels (little wear and tear). The chains are stretched in pairs. Deflection pulleys with scrapers in the front and rear ensure safe scraper floor chain guidance. The scraper floor bars run on extra wear rails.*

*The **spreader unit** with hydraulic dosing wall (fig. optional 3-beater spreader unit with 1,800 mm throughput) can be used universally for all types of materials. The milling beaters with bolted double tines made of high-strength, low-wear material allow for high throughput capacity.*

BERGMANN Universal Spreader TSW 7340 S

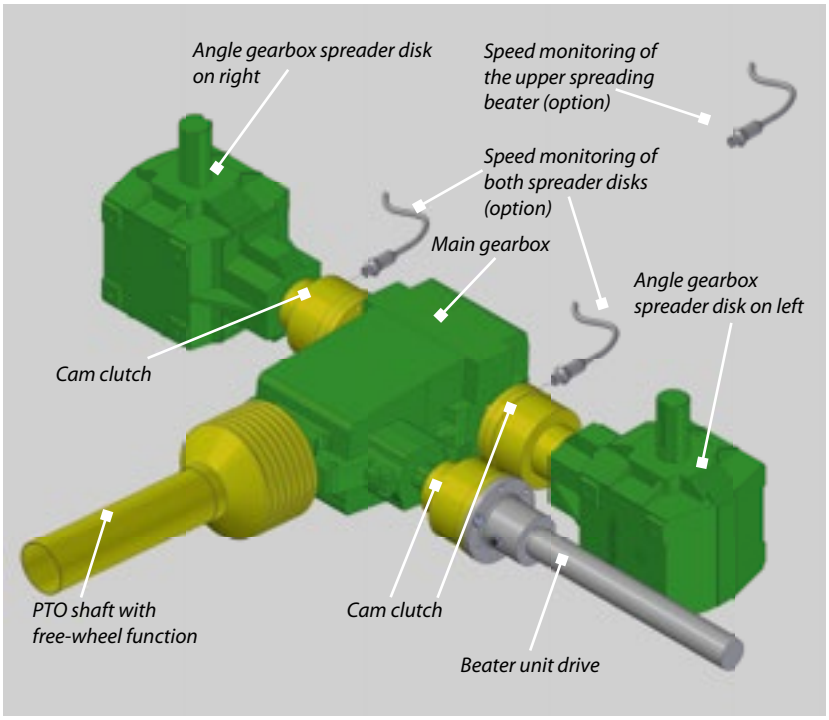
Tridem | 34,000 kg

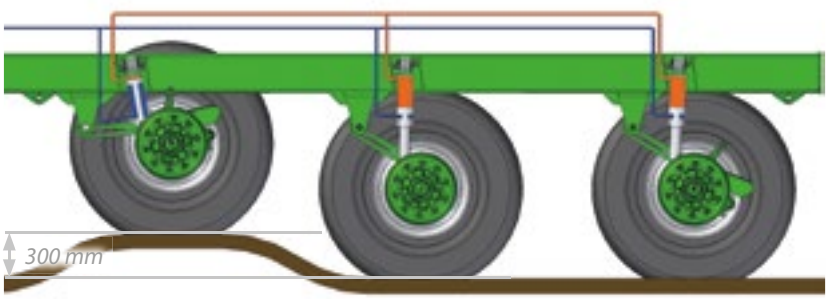
***Spreader unit drive** – as standard with two, optionally three beaters – per roller chain. Spring-mounted chain tensioners ensure optimum power transmission and low wear.*

*The optionally available **cardanic drive** (for the 2 and 3 beater spreader units) minimizes maintenance requirements and provides for high power reserves.*

Spreader unit hood
The throughput height and the angle of inclination on the lower part of the tailgate can be manually adjusted for various materials and conditions. This makes it possible to optimally adjust the feed point of the material onto the spreader disk and thus specify the precise output. A spring safety device serves as protection against foreign objects.

Separate protection for milling beaters and spreader disk unit
Before each milling unit and before each spreader disk there is an overload clutch to prevent overloading of materials and gearbox. A scraper floor brake interrupts the material feed to both units when sudden speed drops occur (optional). In this way material damage caused by blockages is prevented.





Hydraulic chassis
The 300 mm hydraulic axle compensation provides for the best driving performance, the highest standing and driving safety, stability and off-road handling. Bumps are reliably absorbed, ground pressure is significantly reduced and the sinking in of the wheels is minimized.

Lift axle *and* ***tire pressure control system*** *are optionally available.*

Forced steering
(hydraulic or computer controlled) is optionally available. The computer-controlled forced steering is equipped with emergency features.

Forced steering control panel

Operation | control: without ISOBUS

E-Controls light

- Electromagnetic scraper floor adjustment
- Stepless scraper floor speed adjustment
- Scraper floor ON / OFF

Pilotbox

- ON / OFF for operation
- Stepless scraper floor speed adjustment
- Reverse scraper floor
- Lock and unlock follow-up steering
- Open and close spreader hood
- Raise and lower dosing wall
- Lift axle, spread pattern limiter and jack stand (option)

BERGMANN BCT20 Comfort Controls

- ON / OFF for operation
- Ergonomically arranged keys
- Backlit display and keypad
- Trip counter
- Scraper floor ON / OFF
- Stepless scraper floor speed adjustment
- Scraper floor speed control in m/min
- Reverse scraper floor
- Lock and unlock follow-up steering
- Speed monitoring of spreader unit
- Speed monitoring of spreader disks
- Raise and lower dosing wall
- Open and close spreader hood
- Work light ON / OFF*
- Raise and lower hydraulic jack stand*
- Raise and lower the lift axle*
- Raise and lower the spread pattern limiter*
- Spread volume control: manual or vehicle speed dependent*

* optional

Operation | Control
Universal Spreader

CCI.Control (TC bas/geo)

- ISOBUS Task-Controller: TC-BAS and TC-GEO
- Job management
- Documentation: Number of trips, times, material spread (with existing weighing system) and surface treated
- Job summary as PDF report
- Job summary and documentation of exact position (using GPS) and output quantities in ISOXML format
- Export and import of jobs via USB or internet
- Variable spread amounts on one surface – "VRA" Variable-Rate Application using spread maps in ISOXML or Shape format

CCI.Command (TC.PT/SC)

- Parallel driving aid in CCI terminal: Exact trip connection
- Different guiding contours: A-B line, curve, etc.
- Display of treated and untreated surfaces, automatic with coupled ISOBUS spreader
- Area counter
- Save individual areas
- ISOBUS section control (=AEF:TC-SC): Automatic switching on and off of the scraper floor
- Internal pre-turning limit for switching the section control or scraper floor
- External light strip L 10 for mounting directly in the field of view

ISOBUS-Terminal CCI

ISOBUS terminal CCI50 / CCI200

- ISOBUS-compatible terminal (AEF: UT) for controlling and operating ISOBUS devices
- Large, clear displays (CCI50 – 5,6" diagonal, CCI200 – 8,3" diagonal)
- Backlit display and keypad
- Touch screen for intuitive operation
- Optional wide range of apps: CCI.CONTROL, CCI.COMMAND, CCI.CAM, CCI-COURIER, CCI.FIELDNAV, CCI.FARMPILOT, CCI.TECU etc.
- Ergonomically arranged keys, with the possibility to mirror them from left to right
- Interfaces incl. USB, wifi, video and more
- Up to eight video cameras possible
- Emergency stop button

BERGMANN operation ISOBUS

- All information is displayed in the correct positions on the vehicle e.g.: effective width, treated surface, driving speed, target application rate, dosing wall height, steering axle status
- With integrated weighing system (option): current load, spread material, target/ actual spread quantity in t/ha
- Separate "Settings" page shows all possible settings on one page
- A simple product database makes the loading and saving of product-specific parameters possible
- Simple and logical pictograms for the operation of the respective machine function
- Integrated trip counter
- Possible on all ISOBUS terminals with six or more softkeys
- Control possible via separate joystick or tractor control lever (AUX-N)
- Automatic spread quantity control based on the vehicle speed
- Calculation of the dosing wall height through robust measuring system in the cylinder

CCI ISOBUS team play works.

Since 2009, BERGMANN has been one of the first extraordinary members of CCI – Competence Center ISOBUS e.V., which develops CCI terminals and apps.

Customer advantages: Individual manufacturers' operations are becoming more comparable and easier to understand – in accordance with the CCI motto "team play works".

AEF Certified ISOBUS www.aef-isobus-database.org

AEF (Agricultural Industry Electronics Foundation):

Worldwide association including more than 190 predominantly agricultural manufacturers with focus on "development and standardization of agricultural electric and electronics":

- ISOBUS, farm management information systems (FMIS), electrical drives, camera systems, high-speed ISOBUS, wireless field communication
- Certification of ISOBUS components as well as administration and publication of results in the AEF database
- The AEF database enables manufacturers, dealers, farm contractors and farmers to check the compatibility of the individual ISOBUS devices and vehicles as well as their specific functions
- The AEF label on vehicles and equipment provides information on certified functions

Systems

mechanical

Load cell

For vehicles in which the bin is structurally separate from the chassis: TSW 5210 W, TSW 6240 W

hydraulic

Pressure sensors

Drawbar eye with measuring device

If the measurement is carried out hydraulically on the chassis, the payload is also detected hydraulically via pressure sensors or mechanically by the drawbar eye.

Weighing system
Systems | Indicators

Indicators

GT 400

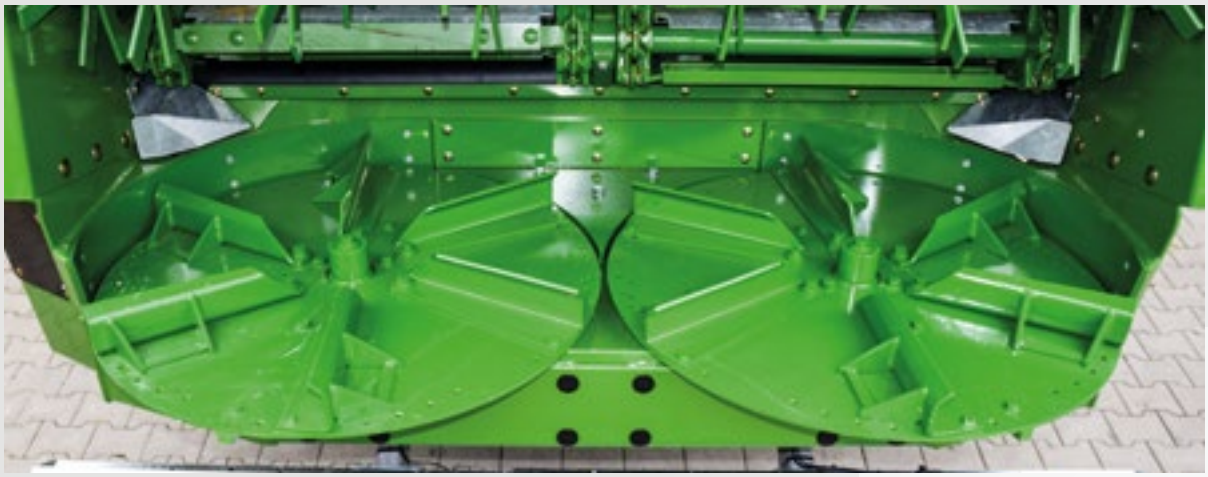
- Payload display
- Manual recording of the spread material
- Printer optional

GT 460

- Payload display
- Automatic recording of the spread material
- Data exchange via usb. stick
- PC software for the evaluation of the data
- Printer optional

ISOBUS

- Payload display
- Possible via many ISOBUS terminals
- Transfer of the payload to BERGMANN ISOBUS for display, control and documentation



DLG tested and recognized
In keeping with their high level of quality BERGMANN spreaders received the highest recognition for quality and functionality with outstanding spreading precision from the German Agricultural Society DLG.

Disk spreader unit
Two large spreader discs (each 1,000 mm Ø) with 6 adjustable blades per disk for a best result with any material.

As part of the DLG Focus Test, the distribution of manure and compost with target quantities was successfully tested in May 2011 based on the DLG test framework "Spreaders for organic solids". The requirements for distribution quality according to DLG test framework were fulfilled and the DLG label "DLG-FokusTest distribution quality manure and compost, 09/11" was awarded.

Spreader units
Exact, fine, precise spreading

The optional, hydraulically operated **spread pattern limiter** prevents the contamination of roads, paths and waterways etc. and ensures precise and uniform spreading of fields, right up to the edges.

A **one-sided version** of the spread pattern limiter – optionally right or left – is also available on request.

BERGMANN-Spreader bodies can be mounted on all common truck types.

Optional special equipment:

- ISOBUS control
- Section control
- also possible via online-weighing
- Parallel tracking via GPS
- Up to eight camera ports
- Tire pressure control system

Technical Data

Dimensions and weights		TSW 4190 S	TSW 5210 S	TSW 5210 W	TSW 6240 S	TSW 6240 W	TSW 7340 S
		Tandem	Tandem	Tandem	Tandem	Tandem	Tridem
Gross vehicle weight	kg	16,000 – 19,000	16,000 – 22,000	16,000 – 22,000	24,000	24,000	34,000
Dead weight	kg	6,320	7,310	8,100	8,940	9,300	11,160
Payload	kg	9,680 – 12,680	8,690 – 14,690	7,900 – 13,900	15,060	14,700	22,840
Bridge dimensions							
Length	mm	5,600	5,900	5,900	6,900	6,900	7,900
Width	mm	2,050	2,050	2,050	2,050	2,050	2,050
Height	mm	1,070	1,320	1,320	1,320	1,320	1,320
Vehicle dimensions							
Length	mm	8,200	8,450	8,450	9,400	9,400	10,400
Width	mm	2,550	2,550	2,550	2,550	2,550	2,550
Height	mm	3,250	3,300	3,440	3,300	3,300	3,300
Transfer height series	mm	2,600*	3,000**	3,060**	3,065**	3,085**	3,065**
Load capacity	m^3	14.00	17.00	17.00	19.70	19.70	23.00
Power requirements	KW	88 – 147	103 – 184	103 – 184	118 – 221	118 – 221	147 – 294
	HP	120 – 200	140 – 250	140 – 250	160 – 300	160 – 300	200 – 400

* with tire 650/50 R 22.5 Nokian
** with tire 710/50 R 26.5 BKT

Optional:

- ALB – automatic load sensitive brake system
- Forced steering (hydraulic or computer controlled)
- Lift axle
- Side wall extensions
- Beater spreader unit with cardan drive
- Spread pattern limiter
- Various lighting possibilities
- BCT20 comfort controls
- ISOBUS comfort controls
- Weighing system
- Central lubrication
- Various tire options, etc.

03/2017 · Haus der Werbung, Verden

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

- Manure spreaders
- Universal spreaders
- Silage trailers
- Combi silage trailers
- Large capacity combi trailers
- Forage transport trailers
- Vario chassis systems
- Grain transfer wagons
- Beet overlaoding wagons
- Self-propelled systems

BERGMANN

...the specialists

Ludwig Bergmann GmbH
Maschinenfabrik

Hauptstraße 64 - 66
D-49424 Goldenstedt / Germany
Tel.: +49 (0) 44 44 - 20 08-0
Fax: +49 (0) 44 44 - 20 08 88
info@l-bergmann.de

www.bergmann-goldenstedt.de