

TX

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FORAGE TRANSPORT WAGON



TX

KRONE forage transport wagons

Up to 56 m³ capacity

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Single-frame concept

for a lower dead weight and more loading volume

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Sloping steel base

for more loading volume and greater driving comfort

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Extremely powerful scraper conveyor drive

by roller chain for fast unloading

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Hydraulic articulated drawbar

Wagon lowered to the front, ideal for opening up a field

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Optionally hydraulic or electronic forced steering

for easier manoeuvring

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for best driving stability

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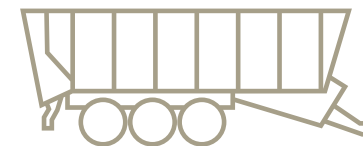
D-models with two discharge rollers

for uniform forage discharge

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*KRONE TX –
Maximum efficiency and highest
quality of work!*



Load more – unload faster!

KRONE TX – the name stands for powerful, efficient and reliable removal logistics for forage harvesting. The huge transport volume coupled with a very fast unloading time make the TX forage transport wagon the absolute professional in the harvest fleet!

The design

Loading space



The innovative forage transport wagon

With a permissible total weight of up to 34 t, KRONE TX forage transport wagons are designed for heavy-duty work. Featuring innovative details such as the sloping scraper conveyor and flared head and rear wall, these models offer extra load capacities and an large opening at the top reduces the risk of losses and allows for easier loading. When turning near fences, collisions can be avoided, as the lower part of the inclined rear wall can swivel over fence posts.

Perfect visibility

The see-through front wall offers an excellent view of the loading space. It ensures that the driver can always see the loading state and bring the wagon easily into the correct position for optimum loading by the harvester.

A KRONE exclusive

The single-frame is a special KRONE development for forage transport wagons – designed with a self-supporting loading trough, it has a reduced dead weight and lower platform offering extra loading volume and higher payloads. Bringing the centre of gravity closer to the ground, TX offers exceptional stability in sloping fields and headland turns at speed.

Low dead weight

- **Huge loading volume:**
46 and 56 m³
- **Single-frame concept**
with front loading trough for a lower dead weight and more payload
- **Rugged and heavy-duty all-steel body**
- **Conical design,**
so that the load slides better
- **Unique unloading aid**

The KRONE TX can easily be loaded by the harvester and stands out for offering huge transport capacities, safe and swift travel, as well as fast unloading. A TX boosts your efficiency, reduces costs and sets new standards.



Strong

With a frame height of 450 mm, many stakes and extremely resistant trapezoidal sheets, the forage transport wagons are robust and can take high loads.

Smooth emptying

The conical design offers the advantage of tapered side walls front to rear and the steel base facilitates the unloading process. There are no retaining edges. Nothing can get caught.

Unloading aid

An extra plate at the front end pivots to the rear, pushing the crop wall so this topples over for faster and exhaustive unloading. The plate also eliminates the risk of the crop wall toppling over to the front end. No need to sweep the forage wagon.

The design

Scraper conveyor



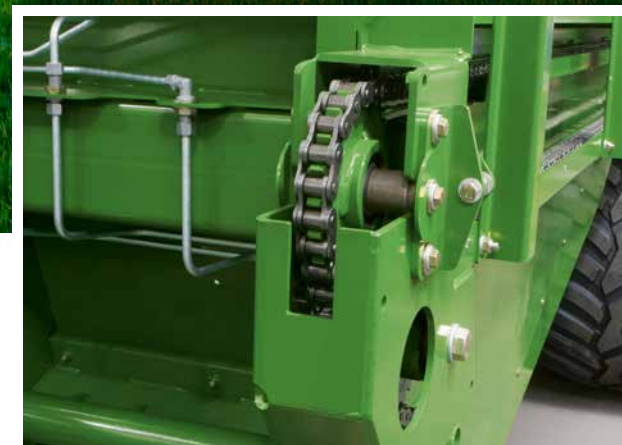
Added capacity

The KRONE TX is the first forage transport wagon that features a sloping scraper conveyor. The extra volume is provided by the 'pocket' at the front end. This design shifts more weight to tractor's rear axle thereby improving traction in the field. Also, the low centre of gravity of the wagon leads to better rides in sloping fields and improves road stability in swift transport work.



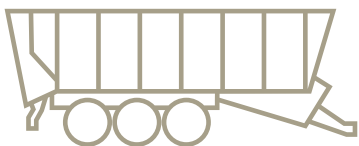
Perfectly tensioned chains

Scraper conveyor chains that are tensioned perfectly last longer and perform better. These low-maintenance chain tensioners with integral springs are integrated in the front end of the machine where they are easy to operate and service.



Unloading takes less than a minute

The mechanical chain drives of the scraper conveyor offer very speedy unloading. The heavy-duty 1 1/4 inch drive chain is integrated in the vehicle frame. The low-maintenance and extremely durable chain runs in plastic rails.





Clean and fast

- **Lowered scraper conveyor**
for more loading volume, best driving characteristics on slopes, in the field and on the road
- **Better traction of the tractor rear wheels**
when initially loading the front wagon
- **Double scraper conveyor:**
Robust and non-slip
- **Direct and mechanical scraper conveyor drive:**
 - extremely powerful
 - extremely fast
 - independent of the tractor hydraulics

Four chains

The use of two scraper conveyors doubles the unloading efficiency. The four highly tempered, short-link round steel chains, each with a breaking load of 23 tonnes, are designed for maximum scraper conveyor speeds of up to 29 m/min. The square tube floor conveyor strips are easy to grip and have ideal feed properties.

Convenient door

The TX models with discharge rollers come with a door on one side which is accessed via a foldable ladder. The wide door makes access more convenient and easier to clean the loading space.



The KRONE TX forage transport wagon is tailored to the needs of contractors. With greater loading capacities, a steel base that slopes to the front and swift unloading by the scraper conveyor feed that does not rely on the tractor hydraulics, the TX has become even more efficient.

The hydraulic articulated drawbar

Maximum stability, *maximum comfort!*



Hydraulic articulated drawbar

The articulated drawbar is particularly useful for loading the wagon from the front when opening a field. It inclines toward the tractor increasing the throat volume and ensuring loss-free filling of the KRONE TX from front to rear.



Agile

A TX forage transport wagon is very easy to manoeuvre. The slim drawbar gives tightest turns and easy shunting in confined space – the ideal equipment for opening up fields or clearing small plots. No need to remove the tractor lower link.



Suspended drawbar

The drawbar suspension has a nitrogen tank that is integrated in the oil circuitry of the articulated drawbar. The accumulated drawbar absorbs shockloads and offers maximum operator comfort.





An ideal system

The TX features a foldable support jack. The articulated drawbar adjusts hydraulically to individual tractor ends. It's easy.



Ball-head attachment

This hitch offers maximum operator comfort at minimum wear and ensures the machine runs smoothly without jolting. The ball-head attachment 80 is designed for a drawbar load of 4 tonnes.



Convenient for operators

The hydraulic forced steering connects easily to the 50 ball-head attachment of the tractor. The adjustment is made via the rocker arm with a releasable bolt.

Firmly under control

- **Wagon can be lowered towards the front**
for optimum filling when opening up a field
- **Variable ground clearance –**
ideal on the silage clamp and for deep ruts
- **Tight turning radius –**
no need to dismount the tractor lower links
- **Quiet running –**
hydraulic drawbar suspension

The hydraulic articulated drawbar tilts the wagon to the front, making it easier to open up a field but also increases the machine's ground clearance when travelling in deep ruts. The slim drawbar with ball-head attachment is suspended to offer superior driving stability. The narrow drawbar with ball-head attachment has hydro-pneumatic suspension and offers maximum driving comfort.

TX 460 · TX 560

Without discharge rollers



Convenient

The sloping rear wall makes for easier filling of the forage transport wagon and the shorter base is an advantage when entering narrow gates.



Speedy unloading

The scraper conveyor drive was designed for high performance. With a feed speed of up to 29 m/min, the wagon is unloaded in less than a minute. A TX boosts your productivity.



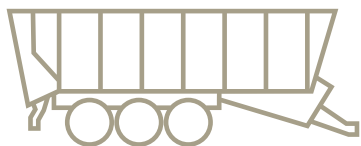
Controlled from the tractor seat

The steel tailgate is opened and closed by hydraulic cylinders on both sides. The automatic locking and unlocking device makes it easier to operate from the tractor.



Pump it out

With a wide-opening tailgate, double scraper conveyor and a scraper conveyor speed of up to 29 m/min, the TX 460 and TX 560 unload even large forage masses extremely quickly and smoothly.





Fast unloading

- Robust all-steel body,
few components
- Unloading takes less than a minute
- Extra strong scraper conveyor
with four chains

The KRONE forage transport wagons TX 460 and TX 560 are the specialist machines that really boost the efficiency of your harvest fleet – courtesy of the extra loading space that is gained from the sloping scraper conveyor, the very high scraper conveyor speed and the single-piece frame design that increase the payload.

TX 460 D · TX 560 D

With discharge rollers



Discharge rollers

The entry-level TX 460 D and 560 D have two open discharge rollers that unload the material. The large diameter of 450 mm and the helical arrangement of the non-slip tines ensure powerful, even forage distribution across the entire width.

The efficient drive

The discharge rollers are driven by the sprocket wheel of the scraper conveyor drive. Robust chains with 1 inch links transmit the drive power without loss. Spring-loaded chain tensioners are in place to ensure a smooth performance.

Fast changeovers

Forming one integral assembly, the discharge rollers on the KRONE TX 460 D and 560 D forage transport wagons are fitted and removed easily and quickly.

Full overload protection

Powered directly by the tractor main drive train, the discharge rollers perform absolutely dependably. The overload protection in the main universal shaft allows for even faster unloading.





Even forage distribution

- **Two discharge rollers**
for depositing forage evenly
- **Discharge roller protection**
via the main universal shaft
- **Quick installation and removal**
of the complete discharge roller unit
- **Fast unloading**
with a scraper conveyor speed of 17 m/min

The two discharge rollers on the KRONE TX 460 D and TX 560 D forage transport wagons unload crops in a uniform mat for subsequent rolling. Powerful and effective, the rollers are made to match the high unloading rate of the scraper conveyor.



A perfect crop mat

Two discharge rollers unload and distribute huge masses in a uniform mat along the full length of the clamp.



The additional equipment

Even more practical, *even more comfortable!*



Easy operation

When the tailgate opens the unloading aid pivots to the rear, pushing against the crop wall and supporting the work of the scraper conveyor. As soon as the tailgate closes, the spring-loaded unloading aid returns to its initial position.



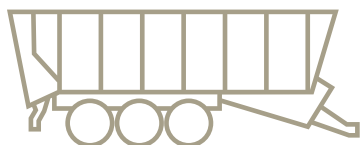
Filling level indicators

These pressure gauges indicate the filling level of the transport wagon. The pressure in the hydraulic cylinder of the articulated drawbar and in the cylinders of the hydraulic pressure compensation system on the axles is measured. The filling level helps operators estimate the weight of the load.



Nothing is lost

KRONE forage transport wagons can optionally be fitted with a loading space cover. ensure nothing of the valuable load is lost in road transport at speed. The loading space cover can be opened and closed hydraulically.



Extremely useful

- **Unloading aid**
for fast and optimal emptying
- **Filling level indicator**
via pressure monometer
- **Weighing device**
via gauging pins on the drawbar
- **Loading space cover**
for loss-free transport

A well-equipped machine facilitates operation, is safe and increases productivity. A specially developed unloading aid for the KRONE forage transport wagon ensures the unloading process is completed even faster and more efficiently. Further equipment options include loading space covers, weighing devices, extra lights and reflective contour markings for added safety and maximum operator comfort.

Electronic weighing device

The optional electronic weighing device uses gauging pins on the drawbar and on the tandem/tridem unit with hydraulic pressure compensation. The weight of the load is equivalent to the accumulated drawbar tongue load and axle load.



Weight readings

The weight of the load is read out on the display of the operating terminal that forms part of the optional weighing device. The weight of the unloaded crops is determined by the difference between the weight of the loaded material and that of the material left on the wagon.



The lighting

Safe on the move – *day and night!*



External lights

The KRONE TX forage transport wagons are equipped as standard with two, optionally four, side-mounted LED auxiliary headlights. These provide excellent illumination of the axle as well as the surrounding area, facilitating manoeuvring and parallel driving at night and increasing safety on the silage clamp.



Road safety

The TX models have standard rear lights both at the top and bottom plus an adjustable underride guard. These features are an industry standard on commercial trailers.



Loading space lighting

Three powerful LED light strips fully illuminate the loading space. They are operated together with the tractor lights.



Perfectly illuminated

- **With LED working lights**
safe in the field and on the road
- **Excellent all-round view**
at night
- **Optional internal and rear-view cameras**
provide great visibility
- **Optional contour marking**

The effective interior LED lighting, up to four external LED working lights and bright front position lamps visible from far away, plus reflective contour markings as well as a camera with a monitor improve operator comfort and maximise safety.





Maintaining a clear view

KRONE transport wagons can optionally be fitted with a camera in the loading space and a rear-view camera. The high-resolution images increase the field of view, make it easier to work and increase safety levels especially when shunting, loading and unloading. Can be ideally combined with the CCI terminals or the 7" monitor – to ensure perfect control in every situation.



Visible from afar

Additional LED rear lamps with direction indicators, rear lights and brake lights at the top of the rear wall make the machine visible from far away and clearly indicate a turn.



High visibility

LED front position lamps and optional reflective contour markings ensure other operators can determine the actual size of the machine even if further away. Early detection of sudden traffic conditions in the dark enables other road users to change the way they are driving in good time. The reflective contour markings enhance safety on roads and tracks.

The running gear

Tandem axle assembly



Very adaptable

The axles provide for generous vertical travel. The load is distributed uniformly to the rear and front wheels at all times. The design of the axle provides for excellent climbing and unloading on high and steep clamps.

Maximum stability

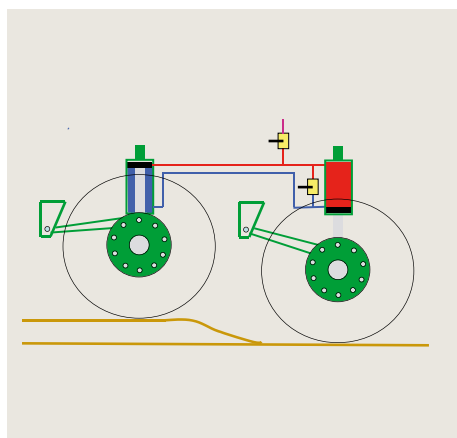
To compensate for undulating ground, the oil flows from the cylinder on the front wheel to the cylinder on the rear wheel on the same side of the machine and vice versa. Using two separate oil circuits inside the axle assembly on either side cuts out any risk of rolling and maintains the body level at all times.

Best straight travel

The cam discs on the steering knuckles are locked relative to the load that is currently placed on the axle. This results in maximum road stability and safe turning. The deflection forces are lowest when the machine is empty.

Gentle on the tyres

The steered axles are standard specification. Tracking excellently in headland turns and curved lines, these rear wheels eliminate the risk of scuffing, protect the sward and take off stress from the running gear.





Tyre options

There is a choice of tyre options with various treads and carcasses, KRONE can thus offer you the perfect solution for your specific needs.



800/45 R 26.5 TL 174 D

Width: 800 mm
ø: 1350 mm



**800/45 R 26.5 TL 174 D
(Trac profile)**

Width: 800 mm
ø: 1380 mm



**710/50 R 30.5 TL 173 D
(Universal profile)**

Width: 730 mm
ø: 1485 mm



**800/45 R 30.5 TL 176 D
(Trac profile)**

Width: 810 mm
ø: 1510 mm

Relaxed on the move

- **Roll-resistant** –
safe handling on the road
- **Maximum stability on slopes, reduced risk of rollover**
- **With axle steering** –
protection of the sward, less tyre wear

The trailing and positively steered tandem units with hydraulic compensation meet all practical requirements. Each running gear offers stability on the slope and roll stability when travelling at speed and around bends. These axles offer maximum safety and operator comfort.

The running gear

Tridem axle assembly



Built-in road stability

The six wheels on the tridem chassis ensure soft treading and full ground contour following. Hydraulic pressure compensation ensures the pressure inside all cylinders and on all wheels is the same. Using a separate circuit on either side of the vehicle hydraulics, eliminates the risk of the wagons rolling, maintains the body level at all times and ensures maximum stability. The maximum permissible speed is up to 60 km/h, depending on the licence.



With lifting axle

The front axle is designed as a lifting axle that can be raised to protect the front tyres and save costs during empty hauls.



Steered wheels

A steered front or rear axle ensures excellent tracking on every curve for effective sward protection, reduced draft requirement and less strain on the wheel bearings.





Gentle on the soil

- **Tridem axle assembly**
with load distribution on 3 axles
- **Permissible axle load**
27 t (TX 460) or 30 t (TX 560)
- **Maximum ride comfort,**
stable and roll-resistant
- **Steered front and rear axles,**
lift axle at front
- **Option on TX 460, standard feature on TX 560**

With the tridem axle assembly, the bottom hitching and ball-head attachment 80, the TX forage transport wagons can be driven with a permissible axle load of 27 t (TX 460) or 30 t (TX 560) and at a maximum speed of 40 or 60 km/h. The running gear, designed for heavy loads, is extremely comfortable and reliable with hydraulic compensation and hydro-pneumatic suspension.

Tyre options

On tridem axle assemblies, you can also select the tyres that best suits your requirements. The light-pulling wide-base tyres are gentle on the sward and minimise wheelmarks.



800/45 R 26.5 TL 174 D

Width: 800 mm
ø: 1350 mm



**800/45 R 26.5 TL 174 D
(Trac profile)**

Width: 800 mm
ø: 1380 mm



**710/50 R 30.5 TL 173 D
(Universal profile)**

Width: 730 mm
ø: 1485 mm



**800/45 R 30.5 TL 176 D
(Trac profile)**

Width: 810 mm
ø: 1510 mm

The brake and steering

Reliable and smooth-running



The brake

The TX 460 and TX 560 models are fitted with a standard dual-line compressed air brake system as standard. The hydraulic ALB valve controls the brake pressure relative to the current load. This hydraulic brake is an option in certain countries.

Enhanced reliability

EBS is the optional electronic brake system, which comprises ALB, ABS and RSS functions. The roll stabilisation system intervenes by braking whenever there is a danger of tipping over, ensuring the TX will not roll over when navigating narrow bends at speed. Combined, all of these functions increase operational safety.



Optimally coordinated

- **Electronic braking system EBS with**
 - automatic load-dependent braking force control ALB
 - anti-lock braking system ABS
 - roll stabilisation system RSS
- **Hydraulic or electronic forced steering as an option**

Increasingly bigger and faster tractors, higher transport capacities and payloads call for a thorough rethink when it comes to safety. Therefore, KRONE offers an electronic brake system that has already proven its worth in the commercial vehicle sector. Intelligent steering axles help protect the swath and provide added safety.



Self-steering

On the TX 460 with the tandem unit, the self-steering is included in the standard equipment. The steering system can be locked using locking cylinders during shunting, clamping and when driving on the road.



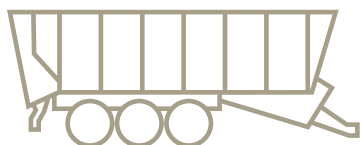
Hydraulic forced steering

On the TX 460 with tandem axle, the hydraulic forced steering (optional) controls the rear wheels. On the TX 560 with tridem axle the hydraulic forced steering is standard and controls front and rear wheels. The forced steering offers a number of benefits: it stays activated during reverse travel; it reduces some of the pushing power required to turn a curve; it also reduces the load on the running gear, and optimises the stability at speed. The system is controlled via the tractor's ball hitch and the master cylinder on the drawbar, or two master cylinders on tridem units.



Contactless electronic forced steering

By electronically transmitting the steering angle, the contactless forced steering allows a higher steering angle and prevents possible damage due to collisions with the tractor tyre. No linkage interferes with the full steering angle of the tractor-trailer combination. Thanks to the electronic control, the steering characteristics can be adjusted perfectly to different driving situations. In addition, transport wagons that are equipped with the contactless electronic forced steering (version 0685) are also fitted with an electronic weighing device as standard. This makes it very easy to monitor the loaded quantities at any time.



The control concept

Relaxed operation, *productive work*

Easy and intuitive

- Clear concept
- Easy operation
- CCI ISOBUS

No electronic or operating terminals are required to work with a basic version of the TX. It is simply operated via the tractor's regulating valves. Other optional features, such as the electronic weighing device and electronic axle steering, can easily be operated via the CCI 1200 ISOBUS terminal or the ISOBUS tractor terminal.

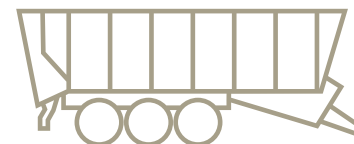


Operating a base specification machine

A base version of the TX is solely operated via the regulating valves on the tractor. The tailgate, the hydraulic articulated drawbar, the locking system of the caster-steer tandem axle and the tridem lift axle are easily operated via the hydraulic controls next to the driver's seat. The pivoting flap that supports the unloading process is an option and is operated from the same spools that operate the tailgate. The optional loading space covers require an additional double-acting hydraulic connection.

Spot on

The new operation panel can be used to intuitively operate both the working lights and loading space lights. Both of the units can be switched independently of one another. An additional LED informs the driver about the opening state of the tailgate.





The DS 500 Terminal

The compact DS 500 terminal has a 5.7" colour display screen and can optionally be operated via the 12 function keys, the touchscreen or the scroll wheel on the rear side. An optional joystick is available for even more convenient operation.



ISOBUS terminals CCI 800 and CCI 1200

With an 8" or 12" colour touchscreen, the CCI 800 and CCI 1200 ISO-BUS terminals offer maximum user comfort. In addition to the main function at maximum zoom, other functions are displayed in the mini-viewer at the same time. These terminals can also be combined with cameras and AUX joysticks.



ISOBUS tractor operating terminal

The ISOBUS operating terminal on the tractor completes all of the functions of the ISOBUS CCI 1200 operating terminal.



SmartConnect Solar – the digital vibration logger

SmartConnect Solar enables you to connect machines in real time. The self-sufficient telemetry unit automatically records the location, route and operating hours independently of the manufacturer and completely autonomously thanks to the solar panel and rechargeable battery. On transport vehicles, the number of loads can also be recorded by mounting it on the tailgate. All of the relevant data is thus available for transparent and fair invoicing – perfect for leasing or service companies.

Technical data



		TX 460	TX 460 D	TX 560	TX 560 D
Capacity	approx. m ³	46	46	56	56
GVWR					
On tandem-axle model	t	24	24	–	–
On tridem-axle model	t	31	31	34	34
Drawbar tongue load	t	4	4	4	4
Gross axle load					
On tandem-axle model	t	20	20	–	–
On tridem-axle model	t	27	27	30	30
Overall length	approx. m	10.03	10.03	11.84	11.84
Total width*	approx. m	2.90 - 2.96	2.90 - 2.96	2.90 - 2.96	2.90 - 2.96
Total height	approx. m	4	4	4	4
Discharge rollers		–	2	–	2
Tandem axle		Standard	Standard	–	–
Tridem axle		Optional	Optional	Standard	Standard
Self-steering		Standard	Standard	–	–
Mechanical forced steering***		Optional	Optional	Standard	Standard
Electric forced steering		Optional	Optional	Optional	Optional
Tyres					
800/45 R 26.5 TL 174 D		Standard	Standard	Standard	Standard
800/45 R 26.5 TL 174 D Trac profile		Optional	Optional	Optional	Optional
710/50 R 30.5 TL 173 D Universal profile		Optional (tandem)	Optional (tandem)	Optional	Optional
800/45 R 30.5 TL 176 D Trac profile		Optional (tandem)	Optional (tandem)	Optional	Optional
PTO speed	rpm	1,000	1,000	1,000	1,000
Scraper conveyor speed	approx. m/min	34	17	34	17
Hydraulic connections					
Drawbar		1 x da	1 x da	1 x da	1 x da
Tailgate		1 x sa	1 x sa	1 x sa	1 x sa
Hydraulic connections					
Self-steering axle lock		1 x sa	1 x sa	–	–
Hydraulic connections					
Lifting axle		1 x sa	1 x sa	1 x sa	1 x sa
Unloading aid		Optional	Optional	Optional	Optional
Weighing system		Optional	Optional	Optional	Optional
Loading space cover		Option **	Option **	Option **	Option **
Min. tractor power	Approx. kW/hp	89/120	89/120	111/150	111/150

* depending on the tyres, **additional 1 double-acting hydraulic connection required, *** standard for all Tridem chassis

All specifications, weights and dimensions do not necessarily comply with standard specifications and are therefore not binding. All product specifications are subject to change.







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