

AX

EN LOADING AND FORAGE TRANSPORT WAGONS



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AX

Loading and forage transport wagons



Camless pick-up for very quiet running and hard wearing

Camless pick-up for very quiet running and hard wearing

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Tines in W-arrangement
for optimum crop flow

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Wide rotor

large-diameter rotor for high intake rates

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Central blade group control system

for 0, 16, 16, 32 blades

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enhances crop feed efficiencies

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Sprung combined unit or un-sprung tandem unit
with hydraulic levelling system

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Drawbar suspension
for comfortable rides

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*Loading and chopping –
all your crops in one wagon.*

AX defines the KRONE range of loading and forage transport wagons that offer capacities from 25 m³ to 31 m³

and which are available with different extensions that give users the flexibility to use them as self-loading forage wagons with and without discharge rollers but also as silage trailers in the maize harvest chain. AX suggests maximum reliability, efficiency and flexibility.

AX 250 · 280 · 310

Dual-purpose wagons

AX model		250 L	250 D	280 L	280 D	310 L	310 D
Capacity	m ³	25	25	28	28	31	31
Available extensions		FL GL	FD GD	FL GL HL	GD HD	GL HL	GD HD
Discharge rollers		-	2/3	-	2/3	-	2/3
Work width (pick-up) mm	Work width (pick-up) mm	1800	1800	1800	1800	1800	1800
Max. no. of blades		32	32	32	32	32	32
Power requirement	min. kW/hp	59/80	59/80	66/90	66/90	74/100	74/100

The technical data may vary depending on the equipment.



AX 250

Offering a loading volume of 25 m³, the AX 250 loading and forage transport wagon is the most compact model in the AX range and is available with collapsible or steel extensions. The AX 250 D is the model that also has discharge rollers at the rear. The 1,800 mm wide, uncontrolled pick-up feeds the crops to the cutting rotor with 32 blades that chops the material to lengths of up to 45 mm using the shear cut principle.



Versatile and flexible in the field

- **AX 250 loading and forage transport wagon:**
25 m³ volume; folding grid or all-steel extensions
- **AX 280 loading and forage transport wagon:**
28 m³ volume; folding grid or all-steel extensions
- **AX 310 loading and forage transport wagon:**
31 m³ volume; folding grid or all-steel extensions

The new generation of AX loading and forage transport wagon models stand out for offering different fittings and loading capacities, to adapt to many different conditions and applications. These extremely efficient loading, dosing and forage transport wagons have very low power requirements. The various possible uses increase the workload and efficiency of this dual-purpose loading and forage transport wagon.



AX 280

Offering a volume of 28 m³, the AX 280 is the most versatile machine in the AX range and can be specified with many different extensions – collapsible hay extensions, steel extensions or silage extensions. The AX 280 D model is specified with either two or three discharge rollers. The 1,800 mm wide, uncontrolled pick-up feeds the crops to the cutting rotor with 32 blades that chops the material to lengths of up to 45 mm using the shear cut principle.

AX 310

The AX 310 GL is the flagship of the range and offers a capacity of 31 m³. It has a rugged steel extensions as standard specification or silage extensions as an option. The AX 310 D is the model that features either two or three discharge rollers at the rear. The 1,800 mm wide, uncontrolled pick-up feeds the crops to the cutting rotor with 32 blades that chops the material to lengths of up to 45 mm using the shear cut principle.

The AX extensions

Individual and efficient



Collapsible hay extensions (FL / FD)

The AX 250 L/D model has hay extensions that collapse hydraulically. With the extensions down, the machine easily passes under low gates. The top ropes, the slide cover in the front section and the rear cover ensure no material is lost in transport.

Steel extensions (GL / GD)

All AX forage wagons are available with the extra strong steel extensions. The crop is secured with top ropes that ensure nothing is lost during transport. The steel tailboard is operated automatically by two single-acting rams





The fittings

- Collapsible folding grid are ideal in low buildings
- Sturdy all-steel body with upper tensioning ropes ensuring nothing is lost during transport
- Silage extensions with headboard hatch and no ropes for use as a silage trailer

The large choice of available extensions makes the KRONE AX a universal loading and forage transport wagon. Collapsible hay extensions allow the AX to enter low buildings or pass under low gates whereas steel extensions give it a head start as a self-loading forage wagon. But it can also take silage extensions including the headboard hatch, which make it the perfect dual-use forage wagon / silage trailer.



Silage extensions (HL / HD)

The AX 280 and 310 can be specified with optional silage extensions. These include a silage hatch at the top of the headboard. Operated hydraulically, this flap moves forward for filling from the forager ahead. Without top ropes, the AX suits not only applications in which the material is collected by the pick-up but also when the wagon is filled by the forage harvester.



Suspension, drawbar and running gear

For a safe and comfortable ride



Ball-head attachment

The bottom-mount ball-head attachment 80 brings great agility, minimizes wear and offers tongue loads of up to 3 tonnes.

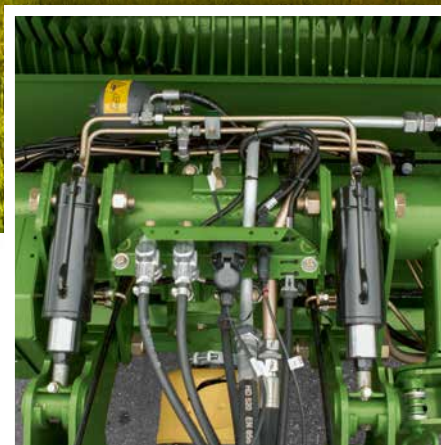
Drawbar eye

The top-mount 40 mm drawbar eye couples to the tractor clevis.



Height control at your fingertips

The articulated drawbar offers hydraulic height control which can also be operated from an optional button on the headboard. The optional auto control feature allows operators to retrieve the stored field/road position of the drawbar easily and fast. The latter increases the ground clearance by up to 60 cm for easier manoeuvring on the headland or clamp.



Suspended drawbar

Spring-loaded as a standard, the drawbar stabilizes the trailer for a smooth ride and is a particular boon during long-distance travel on bumpy roads.



Running on comfort

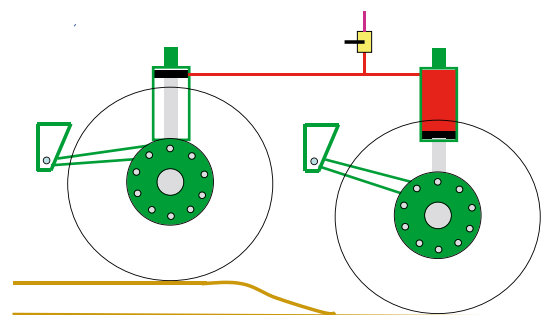
The AX 250 has a combined unit as standard that offers a permissible axle load of 10 t, 13 t or 16 t depending on tyre size. The axle load of the AX 280 and AX 310 is 16 t with a maximum speed of 40 km/h. In addition to a version with two rigid axles, the combined unit can optionally be caster-steered with a rear axle, which helps avoiding turf damage when travelling through bends. The steering can be locked during shunting and clamping.



Solid transport technology

- **Bottom- or top-mount hitching**
- **Articulated drawbar**
for high ground clearance
- **Drawbar suspension**
for comfortable rides
- **Sprung or unsprung tandem unit**
with hydraulic levelling system

Varying harvest conditions, difficult situations on the clamp, high payloads, and long-distance travel at speed call for a running gear and a drawbar that offer maximum strength and stability as well as superior operator comfort and safety. Choose between the top-mounting hitch ring, the bottom-mount pivoting drawbar, the ball hitch or the articulated drawbar. This and the caster-steer tandem unit with either mechanical or hydraulic suspension allow you to specify your machine to your individual needs.



Great stability

The tandem unit with hydraulic auto-levelling has two separate hydraulic circuits. The system reduces the risk of machine roll when working in sloping fields or travelling through bends. The AX manages undulations with ease as the oil flows from the cylinder on the front axle to the cylinder on the rear axle and vice versa to compensate for roll. This way the machine weight is uniformly distributed to all wheels as the machine is entering the clamp.

Choice of tyres

We offer the correct tyres for every harvest condition. Flotation tyres offer a larger contact area and are therefore preferable in boggy terrain as they reduce compaction and make for lighter pulling.



Cross ply tyres 500/50 - 17 TL

Width: 503 mm
ø: 945 mm



Cross ply tyres 500/50 R 17 TL

Width: 503 mm
ø: 945 mm



Radial ply tyres 620/40 R 22.5 TL

Width: 610 mm
ø: 1080 mm



Radial ply tyres 710/40 R 22.5 TL

Width: 727 mm
ø: 1140 mm

The articulated drawbar provides the necessary flexibility to cope with any situation and challenge.

The KRONE EasyFlow pick-up

Picks up crops across the full width

The pick-up

With a working width of 1.8 m (as per DIN 11220), the pick-up effectively gathers wide swaths and provides the cutting rotor with a consistent flow of crops. Excellent ground contour following comes from the pivoting suspension and the leading gauge wheels that pivot sideways and also offer height control without tools.

Perfect control

You can order two optional gauge wheels to run at the rear and outside the tractor wheelings to optimize contouring and minimize contamination in very difficult conditions.

Maintenance-free and long-lasting

- **Wide pick-up**
for clean and comprehensive gathering
- **Camless pick-up for very quiet running and hard wearing**
- **Tines in W-arrangement**
for optimum crop flow
- **Optimum ground contouring by gauge wheels and side pivot**

The camless EasyFlow pick-up has only few moving parts and runs extremely quietly, causing little wear. Boasting a wide work width, it gathers wide swaths tidily also in bends. Undulations are no problem at all, thanks to the pivoting suspension along with the gauge wheels.





Consistent crop flow at all times

The crop press roller unit has a chain that allows operators to easily adjust the work height to ensure a uniform and consistent crop flow in varying crops, swath volumes and at varying ground speeds.



Strong tines

The diameter of 6.5 cm and the large coils make the double tines particularly resilient and wear-resistant. Arranged in a wavy pattern, six rows of tines feed the material from the ends to the middle of the rotor, thereby preventing crop from building up as the machine travels through bends, for example, and spreading it evenly across the full width of the cutting rotor.

The KRONE cutting rotor

For an accurate cut



The rotor

Measuring 760 mm in diameter and with a working width of 1.47 m, the cutting rotor was developed for filling a high-capacity wagon. The tines arranged in six rows in a spiral, are fitted with 25 mm wide steel plates made of a special hardened drill steel. This guarantees a particularly long service life. The scraper elements are also made of hard-wearing drill steel. The design ensures the tines feed the crop dependably through the blades for precise and scissor-like cuts and fast and uniform fills.



The blades

Their wavy edges make precise and smooth cuts. The blade itself is plain and simple and the cutting edge is hardened twice. This is the KRONE formula for reduced wear and lasting sharpness – and the perfect combination for making long and challenging harvest days a success.

Maximum throughput

- **Wide and large-diameter rotor**
for high intake rates
- **Helical tine arrangement**
for quiet running
- **Easy pulling blades**
for exact and scissor-like cuts

Powerful and low-maintenance, the AX rotor cutter operates very smoothly and gently. The blades give exact cuts, stay sharp for a long time and are very easy to replace.



The blade cassette

When a complete set of 32 blades is installed, the system achieves a theoretical cutting length of 45 mm. The blade group control system allows operators to select the blades in sets of 32, 16, 16, 0.

Operated from one lever

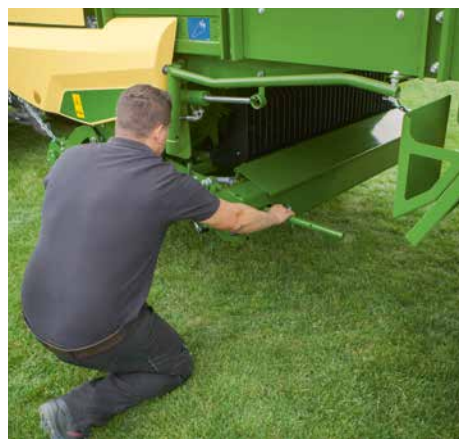
After the blade cassette lowers and the blades are withdrawn to '0' position, operate a lever on the left side of the machine to remove the blade cassette.

Pulling out to the side

After the cassette is released, it easily pulls out and swings alongside the machine for easy blade removal and replacement.

Locked in place automatically

After the blade cassette moves back into its working position, it locks home automatically on the right machine side.



The loading space

Convinces in every aspect



Convenient steps

The AX forage wagons that are fitted with discharge rollers have a large nearside door that gives convenient access to the load area after you climb the fold-down ladder for a safe ascent.



Robust design

The forage wagon is a heavy-duty machine thanks to its channel-steel frame. The hot-galvanized and powder and plastic coated sides are high-quality and extremely durable. The sloping mudguards avoid crop collecting here.



The feeding belt

The optional cross conveyor belt is an ideal feature for farmers who feed the fresh forage directly to their cows. The 70 cm wide conveyor belt unloads the forage on both sides of the forage table. But you can also empty the machine as usual via the discharge rollers without any previous modification. The belt is integrated in the "rucksack" tailgate and moves out of the way when this is opened.





Optimum loading performance

- **Wide and sturdy channel-steel frame**
- **Sloping scraper conveyor**
enhances crop feed efficiencies
- **Strong scraper conveyor chain**
and infinitely variable advance speed
- **Discharge rollers with V-shaped tines**
distribute the material uniformly
- **The optional cross conveyor belt**
unloads fresh forage directly on to the feed passage

The sloping floor on AX increases its throughput rates and minimizes tractor input. The extremely robust chain-and-slat floor offers stepless adjustment of its advancing speed, a feature that has been asked for by many farmers.



Perfect pick-up loading

The scraper conveyor that slopes 100 mm at the front and the shortened feed channel ensure the forage is carefully and quickly conveyed into the wagon with low power requirements.

Heavy-duty chains

The AX loading and forage transport wagons with either two (AX 250) or four (AX 280/AX 310) short-link chains, which are made up of 10 mm thick round steel and highly tempered scraper conveyor chains discharge their load quickly and securely. The feed speed of the scraper conveyor is controlled continuously by a hydraulic drive. The forage wagons are also equipped with a scraper conveyor reversing mechanism that can move the loads to the front in the event of any malfunctions.

Two or three discharge rollers

The AX models can be fitted with two or three discharge rollers. These have tines that are arranged in a V-line to distribute the material uniformly either on the clamp or in the feed passage. The bottom rotor revolves at a higher speed to boost unloading efficiency and crop flow consistency.

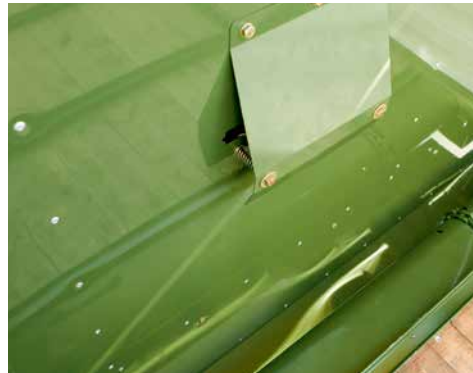
KRONE automatic loading system

Makes loading easy

Convenient loading system

- **Automatic loading system**
for advance control of scraper conveyor supply
- **Shuts off the scraper conveyor stop automatically**
on machines with discharge rollers
- **PowerLoad auto loading system**
for loading and forage transport wagons with steel extensions

Regardless of whether your AX loading and forage transport wagon is fitted with the basic or optional PowerLoad automatic loading system, both systems ensure the wagon is filled to capacity whilst compressing crops to an optimum level. With the wagon filled to capacity in each haul, you are cutting down on your transport costs.



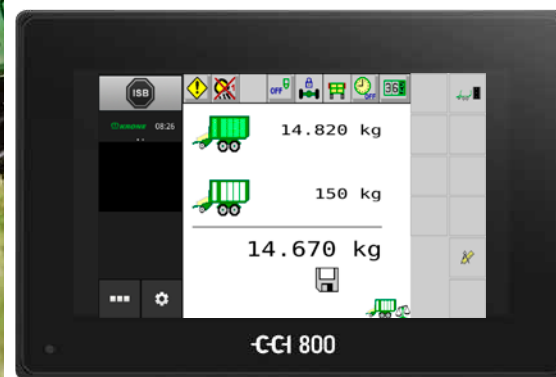
Tailgate protection

The tailgate on the wagons without discharge rollers has a sensor which stops the chains the moment it senses the machine is filled to capacity, thereby avoiding damage to the tailgate.

Clear the rollers

When the wagon is filled to capacity with discharge rollers, the crops push the roller in the guide mechanism to the rear. The motion sensor stops the scraper conveyor supply so that the discharge rollers can start up smoothly.





The automatic loading system

This optional system activates and controls the scraper conveyor with the help of sensors. One sensor measures the pressure that the material exerts on the headboard (left photo). Another sensor at the top of the headboard scans the current angle of the pendulum flap (right photo). The scraper conveyor is started automatically when the preselected values are achieved. Depending on the crop, it is also possible to use the two sensors independently of each other.

Using both sensors

The scraper conveyor speed of the PowerLoad is controlled automatically and adjusts itself relative to the load level of the precompression sensor. This helps distribute the load evenly in the loading and forage transport wagon and preserve the best possible feed quality. The target values can be set via the tractor's operating terminal.

The KRONE on-board electronic system & operating terminals

Clearly organised and well structured



Alpha control unit

This is the base specification level for the AX loading and forage transport wagon – the Medium on-board electronic system complete with the Alpha control unit, which operates the pick-up, the articulated drawbar, the scraper conveyor and the tailgate.



The DS 500 terminal

The compact DS 500 terminal has a 5.7" colour display, can be operated with 12 function keys, the touchscreen or the scroll wheel on the back. 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 ISOBUS 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.



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.

Panoramic view

- Convenient, simple operation and intuitive operation
- ISOBUS compatible

The KRONE on-board electronic system clearly simplifies, improves and accelerates the operation of the AX loading and forage transport wagon. Available in a Medium and Comfort version, the system is operated from various terminals, each catering for different applications and needs.



Technical data



		AX 250 L	AX 250 D	AX 280 L	AX 280 D	AX 310 L	AX 310 D
Capacity	approx. m ³	25	25	28	28	31	31
Pick-up working width (to DIN 11220)	Approx. m	1.80	1.80	1.80	1.80	1.80	1.80
Cutting unit Cutting length with 16/32 blades	approx. mm	90/45	90/45	90/45	90/45	90/45	90/45
Discharge rollers Standard/option	Number	-	2/3	-	2/3	-	2/3
Tractor power	Approx. kW/hp	59/80	59/80	66/90	66/90	74/100	74/100
Length	Approx. m	8.10	8.85	8.80	9.60	8.80	9.60
Width*	Approx. m	2.46-2.58	2.46-2.58	2.46-2.79	2.46-2.79	2.58-2.79	2.58-2.79
Height*	Approx. m	3.50-3.64	3.50-3.64	3.60-3.65	3.60-3.65	3.87-3.88	3.87-3.88
Platform height	Approx. m	1.30	1.30	1.30	1.30	1.30	1.30
Track width (with steering axle and Medium control)	Approx. m	1.95	1.95	1.95 (2.00)	1.95 (2.00)	1.95 (2.00)	1.95 (2.00)
Permitted Drawbar tongue load (top/bottom hitching)	t	2/3	2/3	2/3	2/3	2/3	2/3
Axle load	t	10/13/16	10/13/16	16	16	16	16
Tyres							
500/50-17 14 PR		Standard	Standard				
620/40 R 22.5		option	option	Standard	Standard	Standard	Standard
710/40 R 22.5				option	option	option	option
Filling / unloading rate	approx. min	5-8/1.5	5-8/3	6-9/2	6-9/3	7-10/2.5	7-10/3.5
Ground clearance	Approx. m	0.62	0.62	0.62	0.62	0.62	0.62

The technical data may vary depending on the equipment.

*depending on axle and tyre height

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



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