

BiG X 480 · 530 · 580 · 630

Precision-chop forage harvesters

(D KRONE

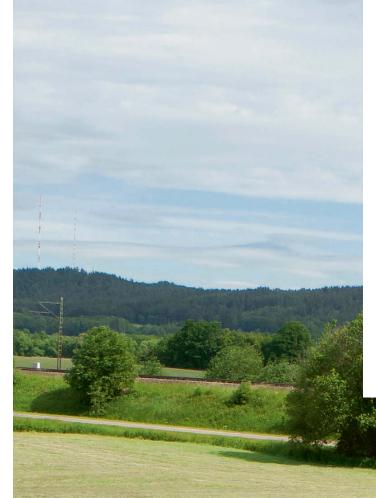
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DKRONE

Big

### BiG X 480 · 530 · 580 · 630

The new compact foragers from KRONE



- Constant engine outputs from 490 to 626 hp
- 6 intake rollers for extra safety and a top quality chop

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- Universal MaxFlow cutterheads: 20, 28 or 36 knives
- Biogas cutterhead: 40 knives
- KRONE VariStream: Spring-loaded floors for a continuous crop flow
- KRONE VariQuick: engage and disengage the corn conditioner in an instant
- KRONE StreamControl: optionally adjustable crop throw
- 4WD option with 40 km/h (25 mph) wheel motors
- Independent wheel suspension on rear axle for exceptional manoeuvrability
- Perfect for on-road travel: 3 m (9'10") machine width (depending on tyres)
- Curved retainer bracket makes headers easy to attach and remove





#### BiG X:

Setting new standards in chop quality, performance, handling and convenience.

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### The crop flow system A KRONE exclusive

Top quality chop with 6 intake rollers

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- High throughput with the Universal or Biogas cutterhead
- VariStream: continuous crop flow
- StreamControl: optionally adjustable crop throw
- VariQuick: switch quickly between grass chute and corn conditioner

#### Cutterhead

- Universal MaxFlow cutterhead with 20, 28 or 36 knives
- Biogas cutterhead with 40 knives

The right drum for the very best quality chop

#### Intake system

- 6 intake rollers
- Additional protection against foreign objects
- Hydraulic drive shaft
- Steplessly variable LOC

Perfectly protected for an optimum length of chop

And San Harrison

## The BiG X delivers more

When you're looking to maximize throughput, the technology must be up to the job. That's where the BiG X from KRONE comes in: precision-chop forage harvesters that deliver an exceptional quality cut, maximum throughput and impressive comfort and convenience. All courtesy of the direct crop flow system and a wealth of innovative details that meet the needs of the successful contractor and make light work of the job.



- Powerful crop accelerator
- Adjustable crop throw
- Precision filling, even with trailer following behind
- Highly fuel-efficient

Say goodbye to wastage

#### VariQuick

- Sliding corn conditioner/grass chute unit
- Switch quickly between corn conditioner and grass chute
- Conditioner quick to remove via a gliding plane that folds downwards

From grass chute to corn conditioner in an instant

#### VariStream

- Spring-loaded cutterhead floor
- Spring-loaded accelerator backplate
- Continuous crop flow

High throughput





#### Constant, safe and convenient

Six pre-compression rollers and an 820 mm (2'8") gap between the leading roller with metal detector and the rearmost roller not only enhance pre-compression but also protect the knives better against metal objects at high-speed intake. The hydraulic drive shaft automatically adjusts the LOC in line with the maturity of the crop, which is detected by the KRONE AutoScan sensor. If the engine speed drops below 1200 rpm as the load increases, the header and intake system are stopped automatically while the cutterhead continues to turn – because blockages caused by too low speeds cost time and money.

## Top technology for top silage

On a compact forage harvester, it's the intake components that determine the chop quality.

And the intake rollers play a particularly vital role: the higher and more constant

the pressure on the crop, the better the chop quality. So BiG X features a long intake system and six highpressure intake rollers which make for an easier and more precise chop. The LOC can be adjusted steplessly either by hand or automatically courtesy of hydraulic drives on the intake rollers.

#### Neat detail

The intake system can be supported on wheels for fast access to the chopping assembly.



#### Practical

The intake system can be folded forwards for easy inspection access to the cutterhead and counterblade.



The lower front intake roller is fitted with full-width metal detector sensors, guaranteeing detection of foreign objects across the full chamber width.

#### **Under pressure**

Adjustable coil springs keep up the pressure on the crop from the intake rollers, ensuring strong crop compaction and top chopping results.





#### Open wide

Maximum throughput is guaranteed with the massive opening between the six intake rollers. The heavy-duty drive shafts on the pre-compression rollers can cope with even the toughest loads.





### The chopping assembly

Cutterheads that fit the bill

- Cutterheads with 20, 28, 36 or 40 knives
- High inertia: closed 660 mm (2'2") diameter drums
- Top quality chop: 630 mm (2'1") wide drums designed specifically for BiG X 480, 530, 580 and 630
- Extremely fuel-efficient: high inertia, pulling cut



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## No-compromise chop

The design and dimensions of the cutterhead impact on the chop quality, crop flow, power usage and diesel consumption. Matching the drum dimensions to the forager and choosing the right number and shape of knives not only gets more power out of BiG X but increases its range of uses too. The wide range of drums for BiG X have proved their worth over and over and deliver a top-quality chop in any conditions anywhere in the world.



#### **Optimum mat thickness**

It's not just the number of knives that produces a good quality chop. The thickness of the crop that passes through them and therefore the width of the cutterheads are just as important. So KRONE offers a modified 630 mm (2'1") wide cutterhead for the BiG X 480, 530, 580 and 630 models which delivers the same outstanding quality chop as our well-known 800 mm cutterhead.



#### **Pulling power**

The knives on the KRONE cutterheads are arranged chevron-style at an angle of 11° to the counterblade for a continuous crop flow, extremely quiet running and maximum engine efficiency.



#### **Damage limitation**

BiG X can be fitted with grass or maize knives. Slots on the knives allow for precision adjustment in relation to the counterblade and protect the knives against breakage when they hit foreign objects.

### MaxFlow

#### The universal cutterhead

- For grass, pre-wilted material, whole crop silage and maize
- Cutterheads with 20, 28 or 36 knives
- Plenty of carrying space under the knife carriers: high throughput and smoother running even on uneven swaths
- Knives quick and easy to insert and remove



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#### Quick fit

Every knife is bolted to the cutterheads with just three hex bolts. The knife carrier above the knives holds them securely in place.

#### Cutting edge

To ensure a good quality cut, the knife and the counterblade must be exactly the right distance apart. The knives are quick and easy to align via the eccentric plate.

#### Protected drum body

The knife bar has another function besides: it protects the closed drum body from wear.







### Feed specialists

The universal cutterheads are specialists when it comes to preparing top-quality silage. Harvesting pre-wilted material in uneven swaths is tough going for the cutterheads. So KRONE universal cutterheads feature specially designed knife carriers with more space under the knives. With its larger "pockets" and spring-loaded cutterhead floor, BiG X is extremely smooth running and has high power reserves that make light work of temporary crop accumulations.





**20-knife drum** This is the perfect drum for long LOCs, as called for in some countries.

#### 28-knife drum

This drum is standard specification and cuts grass to the right length even with half this number of knives.



36-knife drum

Boosting throughputs and reducing fuel consumption, this 36-knife drum soon pays for itself.

#### More space for more crop

The knife carriers are arranged and designed to allow plenty of space under the knives. This extra carrying space means higher throughputs and smoother running, particularly in grass.



### The Biogas cutterhead

The special drum for short LOCs

- 40 knives arranged in a chevron pattern
- High cutting frequency
- High inertia
- Fewer overlengths
- High gas yields



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#### 40-knife drum

With its higher throughputs and lower fuel consumption per tonne of chopped maize, the 40-knife Biogas drum pays for itself in no time. The short stalks increase the

efficiency of the biogas fermenter. With the higher gas yield per m<sup>3</sup> of crop, less acreage is needed for biogas production.



## The specialist for biogas plants

The KRONE Biogas drum has proved its worth over the years and is popular with contractors working largely for biogas plants. As gas yield and throughput are the main criteria affecting the biogas plant's bottom line, profitability can only be ensured if the basics are right. The

operation. Its extremely short LOC boosts gas yield and throughput at the biogas plant even further.



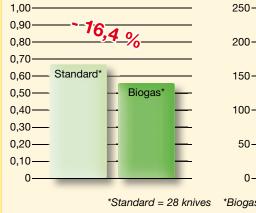


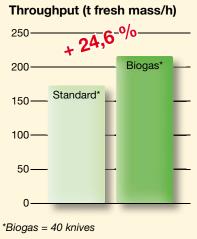
#### **High cutting frequency**

Forty knives can achieve an impressively high cutting frequency. So the Biogas drum cuts harvesting time and increases throughput - even when producing short LOCs.

#### Standard drum versus Biogas drum LOC: 5 mm (0.2")

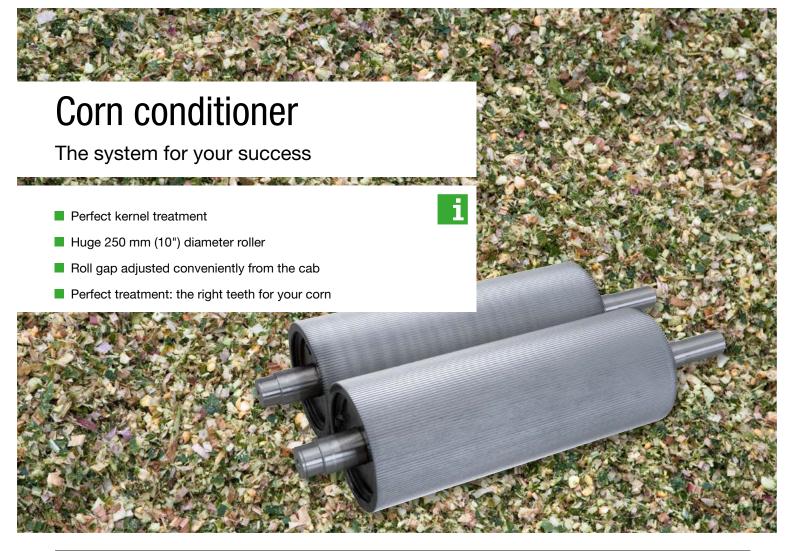
#### Consumption (I/t fresh mass)





#### Higher output, lower costs

Working with a short LOC, the KRONE 40-knife Biogas drum can increase throughput by almost 25% compared with the 28-knife universal drum. What's more, fuel consumption drops by up to 16% per tonne of chopped crop.\*



No. of teeth: 105	No. of teeth: 123	No. of teeth: 144	No. of teeth: 166
Shape of teeth: Triangular	Shape of teeth: Triangular	Shape of teeth: Triangular	Shape of teeth: Sawtooth
Application: long stalks	Application: long stalks	<ul> <li>Application:</li> <li>universal chop length</li> <li>ideal for European silage maize</li> <li>suitable for whole crop silage</li> </ul>	<ul> <li>Application:</li> <li>whole crop silage conditioner</li> <li>cracks small kernels most efficiently</li> <li>cracks whole crop silage from soft dough stage to full ripeness more effectively</li> </ul>
Can be combined with - 20-knife drum	Can be combined with - 20-knife drum - 28-knife drum	Can be combined with - 20-knife drum - 28-knife drum - 36-knife drum - 40-knife drum (Biogas)	Can be combined with - 28-knife drum - 36-knife drum - 40-knife drum (Biogas)

# **Optimal digestibility**

Livestock farmers want forage that is very easy to digest. This means every single kernel needs to be cracked, even when chopping lengths are long. KRONE corn conditioners deliver just that. Larger diameters and larger friction faces deliver top-quality conditioning and higher throughputs using less power.

#### Standard toothed rollers

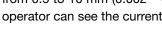
The rollers on the standard corn conditioner have 105, 123, 144 or 166 teeth. The huge 250 mm (10") diameter rollers allow you to step up your work rates and forage quality levels.

#### Hard chrome coating

Featuring 250 mm (10") diameter rollers with 105, 123 or 144 teeth, the chrome-plated corn conditioner is exceptionally durable and will give you an extremely long service life.

#### Variable roll gap

The roll gap is adjusted steplessly from the cab in a range from 0.5 to 10 mm (0.002"- 0.4") via two electric motors. The operator can see the current setting on the display.



#### KRONE corn conditioner cracks every kernel

The 250 mm (10") diameter rollers have a larger friction surface area than the smaller diameter toothed rollers and can be operated with a larger roll gap for greater efficiency and fuel economy and better long stalk conditioning. The speed difference between the two rollers is 20% or, optionally, 30%.







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### VariQuick Grass chute or corn conditioner

- Switch quickly from grass chute to corn conditioner and back
- Easy change thanks to drawer system
- No complicated changeover: done in just a few minutes
- Corn conditioner is quick and easy to remove





### Installing and removing the corn conditioner

The corn conditioner is quick and easy to install and remove. Once you have disconnected the grass chute, you simply tilt the corn conditioner downwards over the gliding plane. Two hydraulic drums make for easy handling and very fast set-up times.

## Drawer format for a quick change

With VariQuick, BiG X can be switched from maize to grass mode and back again in no time.

The sliding rail enables the grass chute and the corn conditioner to be moved together as one unit with a hand pump and positioned at the appropriate point in the crop flow. For longer use in grass, the corn conditioner can be folded down and removed completely to the side.





#### Using the grass chute

When working in grass, pre-wilted material or leguminous crops, the chopped crop is sent directly to the crop accelerator via the grass chute. As the corn conditioner is moved backwards hydraulically out of the crop flow along the gliding plane, it has no effect in this position.



#### Using the corn conditioner

When working in maize or whole crop silage (cereals), the corn conditioner is moved into the crop flow hydraulically along the gliding plane. The kernels are crushed and broken by the rollers, allowing better treatment of their contents.

#### How simple is this?

Once the transport wheels have been fitted (no tools needed), the folded-down corn conditioner can be pulled out from under the forage harvester and rolled away.



### VariStream A KRONE exclusive

- Consistent performance with irregular crop flow
- Extremely smooth running even on uneven swaths
- High throughput
- Top quality chop
- Extremely user-friendly



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#### Springs make the difference

Every forage harvester knows the deal. Uneven swaths take more concentration, reduce performance and can cause blockages in the spout. On BiG X, the cutterhead floor and the accelerator backplate are both spring-loaded, so the crop flow chamber can expand temporarily if an abnormally large volume of crop passes through it. This flexible chamber design makes lighter work for the engine and the chopping assemblies, so the forage harvester runs more smoothly and delivers more output.



### VariStream: The chamber that keeps on giving



When you're looking to maximize throughputs with a top quality chop, the technology must be up to the job. With spring-loaded floors under the cutterhead and behind the crop accelerator, VariStream delivers blockage-free, smooth operation even in an uneven crop flow. The forager is utilized to its limit and uses less fuel per hour.







**Outstanding quality chop even in an uneven crop flow** The spring-loaded cutterhead floor is connected to the anvil of the counterblade at the front. This means that the clearance between the cutterhead floor and the knives is always constant. So any movement of the spring-loaded cutterhead floor to compensate for an uneven crop flow won't affect the quality of chop.



#### Consistent throw with a tight crop stream

The spring-loaded backplate of the crop accelerator ensures maximum crop output in all conditions, filling the trailer to perfection.

### StreamControl

#### Adjustable crop throw

- Optionally adjustable crop throw
- Tight crop stream even with a long crop throw
- The shorter the crop throw, the less power is needed
- Fill trailer accurately with no spillage



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#### Short crop throw

For a short crop throw with the trailer driving alongside, the crop stream leaves the spout at a lower speed. This saves power, which can be used to boost chopping output.

#### Long crop throw

With the trailer following behind, the crop stream needs to be ejected from the spout at a higher speed. A strong, tight stream is needed to cover the long distance over the tractor to the rear wall of the trailer.





## Neat filling – efficient and effective

To avoid spillage while filling the trailer, the crop stream must be tight and the crop throw must be set to the exact distance. The operator can adjust the crop throw from the cab quickly and easily by adjusting a hinged flap in the backplate of the crop accelerator. As the

accelerator needs less power with a short crop throw, the freed-up engine output can be used for chopping, thus increasing throughput.



**Crop accelerator** The paddles are designed for high crop output and guide the crop flow towards the middle.



#### Adjusting the crop throw distance

The crop throw is controlled via the hinged flap on the backplate of the accelerator. For a short throw, the flap is tilted out of the crop flow, so there is little contact between the crop and the accelerator. For a long throw, the flap is tilted into the crop flow, so there is more contact between the crop and the accelerator.

#### Joystick control

The crop throw is quick and easy to control with the buttons on the joystick control panel.

#### Armrest buttons

Additional control buttons are provided in the armrest for extra convenience.

#### Stepless electric motor control

The hinged flap on the backplate of the accelerator is adjusted steplessly via an electric servomotor.









#### Perfect

The robust header mounting has two guide rolls at the top, and the lower main frame comes with optional hydraulic locking bolts. Two features that make it easy to attach and remove the headers and guide them accurately into position.

#### **Full adaptation**

Hydraulic drums on either side of the pivoting cross beam actively adapt the header to undulations in the ground. The hydraulic drums can be de-pressurized to allow the beam to pivot freely.





## More time for chopping

Driving between fields and working in different conditions with different crops can often mean attaching, removing or switching headers several times a day during the forage

harvesting season. And time is money when it comes to machines like this. So the BiG X 480, 530, 580 and 630 models are equipped with a quick coupler system that enables the operator to attach and remove headers faster, more easily and safely without leaving the cab.



#### How simple is this?

To attach the header, the two guide rolls on the BiG X header mounting engage underneath the tubular bar on the header.



#### No need to leave the cab

The header is secured with bolts on the bottom beam of the header mounting. Optional hydraulic locking bolts can be operated from the cab for even greater convenience.

#### Unique

Supported by the guide rolls, the tubular bar allows the header to pivot from side to side. Impressive features: a wide pivot path and easy header attachment and removal.

#### Automatic

The optionally spring-loaded quick coupler connects the header drive shaft safely and easily, with the drive train automatically locked. The frictional driveline is designed to cope with exceptionally high loads.





### EasyFlow 300 S, 380 S

#### The camless pick-up

- More output, quieter running, less wear
- Stepless speed adjustment from the cab
- EasyFlow speed automatically adjusts to driving speed
- Quick coupler with curved bracket for easy attachment and removal and excellent ground tracking

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Six rows of tines arranged in W shape

#### Two work widths

Working at widths of 3 or 3.8 m (9'10" or 12'6") using six rows of tines arranged in a W shape, the camless KRONE EasyFlow 300 S and 380 S pick-ups are extremely powerful and thorough. Depending on the swath width and your working speed, you can vary the speed of the EasyFlow steplessly from the cab. Alternatively, the speed can be automatically matched to your driving speed. The curved retainer bracket allows for a wide pivot range and makes the header easy to attach and remove.





## EasyFlow – another KRONE exclusive

The camless EasyFlow 300 S and 380 S pick-ups have no deflection rollers or cam tracks. Compared with conventional pick-ups, EasyFlow has up to 58% fewer moving parts and is impressively smooth running, low-wear and therefore cheap to maintain and service. EasyFlow operates 30% faster for cleaner gathering and increased productivity.



#### Comfort that takes the hard out of hard work

Reversing automatically raises the cross auger and the large crop press roller. This gives easy access for removal of foreign objects detected by the metal detector. When the forage harvester moves off again, the press roller and the auger automatically return to their working position.



#### With crop press roller

EasyFlow comes with an adjustable, high-volume crop press roller as standard, ensuring an even crop flow even when travelling at higher speeds.

#### W shape

The six rows of double tines arranged in a W shape pick up the crop evenly and gently using minimal power. The pick-up works neatly and ensures a continuous crop flow and a top quality chop even in uneven swaths.

#### Adapting all the time

Courtesy of the stepless height adjustment function and the adjustable spring-loaded suspension, the crop press roller runs smoothly and adapts easily to varying swath widths.





### EasyFlow 300 S, 380 S

### Professional and smart

- EasyFlow 300 S 3.00 m (9'10") transport width
- Side gauge wheels swing into place hydraulically
- One or two running wheels at rear for perfect ground tracking
- Replaceable stainless steel wear plates in infeed area
- Large adjustable crop press roller



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#### Switch between fields fast

Unsteered, height-adjustable gauge wheels on the sides can be engaged hydraulically from the cab.

#### Excellent ground contouring

Depending on the machine's working width, one or two gauge wheels are in place to optimize the header's ground contouring.

#### High throughput

The large, 600 mm (2') diameter auger performs impressively even in dense, over-long crops.







### Top class comfort and performance

The EasyFlow 300 S and 380 S headers, which are fitted with a tubular frame for easy attachment and removal, are user-friendly, top quality components that can cope with

the roughest conditions. To meet the ever tougher demands of the working farmer, we tap into our global experience to come up with products that improve your bottom line and make your work more enjoyable.





#### Hardox wear plates

Additional replaceable Hardox wear plates increase the service life of the trough in the intake area. Hardox is an extremely hard-wearing material that is perfect for even the toughest field conditions.

#### Adjustable infeed plates

The serrated infeed plates have a choice of two angle settings to adjust the crop feed intensity. So you're ready for any job.

#### Strong drive shafts

The side drive shafts for the pick-up and the cross conveyor auger are robust enough to handle even the toughest loads. Fitted with automatic overload clutches for added protection.











#### Cutting and chopping in one pass

KRONE XDisc is the versatile specialist mowing unit for whole crop silage. It cuts the crop cleanly without wastage. The huge 900 mm (2'11") diameter auger makes BiG X enormously powerful and has no trouble picking up very long, bulky material.



## XDisc: your cutting edge

Whole crop silage is becoming more and more important in agriculture, both as animal feed and as raw material in the bioenergy industry. The 6.2 m (20'4") wide XDisc cuts and chops the crop in one pass. The XDisc 620 is powerful and harvests without wastage and with an outstanding quality cut.



# SafeCut INSIDE

#### SafeCut – only from KRONE

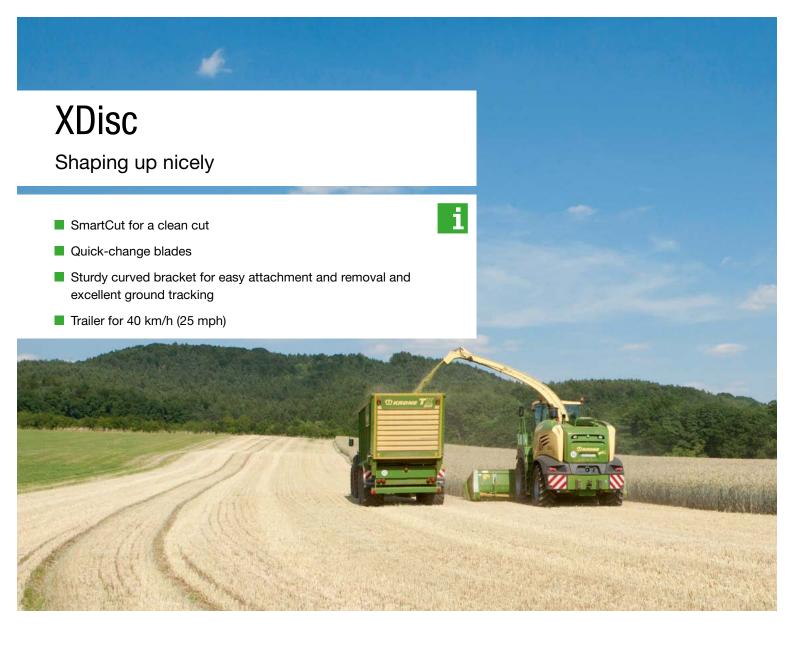
We've all been there. Colliding discs can cause damage that's costly to repair. The KRONE SafeCut gives you peace of mind with its unique design that protects the mower discs against foreign objects. The XDisc comes with SafeCut as standard.

#### Safe as houses

If the system is suddenly overloaded, instead of the impact being directed fully onto the spur gears on the cutterbar, a roll pin in the sprocket drive shaft shears. A thread on the sprocket drive shaft jacks up the disc, lifting it out of the danger area and above the cutting

paths of neighbouring discs. SafeCut protects the spur gear driveshaft and the neighbouring discs against damage. The roll pins can be replaced in just a few minutes and cost next to nothing.

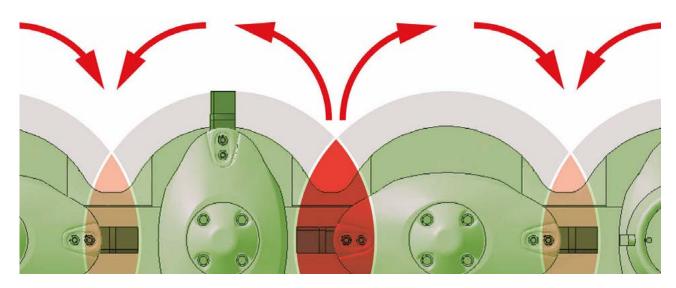




#### SmartCut: stripe-free mowing

Because the mower discs turn in both directions, the disc paths must overlap precisely to ensure a clean cut. So there is a greater overlap between the cutter blades that rotate away from each other – perfect for stripe-free

mowing. The larger gap between the blades rotating backwards ensures efficient output of large quantities of forage.



### Tried and tested in practice

The XDisc direct cutting system features the cutterbar technology of the EasyCut disc mower – a system that has proved its worth time and again the world over. SafeCut, SmartCut and

the quick-change blades are just some of the outstanding features that make the XDisc indispensable. The XDisc works economically and produces a clean cutting pattern.



Quick-change blades are a must for anyone with large areas to mow. The blades are quick and easy to



The powerful, massive 900 mm (2'11") diameter auger

Strong throughput

works trouble-free even in dense, high crops. The pivoting unit has a reversing mechanism and the auger flights have replaceable Hardox steel wear plates.

Change blades in an instant

change in situ.

#### **Safe on the road at up to 40 km/h (25 mph)** The XDisc is quick and easy to place on the specially designed trailer for transportation. The integrated brake system gives you true peace of mind.

#### No time to lose

Attaching and removing the XDisc is quick and easy. The forage harvester moves up to the XDisc, inserting the quick coupler rolls under the tubular frame. For greater convenience, the quick coupler for the drive shaft can be optionally spring-loaded, and an optional hydraulic locking system is also available.





### EasyCollect

Efficient and effective

- Variable-row widths of 4.5 9 m (14'9"-29'6")
- Top quality chop, fewer overlength fractions as stalks are fed in lengthwise
- Simple design reduces power input
- Central drive shaft



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#### Unique, powerful and efficient

Cutting at widths of 4.5 m to 9 m (14'9"-29'6"), the BiG X 480, 530, 580 and 630 models can take two or three-section maize headers that work at variable row widths. The continuously rotating collectors feed the stalks to the middle of the machine, where they are turned through 90° and pulled in lengthwise. Ideal for a top quality chop with fewer overlengths.

### EasyCollect – chop quality starts with the header

The row-independent EasyCollect header is a versatile unit that feeds the stalks lengthwise into the machine. This translates into an unsurpassed quality of chop, as a coarse chop is the last thing livestock farmers or biogas producers want. The unique collector principle cuts labour costs and has proved its worth time and again the world over.

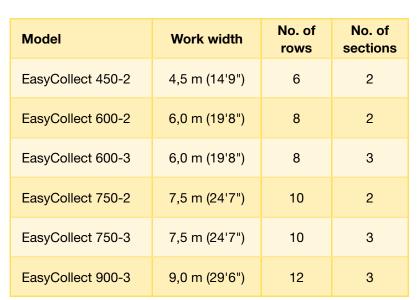


Compact transport width: the three-section EasyCollect



**Pulling power** 

Rigid multi-section knives pull in the stalks, which are then cut off by rotating knives in a scissor motion. The knives are self-sharpening and easy to replace.





#### Simply the best

The 2-section maize heads are impressively simple in design. Their narrow width, slim design and excellent visibility ensure safe on-road transport.

#### Central drive

The mid-mounted gearbox with automatic clutches on the drive shafts transmits full engine power to the folding collector sections.







#### Ingeniously simple – simply ingenious

EasyCollect maize heads have a simple, modular design with endlessly moving collectors. The result? Much lighter in weight, less maintenance and a long service life.



#### Reliable crop guidance

EasyCollect does an impressive job in any situation. Even single rows of maize are no problem: it cuts them cleanly, feeds them towards the middle and on to the cutterhead. This smooth, lengthwise feed produces an outstanding quality chop.



#### Uniform stubble height

The distance sensors on either end of the EasyCollect corn head help maintain a uniform stubble height even in undulating terrain. They instruct the EasyCollect to adjust the depth both across the width and in the direction of travel.





#### Optimum crop flow

The crop divider adjusts its height hydraulically to different stalk lengths, grabs the stalks at the top and pulls them into the machine.



### **Good guidance**

When Autopilot is enabled, the sensor arms on the central cone scan the distance between two crop rows. BiG X is guided automatically along the row, taking the strain off the operator.



#### Widest intake system

The EasyCollect intake channel dimensions match the width of the cutterhead and ensure maximum throughput and a top quality chop. The straight crop flow and large intake capacity combine to provide a trouble-free, precise crop feed.

# The engine Powerful and fuel-efficient

6-cylinder in-line MTU engines

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- Tier 4 final / Stage IV emission standard
- Maximum constant engine outputs from 490 to 626 hp
- Extremely economical, smooth running

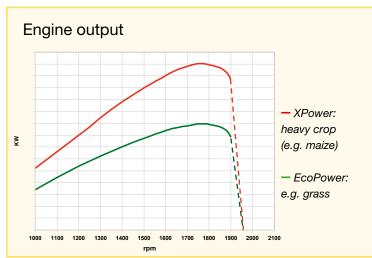
	Model	Engine (emission standard: Stage IV / Tier 4 final)		Engine capacity (I) Continuous engine output in kW/hp		XPower chopping power in kW/hp	EcoPower chopping power in kW/hp	Tank volumes in litres		
								Diesel	SCR	Silage additive
	BiG X 480	MTU 6R 1300	R6	12,8	360/490*	338/460	-	1.220 (+230 Optional)	115	275 (Optional)
NEW	BiG X 530	MTU 6R 1300	R6	12,8	390/530*	368/500	-	1.220 (+230 Optional)	115	275 (Optional)
	BiG X 580	MTU 6R 1500	R6	15,6	430/585**	408/555	338/460	1.220 (+230 Optional)	115	275 (Optional)
NEW	BiG X 630	MTU 6R 1500	R6	15,6	460/626**	438/596	338/460	1.220 (+230 Optional)	115	275 (Optional)

 $^{\star}$  Certified engine output to ECE R120 in kW/hp: 390/530 38

\*\* Certified engine output to ECE R120 in kW/hp: 460/626

# How much power do you need?

State-of-the-art MTU engine technology delivers premium performance and economy. Common Rail injection and optimal torque synchronization translate into smooth running, low fuel consumption, high efficiency and minimal maintenance. The innovative KRONE Power Management system ensures ultimate efficiency and maximum throughputs.



# BiG X 580 and 630 PowerSplit



PowerSplit adapts the engine output automatically to the harvest conditions. EcoPower is used in situations in which less engine power is needed. XPower delivers maximum output for tough conditions. This technology gives you more flexibility and saves fuel.

# In-line engines mounted sideways

The engine is located right at the back of the machine and is mounted sideways for optimum weight distribution. The direct driveline to the crop flow components translates into great fuel economy. Common Rail injection technology makes these MTU in-line engines highly fuel-efficient.

#### Cooling

To keep the engines cool even in dusty conditions with airborne crop residues, the cooling system has a rotating sieve and an active suction system that operates via the crop accelerator. The active suction system kicks in when the cutterhead is running, and the sieve starts when the engine starts.







### **Clever design**

The header and intake system are driven via oil pumps flange-mounted onto a gearbox driven by the engine via an extra strong poly V-belt. This concept allows the header and intake speeds to be adjusted steplessly.



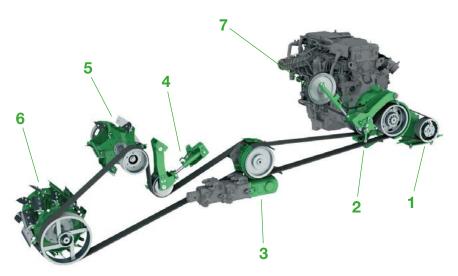
#### Ground drive

The hydrostat pump is powered via a 5-groove poly V-belt driven separately by the engine which starts up automatically when the engine starts. The direct driveline works reliably, guaranteeing maximum safety.



# Direct driveline - full throttle

The transversely mounted engine allows the hydro pump, the cutterhead, the crop accelerator and the header and intake pumps to take engine power efficiently off poly V-belts, eliminating the need for a power take-off gearbox. All crop flow components are activated via a belt clutch.



- 1 Hydrostatic pump
- 2 Belt tensioner for all crop flow components
- 3 Hydraulic pumps fitted for header and intake system
- 4 Belt tensioner for cutterhead and accelerator
- 5 Crop accelerator
- 6 Cutterhead
- 7 Fan drive

### Powering the crop flow components

The crop flow components are powered via two 6-groove poly V-belts. The hydraulic pumps that drive the header and intake system are mounted in the middle of the machine and can be operated independently of the crop flow components. This driveline system allows the operator to reverse the intake system and the header while the cutterhead is idle. The cutterhead brake is integrated into the driveline for maximum safety. The cutterhead brake is integrated into the driveline for maximum safety.



# The running gear

# Innovative drive train

- Front wheel drive as standard, four-wheel drive optional
- Strong Bosch Rexroth wheel motors
- Traction control with three travel modes
- Stepless speed range from 0 to 40 km/h (0-25 mph)



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### Front-wheel drive - four-wheel drive

BiG X 480, BiG X 530, BiG X 580 and BiG X 630 are available with optional hydraulic four-wheel drive via wheel motors. Machines with front-wheel drive have hubs on the rear wheels instead of wheel motors. Both drive trains are designed for speeds of up to 40 km/h (25 mph).





Front-wheel drive

# Great economy and operator convenience

Right from day one, KRONE has always fitted BiG X with a hydrostatic driveline, offering greater productivity and allowing a higher level of automation and operator convenience. Doing without complex mechanical drivelines means less maintenance and makes space for a bigger, more powerful chopping assembly further to the rear of the machine. Infinitely variable forward speed control is essential for automatic engine top speed control.

### Ideal system

The driveline with hydraulic wheel motors provides greater ground clearance. What's more, the machine can be fitted with a larger diameter cutterhead and weight is distributed more evenly. The rear-wheel suspension is spring-mounted for maximum operator comfort.





#### Stepless drive concept

The hydraulic pump for the driveline. With independent wheel monitoring and traction control as standard, BiG X can handle even the toughest terrain with no problem.



#### **Planetary gears**

The wheels are powered by Bosch-Rexroth planetary gearboxes. This type of gearbox has the advantage that it spreads the load across several planetary wheels, delivering high torques in a compact unit.



#### Traction control with three travel modes

BiG X comes with adjustable traction control. In grass mode, it can be finely tuned to protect the sward. Maize mode allows limited slip, and traction control can be disabled at any time.

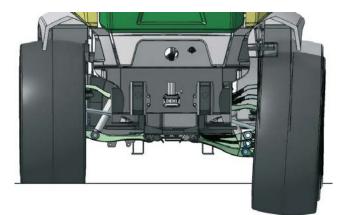


#### Independent wheel suspension

The independent wheel suspension provides plenty of room for steering. So the KRONE BiG X is extremely manoeuvrable even with big tyres on uneven ground, and you're assured of an extremely comfortable ride.

#### A KRONE exclusive

The front wheels feature eccentric, height-adjustable wheel motors to maintain the position of the pick-up, intake system and cutterhead floor for the next pass, regardless of the size of the wheels. So an optimum, constant crop flow is ensured at all times.





# When things get tight

Driving on narrow roads and lanes and working in tight spaces are particularly challenging for the forager and the operator. Courtesy of its hydrostatic wheel drive, independent wheel

suspension and compact design, BiG X is extremely manoeuvrable, gets into even the tightest spaces and doesn't need a lot of space for headland turns. With the right tyres, the machine width won't exceed 3 m (9'10") – perfect for narrow farm tracks.



### 3 m machine width

With either 710/70 R 42 or 800/65 R 32 tyres, the machine is just 3 m (9'10") wide. So you'll be perfectly safe on narrow roads and lanes.



### **Completely manoeuvrable**

This drive concept with wheel motors has an extremely small steering angle of just 50° – perfect for tight turns and matching up to the previous row on headlands with an 8-row maize header.

### Tyres with a purpose

The BiG X 430, 480, 580 and 630 models can take tyres up to 900/60 R 42. Large tyres ensure maximum ground clearance, lowest soil compaction and an extremely comfortable ride.



# Kitted out well

# Down to the very last detail

- Best night vision
   Optional LED lighting kit
- Huge optional spare fuel tank: carry up to 1450 l diesel
- Easy access to service and maintenance points



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# Turn night into day

Sixteen headlights light up your work area perfectly, making night shifts less stressful and safer. An optional LED lighting kit enhances visibility even further.

#### Clear view to rear

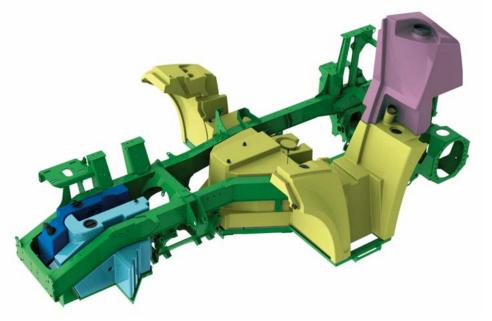
The sloping rear end gives an excellent view to the rear for safe manoeuvring and headland turns.





# Better comfort for better performance

Working long, hard days and often late into the night, the operator has to concentrate on the job at hand for hours on end. So excellent all-round visibility and full illumination in the dark is clearly a must. KRONE minimizes time-consuming downtime for refuelling by providing two tanks with a combined capacity of 1,450 I. Service and maintenance is as easy as it gets with easy access to all components and assemblies.



#### Up to 1,450 I fuel on board

The huge, basic specification fuel tank holds up to 1,220 I diesel. And there's also room for 115 I urea on board. So there's no need to stop what you're doing to refuel. An auxiliary 230 I diesel tank and a 275 I silage additive tank are available as an optional extra.



#### **Everything within sight**

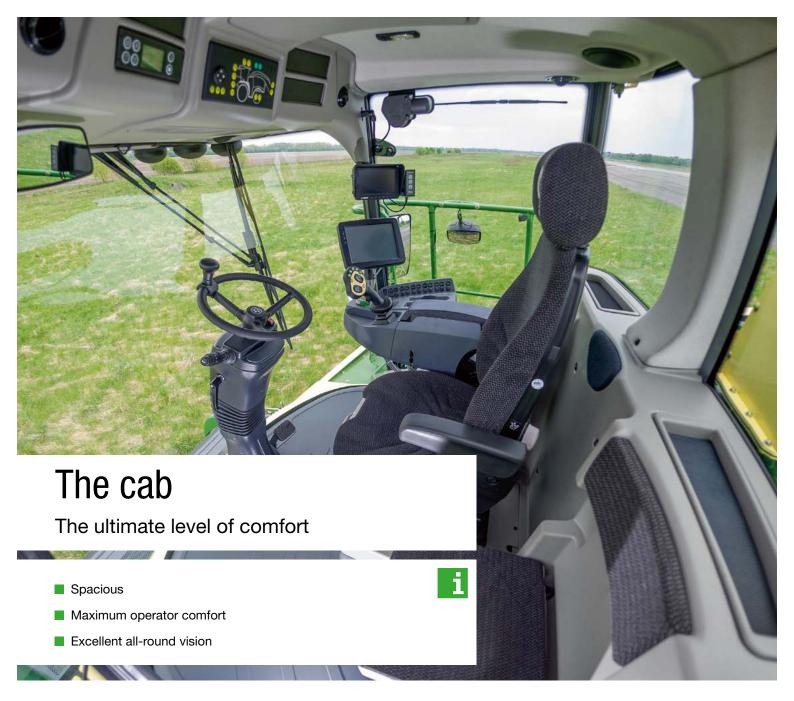
The optional LED maintenance lights give a clear view of all drive assemblies and maintenance points in the dark. Optional LED lights are also available for the access ladder.



# Plenty of room

There's plenty of room between the cooling system and the crop flow on the BiG X 480, 530, 580 and 630 models, giving easy access to all components for cleaning and maintenance.





# Wider, quieter and brighter

The wide cab with its narrow posts is spacious and gives the operator the best possible view of wide headers. The double floor keeps noise in the cab to a minimum. Sixteen H9 lights provide perfect illumination, and LED lights are available as an option.



#### **Everything within sight**

High side windows and slim posts give the operator an unobstructed view of the spout even with filling heights as high as 6 m (19'8"), making filling trailers safer and more efficient.



# A milestone in advanced ergonomics

Working days are long and often last deep into the night. So a comfortable workplace is a must. The big new Silent Space cab is designed to the very latest ergonomic standards. Extremely spacious and with an extra seat, it's a fully air-conditioned and absolutely functional workplace that's comfortable for the operator and gives him full command of all controls.





# **Clutter-free**

The controls for lights, heating and air conditioning are arranged on a panel above the front windscreen. The Follow-Home function lights your way as you get down from the cab. After you switch off for the night, some headlights stay switched on for several minutes, allowing you to find your way safely.

# Ergonomic, convenient and easy to use

The ergonomic joystick with user-friendly icons gives the operator fingertip control of multiple machine functions. Designed specifically for BiG X, the slim stick sits comfortably in the hand. With more than 20 programmed functions, it not only controls ground speed and direction of travel but also the header and spout.



# Little helpers

The control box records all the machine data and displays it on the high-definition colour screen. Various settings can be changed on it, such as stepless LOC adjustment. The clearly designed control unit next to the seat houses all controls that operate the various machine functions, including ground drive and cutterhead drive.





# Simply more BiG X

ICAN is KRONE's electronic system that optimizes machine utilization even further and provides substantial relief for the operator. It gives peace of mind in tough conditions and displays all relevant harvest data.





# AutoScan

The photo-optical sensor in the middle of the maize header measures the maturity of the plant and automatically adjusts the LOC. Green maize is cut to longer lengths for a better structure and to reduce silage effluent in the clamp. When harvesting dry maize, the material is cut to shorter lengths for more effective compaction in the clamp. AutoScan reduces operator effort and saves fuel, because the stalks are only cut as short as necessary and not as short as possible. AutoScan comes as standard with all KRONE machines and is not an expensive extra.

### ConstantPower

ConstantPower automatically adjusts the machine's ground speed to the engine loading. Select the desired engine loading at the touch of a button and the machine will adapt its ground speed fully automatically to the crop and material being harvested. This standard feature reduces operator stress and ensures maximum throughputs with minimum fuel consumption. In combination with AutoScan, this system takes the overall quality of chop and machine performance to a whole new level.





### ForageCam

As an optional extra, a CCTV camera on the spout remotely transmits footage to the forager's in-cab terminal and to the terminal on the trailer. The CCTV camera helps the operator utilize the full load space in the trailer and reduces fatigue at the same time. The system can be expanded to communicate with multiple receivers on all the trailers in a large haulage chain.



#### RockProtect

The six pre-compression rollers are powerful and soft at the same time. The optional RockProtect system provides intelligent protection from damage by stones as it halts the pre-compression rollers fully automatically within milliseconds after the system detects a stone. The operator sets the sensitivity of systems. More protection – more peace of mind.





# **ISOBUS** autoguidance

The guide to maximum work widths







# **ISOBUS** autoguidance

As an optional extra, BiG X can be supplied ready to accept various manufacturers' ISOBUS guidance systems. On the move, the operator activates autoguidance using the KRONE joystick simply by pressing a button, then watches the system guiding BiG X down the track. Autoguidance reduces operator fatigue, boosts work rates in broadcast seeded crops and increases efficiency.

# CropControl

The optional KRONE CropControl yield metering system measures the volume of crop harvested quickly and accurately at the touch of a button. With CropControl you can seamlessly document yield information on all fields harvested.

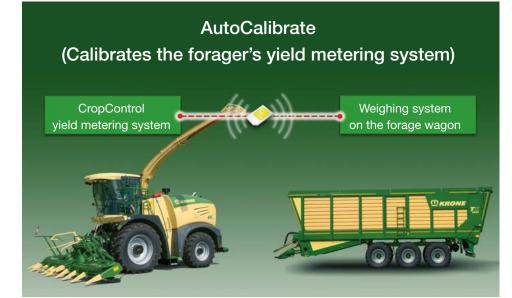




### NIR crop moisture sensing system

The optional NIR sensor provides exact information on crop moisture levels. The information can be allocated to the area harvested in the customer memory. The NIR sensor is easy to install on the BiG X spout and is protected from damage by a cover.





# AutoCalibrate

AutoCalibrate is the re-mote calibration tool for the BiG X's yield metering system. It operates via a weighing system installed on one of the trailers in the harvest chain. Both the trailer and the BiG X forager are equipped with data loggers that communicate via a mobile network. Calibration takes place while the 'calibrating machine' is being filled. AutoCalibrate is highly accurate and is the first system of its kind to eliminate the trip to the weighbridge.

# Technical data

BiG X

		BiG X 480	BiG X 530	BiG X 580	BiG X 630
Engine					
Description		MTU 6R 1300	MTU 6R 1300	MTU 6R 1500	MTU 6R 1500
No. of cylinders		6	6	6	6
Engine capacity	litres	12,8	12,8	15,6	15,6
Continuous engine output	kW/hp	360/490*	390/530*	430/585**	460/626**
Max. XPower chopping performance	kW/hp	338/460	368/500	408/555	438/596
Max. EcoPower chopping performance	kW/hp	_	_	338/460	338/460
Fuel tank capacity/auxiliary tank	litres		1.220 / 23	30 optional	
SCR tank capacity	litres			15	
Silage additives tank	litres			ptional	
Ground drive				F	
Model		Infinitely variable	hvdrostatic drive with	n wheel motors up to 4	40 km/h (25 mph)
Speed in field mode	km/h			-15 mph)	( I )
Speed in road mode	km/h			-25 mph)	
Anti-wheel slip control				Indard	
4WD			Opt	ional	
Axles			·		
Steering angle on rear axle	degrees		Ę	50	
Rear axle suspension	0			raulic	
Drives			,		
Header			Independent, ir	nfinitely variable	
Pre-compression rollers				nfinitely variable	
Pre-compression rollers				-	
Pre-compression roller throat			Funnel	-shaped	
Service position			Quick coupling (also	with header attached)	
No. of rollers/metal detector/no. of magnet coils				ndard/6	
Distance between metal detector and counterblade	mm		820	(2'8")	
LOC adjustment			Steplessly from cab (i	in 0,5 mm increments	)
Cutterhead					
Drum width / diameter	mm		630/660	(2'1"/2'2")	
Arrangement of knives		C		d at 11° to counterbla	de
No. of knives			20, 28	, 36, 40	
LOC range			5-31/4-22/	3-17/2,5-15	
Cuts per minute			11.300/15.820	/20.340/22.600	
Stepless cutterhead floor adjustment/ cutterhead floor suspension			Star	ndard	
Corn conditioner					
105 teeth: standard profile/chrome-plated toothed profile/chrome-p	file		Optional	/Optional	
123 teeth: standard profile/chrome-plated toothed profile/chrome-p	file		Optional	/Optional	
144 teeth: standard profile/chrome-plated toothed prof	file		Optional	/Optional	
166 teeth toothed profile			Opt	ional	
Speed difference	%		20/0pt	ional: 30	
Cab-operated distance control, auto lubrication			Star	ndard	
Roller diameter/clearance	mm		250/0.5-10 (1	0"/0.002"-0.4")	

\* Certified engine output to ECE R120 in kW/hp: 390/530

\*\* Certified engine output to ECE R120 in kW/hp: 460/626

		BiG X 480	BiG X 530	BiG X 580	BiG X 630	
Crop accelerator						
Rotor diameter/width/no. of paddles	560/480/6					
Paddle arrangement						
Speed	rpm	1.980				
Steplessly adjustable backplate/ spring-loaded backplate		Standard				
Spout						
Angle of rotation	degrees		21	0°		
illing height	mm		6.000	(19'8")		
Cross-section dimensions	mm		340 x 230	(1'1"x9")		
Automatic mirror function/parking position		Standard				
Rotary drive system		Gearbox				
Spout lined with wear plates throughout			Stan	Idard		
Aaintenance						
Auto lubricator with compressor		Standard				
Self-diagnostic system via control box		Standard				
Cab <sup>1)</sup>						
Nir seat and instructor seat			Stan	Idard		
Comfort air seat and instructor seat		Optional				
Climate control with mobile cool box		Standard				
Vindscreen wipers on front and side		Standard				
Dimensions						
_ength/width*/height*	mm			-3.300/3.915-3.98 10'10"/12'10"-13'		
Basic machine weight (without header)**	approx. kg (lbs)	13.900 (30,644)	13.900 (30,644)	14.100 (31,085)	14.100 (31,08	
Veight distribution with EasyFlow 300 Pick-up)	F/R %		57	/43		
Neight distribution with EasyCollect 750-3 7.5 m (24'7") work width)	F/R %	60/40				
yres***						
Front axle	Standard**** Optional Optional Optional Optional Optional Optional		710/7 710/7 800/6 800/7 900/6	5 R32 5 R34 0 R42 55 R32 0 R38 00 R38 00 R42		
Rear axle	Standard**** Optional Optional Optional		600/6 600/7	5 R30 60-30 70 R30 60 R30		
leaders						
EasyFlow pick-up	mm	3.000-3.800 (9'10"-12'6")				
asyCollect variable row width header	mm	4.500/6.000/7.500/9.000 (14'9"/19'8"/24'7"/29'6'			"/29'6")	
Autopilot and active ground contouring for EasyCollectOptional			On	tion		

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





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#### Products



Find extensive information on our full product range. This section holds everything you need – from video clips to manuals.

#### Sales organisation

Here you find a distributor in Japan as well as your local KRONE dealer who will be pleased to support you. This is where you find your KRONE partner who will be pleased to assist you.



#### Jobs

Would you like to join our company? KRONE is often looking for diligent and motivated staff to work at our farm machinery factory as well as at our commercial trailer production plant. So, this section is always worth a visit.



#### Media center

The KRONE 'database' holds thousands of documents, pictures, test reports and much more. Here you find very detailed information on KRONE products that are of special interest to you.



#### Events

Are you in for a KRONE live experience? Check out for KRONE events and look at a machine on show or watch it during a demonstration. After all, there is little that is more effective than a hands-on experience.

Your KRONE dealer



#### Service

Here you find all the service information you require – from a point of contact at the factory to finance schemes for your KRONE machine as well as training schemes for staff and users.



#### **Download Center**

Are you looking for a KRONE calendar for your desktop or a smart picture for your presentation? Here, at the KRONE download center, you will find plenty of useful material for a wide range of projects.



# **Used Machinery**

KRONE often has a wide range of demonstration or exhibit machinery on offer. This is a good site to find your KRONE machine. Then contact your local KRONE dealer to arrange the details of a potential purchase.



# Parts

24/7... This service gives you the opportunity to find your KRONE part at any time and without waiting. The KRONE Agroparts Portal has an article number and exact description for every part. You can order the part instantly at your local KRONE dealer by sending an e-mail to Agroparts.



#### KRONE shop

Are you looking for a gift or are you a collector of farm models? Then you should definitely shop around at our KRONE shop. We take your orders at any time of the day.

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