BiG X

EN

480 | 530 | 580 | 630 FORAGE HARVESTER

krone-agriculture.com

BiG X

Forage harvester

6 intake rollers

for maximum reliability and best chop quality

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Comfort cabin

For optimum overview and comfort at the workplace

Page 56

Great manoeuvrability from independent wheel suspension

For extreme manoeuvrability

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Powerful and low-emission engines

from 490 to 653 HP

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KRONE VariStream

Continuous crop flow ensured by spring-loaded floors for chopping drum and discharge accelerator

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MaxFlow chopping drums

with 20, 28, 36 blades, biogas chopping drum 40 blades

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OptiMaxx roller conditioners

with 250 mm diameter, 570 mm width and slanted teeth for intensive kernel conditioning

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KRONE VariLOC

flexible use in long and short cut

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KRONE VariQuick

quick changeover for working with and without corn conditioner

Page 22

High throughput – top driving comfort

BiG X 480, 530, 580 and 630 –
the compact precision forage harvesters from KRONE for outputs of 490 hp to 653 hp and maximum chopping quality and output as well as superior ease of use and operator comfort.

KRONE OptiMaize

Flexible in all cutting lengths

Model	LOC	Application	Drum type
OptiMaize S	4 mm – 7 mm	Biogas	40 Biogas or 36 MaxFlow blades
OptiMaize M	8 mm – 10 mm	Dairy feed rations with ~40% maize with ~40% maize Beef bulls	MaxFlow (36 blades) or MaxFlow (28 blades)
OptiMaize L	11 mm – 19 mm	Dairy feed rations with ~40% maize with ~60% maize	MaxFlow (28 blades) or MaxFlow (20 blades)
OptiMaize XL	20 mm – 30 mm	Dairy feed rations with ~40% maize with >80 % maize	MaxFlow (20 blades)

'OptiMaizing'
– a KRONE concept for BiG X forage harvesters

The OptiMaize concept was developed by KRONE and aims at producing forage of a superior quality. Livestock farmers ask for different chop lengths that meet different aims in the silage maize ration. The smaller the amount of fibres in the ration, the longer should the maize chops be to suit the needs of rumens.

By comparison, chop lengths should be short when the maize is used to fuel Biogas plants whereas the feed rations for beef bulls and dairy cows require much longer chop lengths to add structure to the ration. KRONE OptiMaize combines various chopping drums (see table) and conditioners that enable BiG X forage harvesters to produce short and long chops of maize allowing machine owners to respond to individual customer needs. If you have to produce short biogas maize chops in the morning but coarse maize chops for animal feed in the afternoon, you will find KRONE VariLOC the ideal solution for you. This is a manual gearbox which forms a integral part of the pulley that drives the drum belt; it reduces the drum speed from 1250 rpm to 800 rpm within just a few minutes. This reduces the cutting frequency and increases the range of available chop lengths by up to 50%. This technology allows operators to select between short and long chops at short notice and without any drum changeovers. In combination with the various KRONE corn conditioners, the BiG X harvester therefore becomes a genuine all-round machine.

In practical application, the chop lengths can be grouped into four different ranges: OptiMaize S, M, L, and XL. Each concept describes a different technical solution that leads to customised lengths that suit all applications.

KRONE OptiMaize

- **KRONE chopping technology**
  for optimum maize forage quality
- **OptiMaize S, M, L, XL**
  for variable chopping lengths from 4 mm to 30 mm
- **KRONE MaxFlow and biogas chopping drums**
  with different numbers of blades for producing the chop length you need
- **KRONE corn conditioners**
  ensure optimum fracturing and kernel treatment
- **KRONE VariLOC**
  for flexible long and short chops without converting the machine

OptiMaize brings full flexibility to all KRONE BiG X forage harvesters, allowing them to produce any type of cutting length forage producers call for. MaxFlow and biogas drums with different numbers of blades in combination with matching KRONE corn conditioners ensure different chop lengths ranging from 4 mm to 30 mm. The BiG X can cover this wide range with the aid of the VariLOC system via a reduced cutting frequency, even without rebuilding or replacing the chopping drum.

The proper density
With cutting lengths of more than 20 mm, compaction takes significantly more effort. Clamping forage that is chopped to lengths longer than 20 mm requires more time and heavier equipment to eliminate the risk of mould and heating.

KRONE OptiMaize

You decide on ‘short‘ or ‘long‘

OptiMaize S

Maize that is harvested to fuel biogas plants is chopped to very short lengths. Depending on moisture levels, chops of 4 mm to 7 mm lengths have been found ideal for this application, because shorter chops make the energy readily available to the methane producing bacteria in the fermenter, thereby increasing gas yields. For harvesting biogas maize, KRONE forage harvesters are equipped with a biogas chopping drum fitted with 40 blades. Alternatively, OptiMaize S results can also be achieved with the 36-blade MaxFlow chopping drum. A KRONE OptiMaxx roller conditioner with 123/144 teeth at a speed difference of 30 % then fractures the crop and breaks up the maize kernels so that they ferment easily.

OptiMaize M

Grass based rations for beef bulls and dairy cows which consist of up to 40% of maize should be made up of 8 mm to 10 mm chop lengths. This length of cut and an appropriate conditioning intensity avoids lack of fibre in the ration. OptiMaize M chopping quality is achieved by the MaxFlow chopping drums with 36 and 28 blades. The ideal conditioner is the KRONE OptiMaxx roller conditioner with 123/144 teeth whose speed differential can be increased from 30% to 40% or 50%.

OptiMaize L

Cutting lengths of 11 to 19 mm are ideal for dairy cattle with a maize content of around 60 % in the forage ration. Rumens require silage maize that is reach in fibres. The OptiMaize L chopping quality is achieved by the KRONE MaxFlow drums with 28 or 20 blades. As conditioning units, the KRONE OptiMaxx roller conditioners with 105/123 teeth are recommended for this purpose. Their speed difference can be increased from 30 % to 40 % or 50 %.

OptiMaize XL

The maize in dairy feed rations made up of more than 80% by maize and that do not contain sufficient quantities of grass and feed straw should be chopped to 20 mm to 30 mm lengths to avoid lack of structure in the feed. The ideal drum for long chops is the MaxFlow chopping drum with 20 blades which is complemented by the KRONE OptiMaxx roller conditioner with 105/123 teeth and 30%, 40% or 50% speed differentials.

The crop flow

High throughput and top chop quality

Technology which inspires

- **Six intake rollers ensure**
  a top-notch quality of chops
- **High throughput with universal or biogas chopping drums**
- **OptiMaxx roller conditioner**
  Intensive conditioning
- **VariStream**
  Continuous crop flow
- **StreamControl**
  Optionally adjustable discharge distance
- **VariQuick**
  Quick access to the grass channel or grain conditioner

When you're looking to maximize throughputs with a top-quality chop, the technology must be up to the job. With the BiG X, KRONE offers a forage harvester which convinces by top cutting quality, highest throughput and maximum user comfort thanks to the direct crop flow and the numerous innovative details which meet the requirements of successful service providers and make the working day easier.

StreamControl

- Powerful discharge accelerator
- Adjustable discharge distance
- Precise loading of downstream transport units
- Reduced power requirement for parallel loading
- Working without losses

Chopping drum

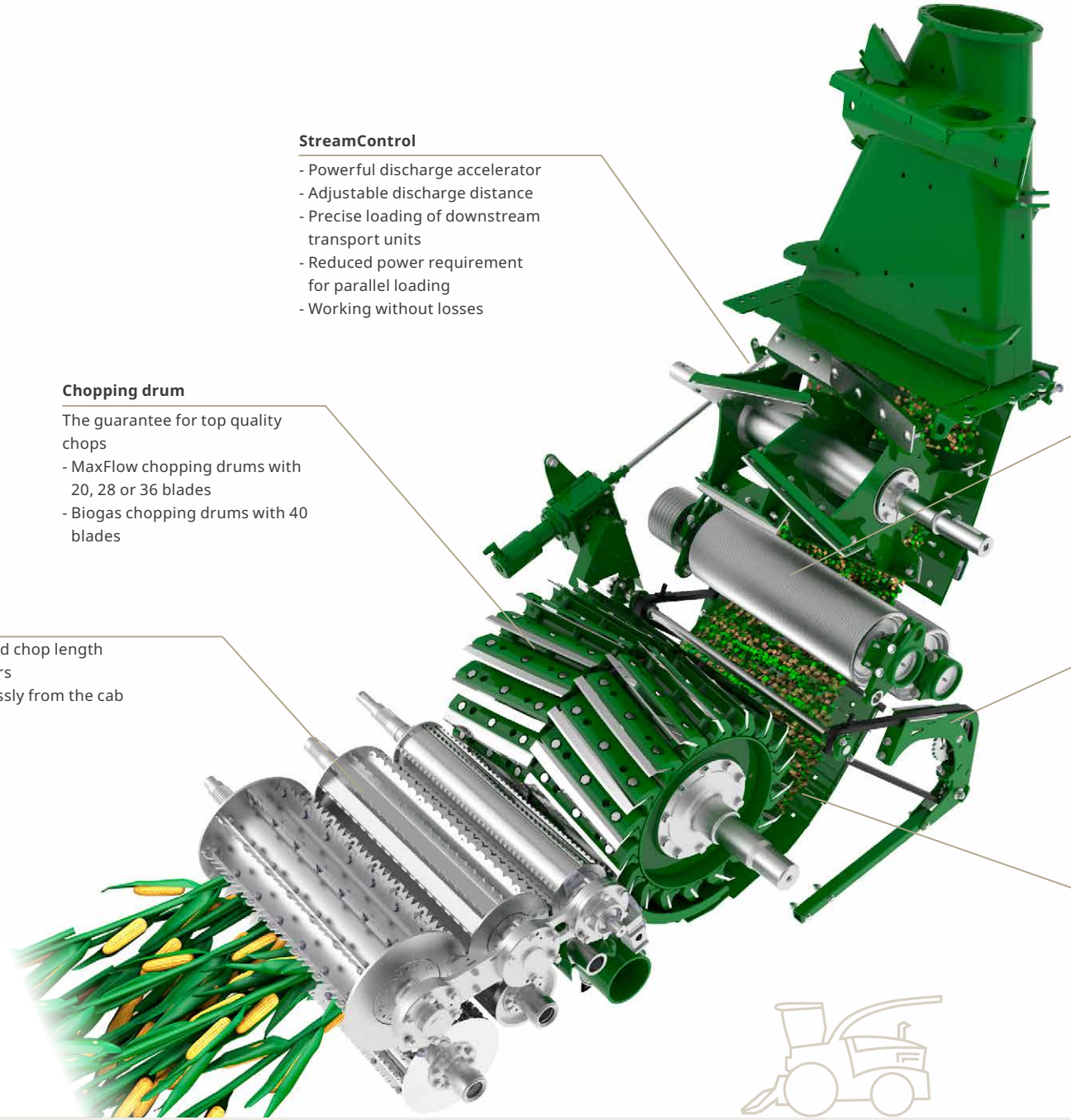
The guarantee for top quality chops

- MaxFlow chopping drums with 20, 28 or 36 blades
- Biogas chopping drums with 40 blades

Intake system

Helps achieve the desired chop length

- 6 hydraulic intake rollers
- The speed is set steplessly from the cab



The OptiMaxx roller conditioners

- 250 mm diameter and 570 mm wide rollers for maximum performance
- Slanted teeth give a unique shearing effect for perfect cracking
- Up to 50% speed difference for optimum fracturing results

VariQuick

- Minimum changeover time between grass channel/corn conditioner
- Quick changeover for working with corn conditioner or grass channel
- Convenient removal of the corn conditioner using mechanical pivoting unit

VariStream

- Maximum throughput
- Spring-loaded chopping drum floor
- Spring-loaded rear wall of discharge accelerator
- Continuous crop flow even with uneven crop feed

The intake

Maximum precompression and greater reliability

Continuous, safe, and comfortable
Six pre-compression rollers and an 820 mm gap between the leading roller with metal detector and the rearmost roller not only enhance pre-compression but also protect the blades better against metal objects, even at high-speed intake. The hydraulic driveshaft 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 1,200 rpm as the load increases, the header and intake system are stopped automatically while the chopping drum continues to turn – because blockages caused by low speeds cost time and money.

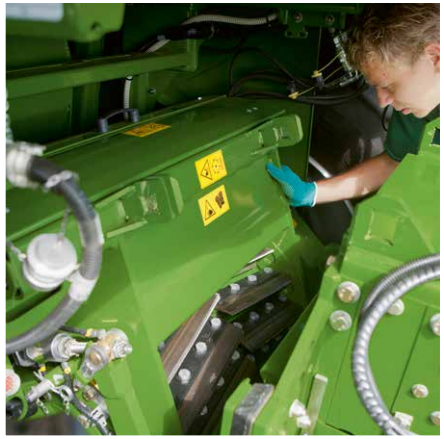
Carefully designed
The intake system can be supported on wheels for fast access to the chopping assembly.

The intake system

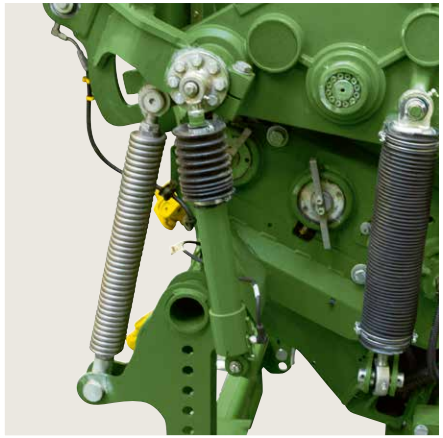
- **6 pre-compression rollers for top-quality chops**
- **Hydraulic drive**
  - Stepless adjustment of the chop length from the cab
  - Automatic adjustment of the chop length via AutoScan or NIR sensor
- **Maximum protection against foreign objects**
  - Long path from metal detector to chopping drum
  - Metal detection across the entire channel width

On a BiG X, it is also the intake system that has an influence on the quality of chop. The six intake rollers compress the chopping crops consistently at a high pressure so that it is easier and more precisely to chop. The hydraulic drive of the intake system allows operators to choose between setting the cutting length manually or automatically.

Full-width application
Metal detection sensors covering the full width are installed in the front lower intake roller. They ensure full-width detection of metal carried into the unit.



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



Under pressure
Adjustable tension springs ensure high contact pressure of the intake rollers and uniformly high compaction of the crop material for the best chop quality.

Large aperture for high throughput
Maximum throughputs are guaranteed from the huge opening between the six intake rollers. The robust drives for the pre-compression rollers are designed for heavy-duty use.

The KRONE chopper unit

It all depends on the chop quality

Optimum layer thickness
To ensure good chop quality, it is not only the number of blades that is decisive, but also the layer thickness of the crop passing through and therefore the width of the chopping drum. Therefore KRONE designed a wider 630 mm chopping drum for the BiG X 480, 530, 580 and 630 which carries the customary high chopping quality of the high-capacity harvesters with 800 mm drums over to the smaller models.

The material is pulled over the blades
The blades on the KRONE chopping drums are arranged chevron-style and at an angle of 11° relative to the counterblade. This arrangement makes for a continuous crop flow, extremely quiet running and maximum efficiency.

OptiMaize chopping drums

Drum type	MaxFlow	MaxFlow	MaxFlow	Biogas
Number of blades	20	28	36	40
LOC	5 - 31 mm	4 - 22 mm	3 - 17 mm	2.5 - 15 mm

Kitted out to purpose
The BiG X can be fitted with grass or maize blades. Oblong holes on the blades allow for precision adjustment relative to the counterblade and protect the blades against breakage when they hit foreign objects.

Varied range of drums

- **Chopping drums with 20, 28, 36 or 40-blades**
  for OptiMaize S to XL
- **High flywheel mass**
  Closed drums with a diameter of 660 mm
- **Top chop quality**
  Drums with a width of 630 mm matched to BiG X 480, 530, 580 and 630
- **Low fuel consumption**
  High flywheel mass, pulling cut

Matching the drum dimensions to the harvester model and choosing the optimum number and shape of blades not only boosts the power of the BiG X but also makes the OptiMaize S, M, L, and XL more flexible to suit more applications. The wide range of drums available for BiG X deliver a top-quality chop in any conditions anywhere in the world – at top performance levels.

The KRONE MaxFlow chopping drums

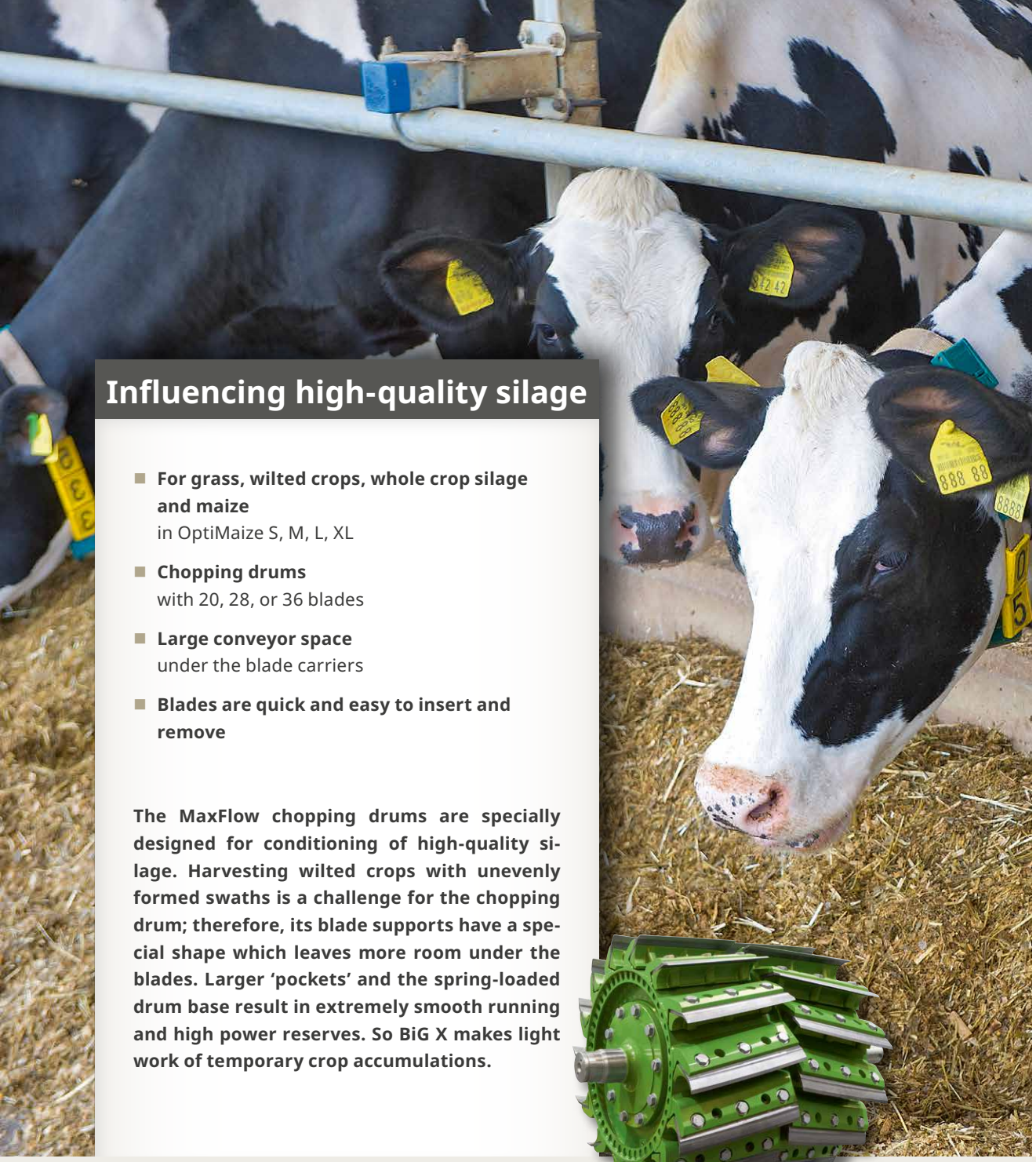
Chopping drums for every need

Quick blade installation
Each blade is screwed to the chopping drum with three hexagon head screws only. The blade support above the blades holds them securely in place.

Cutting edge
To ensure a good quality cut, the blade and the counterblade must be set to the correct gap. The blades are quick and easy to align using the eccentric plate.

Room for conveying
The blade carriers are arranged and designed to allow plenty of space under the blades. More room for conveying crops means higher throughputs and quieter running, particularly with large cutting lengths.

Always the proper length
The KRONE OptiMaize chopping drum offers a wide range of technical solutions that achieve an equally wide range of chop lengths. With a full or half set of blades, the KRONE chopping drums allow users perfect adjustment of the chop lengths to the respective application.



Influencing high-quality silage

- **For grass, wilted crops, whole crop silage and maize**
  in OptiMaize S, M, L, XL
- **Chopping drums**
  with 20, 28, or 36 blades
- **Large conveyor space**
  under the blade carriers
- **Blades are quick and easy to insert and remove**

The MaxFlow chopping drums are specially designed for conditioning of high-quality silage. Harvesting wilted crops with unevenly formed swaths is a challenge for the chopping drum; therefore, its blade supports have a special shape which leaves more room under the blades. Larger 'pockets' and the spring-loaded drum base result in extremely smooth running and high power reserves. So BiG X makes light work of temporary crop accumulations.

KRONE

OptiMaize M, S

36 blades

With a high flowthrough volume in a wide range of cutting lengths, the 36-blade chopping drum pays for itself very quickly. With half a set of blades, it is perfectly suited for use with larger cutting lengths.

Cutting length range:
36 blades: 3 – 17 mm
18 blades: 6 – 34 mm

OptiMaize L, M

28 blades

The 28-blade chopping drum is fit for universal application; with half a set of blades, it is perfectly suited for use with larger cutting lengths.

Cutting length range:
28 blades: 4 – 22 mm
14 blades: 8 – 42 mm

OptiMaize XL

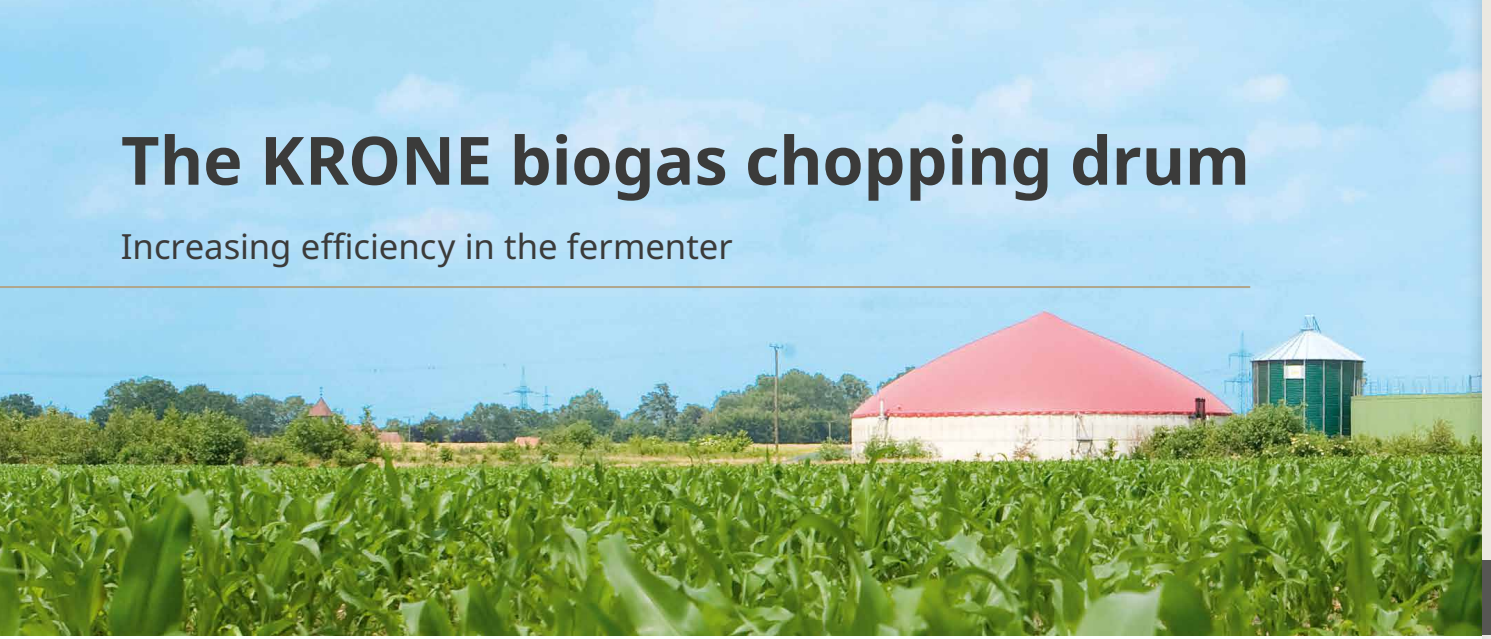
20 blades

This drum cuts the kind of long lengths that are called for in some countries.

Cutting length range:
20 blades: 5 – 29 mm

The KRONE biogas chopping drum

Increasing efficiency in the fermenter



OptiMaize S

- **40 blades arranged in V-shape**
- **High frequency of cuts**
- **High productivity**
- **OptiMaize S**
- **High gas yields**

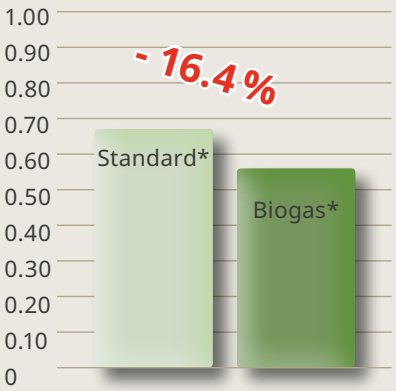
With its 40 blades, the KRONE biogas drum chops the crops very thoroughly. OptiMaize S achieves very short chop lengths which enable high throughputs both on the machine and in the fermenter, making BiG X a major factor in biogas plant productivity.

40 blades
With its higher throughputs and lower fuel consumption per tonne of chopped maize, the 40-blade Biogas cylinder pays for itself in no time. Short 2.5-15 mm chops increase the efficiency of the biogas fermenter. Thanks to the improved gas yield per m^3 of chopped material, the cultivation area for biogas can be reduced.

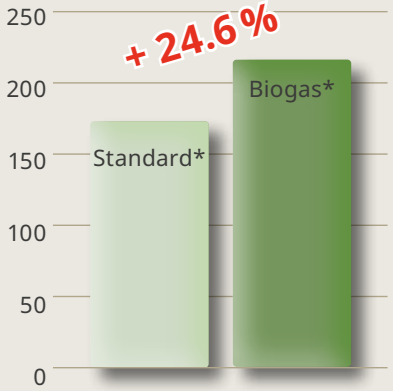
High frequency of cuts
40 blades can achieve an impressively high cutting frequency. So the biogas drum cuts harvesting time and increases throughput – even when producing short chop lengths.

‘Standard chopping drum versus biogas chopping drum‘
Cutting length: 5 mm

Consumption (l/t fresh mass)



Throughput (t fresh mass/h)



*Standard = 28 blades *Biogas = 40 blades

Higher efficiency, lower costs
With short chop lengths, the 40-blade KRONE biogas drum increases the throughput by almost 25% compared to the 28-blade MaxFlow chopping drum. The fuel consumption per ton of chopped crops is reduced by up to approx. 16%.*

OptiMaize

* Results from the 2006 workshop with leading agricultural magazines

KRONE VariLOC

Switches flexibly

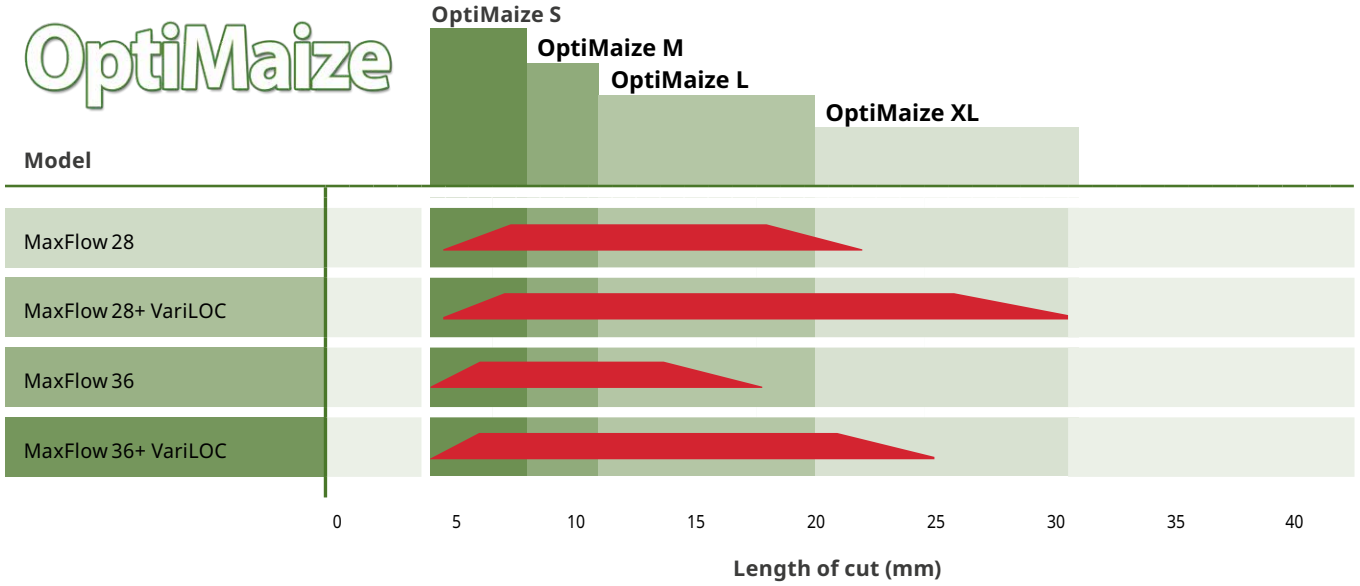
A genuine all-round machine

- **OptiMaize**
  is a versatile and unique system
- **Cutting length gearbox**
  for flexible use in short and long cut applications
- **Changeover of the drum speed**
  is a matter of a few minutes
- **No machine conversion, no up-front planning**

VariLOC is a gearbox in the pulley of the chopping drum. By simply changing the drum speed from 1,250 to 800 rpm using a standard open-end wrench, you can increase the chopping drum's LOC range by up to 50%. This makes a quick changeover between long or short chops possible. You can fulfil your customers' fluctuating demands without any conversion or up-front planning. Combined with the new 105/123 tooth roller conditioner (with 30%, 40% or 50% speed difference), this gearbox turns your BiG X into an all-rounder and gives you maximum flexibility.

Great flexibility

The KRONE VariLOC is available for the KRONE MaxFlow drums with 28 and 36 blades. The manual gearbox makes it possible to cover the entire cutting length range from OptiMaize S to XL entirely according to your requirements with a 28 and 36 MaxFlow.

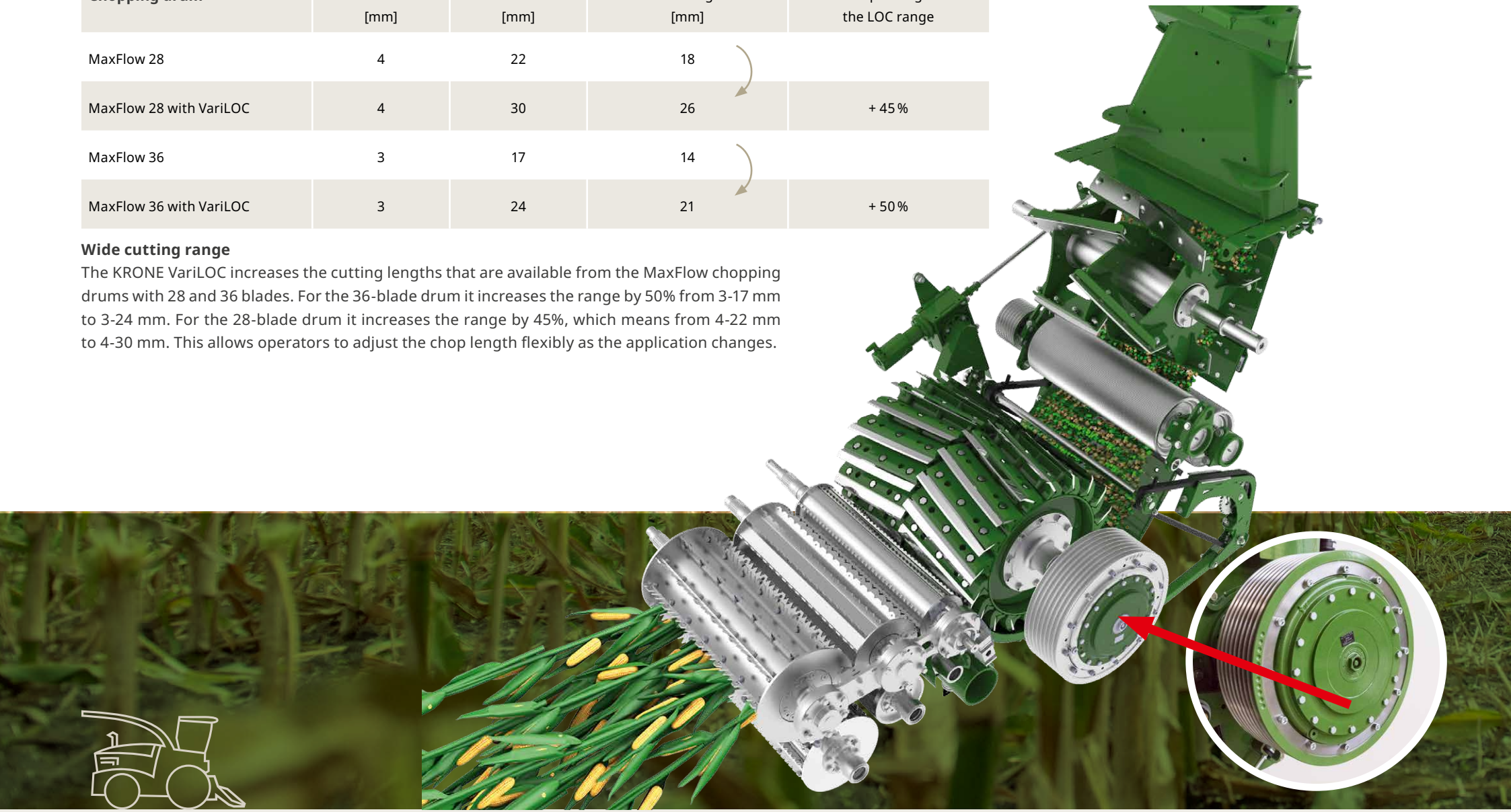


Chop length ranges offered by VariLOC

Chopping drum	min. LOC [mm]	max. LOC [mm]	LOC range [mm]	Expanding the LOC range
MaxFlow 28	4	22	18	
MaxFlow 28 with VariLOC	4	30	26	+ 45 %
MaxFlow 36	3	17	14	
MaxFlow 36 with VariLOC	3	24	21	+ 50 %

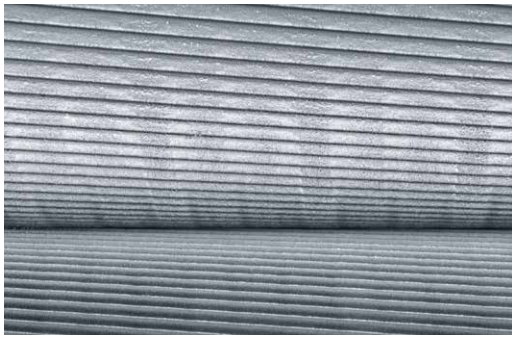
Wide cutting range

The KRONE VariLOC increases the cutting lengths that are available from the MaxFlow chopping drums with 28 and 36 blades. For the 36-blade drum it increases the range by 50% from 3-17 mm to 3-24 mm. For the 28-blade drum it increases the range by 45%, which means from 4-22 mm to 4-30 mm. This allows operators to adjust the chop length flexibly as the application changes.

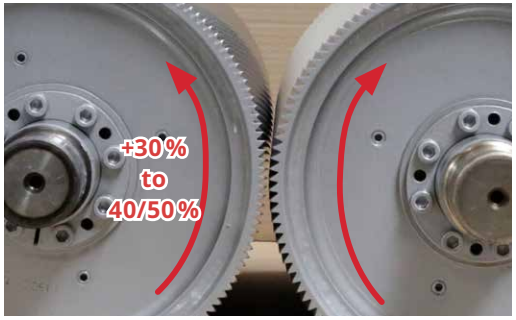


The KRONE OptiMAXX roller conditioners

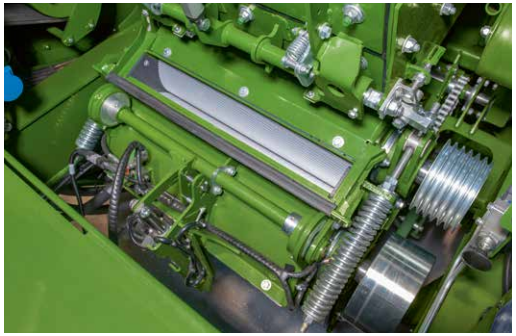
Our roller conditioners redesigned



Perfect conditioning
The new OptiMaxx roller conditioners have their teeth slanted at a 5° angle. This slant produces a clearly higher shearing effect and perfect conditioning of the crop which receives a very intensive treatment both length- and sideways.



Maximum intensity
The two toothed rollers operate at a 30% speed difference. This standard difference can now increase to 40-50% to deliver 100% conditioning and fracturing of long chops as produced by OptiMaize XL.



Variable roller gap
The operator can control the roller distance from the cabin, adjusting it infinitely to the current conditions. The current setting is shown on the display screen.

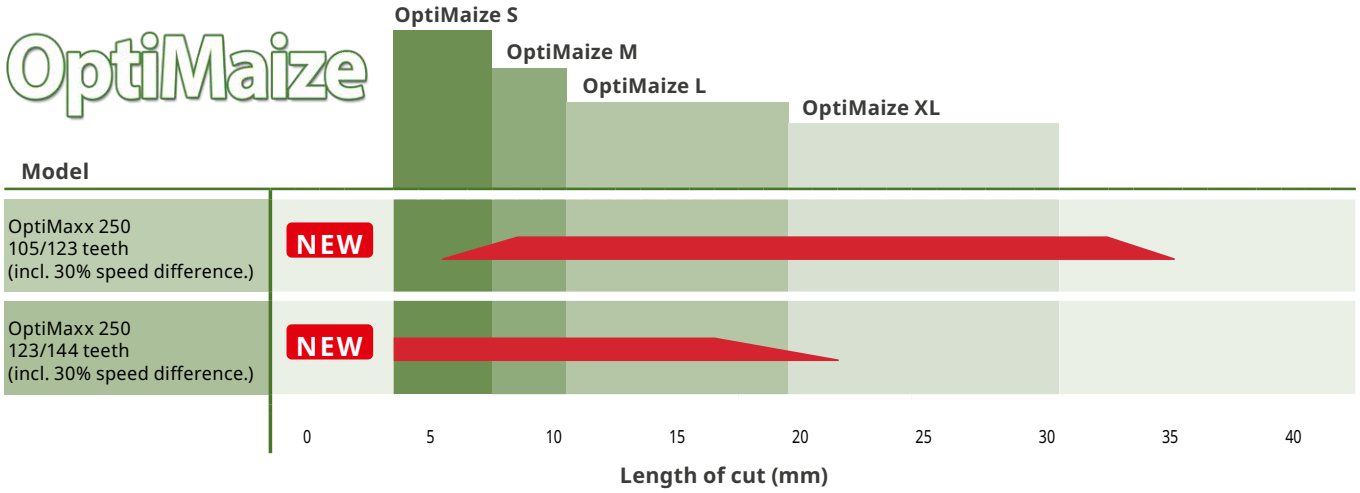
Large roller diameter

- 570 mm wide and 250 mm diameter **OptiMaxx** roller conditioners
- **Slanted teeth for perfect conditioning** to combine with OptiMaize S-XL drums
- BusaCLAD coating technology for maximum service life as an option
- **The gap between the rollers is conveniently adjusted from the cab**
- **A strong spring assembly provides a consistent and high pressure**
- **Intensive fracturing** with optionally up to 50 % speed difference

Every single kernel must be cracked to achieve an optimal digestibility. These user demands are perfectly met by the new OptiMaxx roller conditioners with their slanted teeth, a new KRONE development. The rollers score on a massive 250 mm diameter and a 570 mm width.

The top-standard OptiMaxx 250
With the new OptiMaxx 250, KRONE presents a roller conditioner that offers an even higher performance for the BiG X 480, 530, 580, 630 models. This new development stands out for the following features:

- **250 mm diameter rollers**
  with unique shearing effect thanks to slanted teeth roller profile
- **Combination of roller conditioners**
  with special numbers of teeth:
  - 105/123 teeth for medium to long chop lengths
  - 123/144 teeth for short to medium chop lengths
- **Standard rotational speed 30 %,**
  optionally 40 or 50 % for more intensive fracturing and optimum cracking results
- **Optionally:** Rollers in HD design with innovative BusaCLAD coating technology
- Best wear protection for maximum service life under all harvesting conditions
- **Temperature monitoring** on the roller bearing with display on the machine terminal for maximum reliability as an option



KRONE VariQuick

Rapid changeover from maize to grass mode

Perfect changeover

Quick changeover
Change from maize to grass or from whole crop silage to grass on the move – either using a chain drive with crank handle or an electric motor as an option. This allows BiG X to change from maize to grass or from whole crop silage to grass flexibility and quickly.

Easy to transport
After the transport wheels are fitted without tools, the corn conditioner pulls out to the side and is conveniently rolled to the shed.

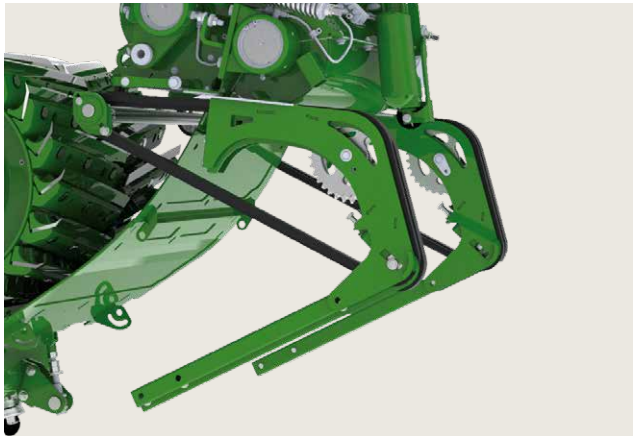
- **Fast changeovers**
  from grass channel to corn conditioning and vice versa
- **A chain drive lowers the unit conveniently**
- **The changeover takes just a few minutes**
- **Fast and easy removal of the grain conditioner**

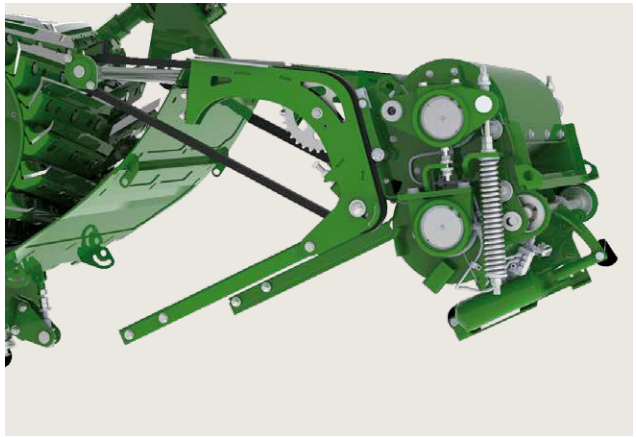
VariQuick is the system that allows operators to converse BiG X very quickly from maize to grass and the other way round. A chain drive (electric option) moves the corn conditioner out of or into the crop flow. If the corn conditioner is not used for longer periods of time, you can lower it and remove it from the machine by pulling it out to the side.

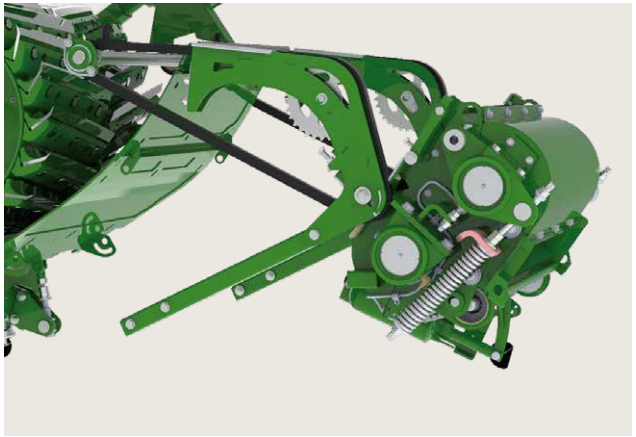
Using the grain conditioner
In this position, the crop flows through the corn conditioner. This way, the conditioner can subject the kernels to intensive treatment to make the nutrients available.

Corn Conditioner in park position
The chain drive moves the corn conditioner out of the crop flow and into its parking position so work can temporarily continue in grass without any major changeover.

Removing the Corn conditioner
If the corn conditioner is not used for an extended period of time, you can lower it with the help of the chain drive and then remove it.







The corn conditioner can be swivelled

KRONE VariStream

Relieving the load on the engine and the chopper units

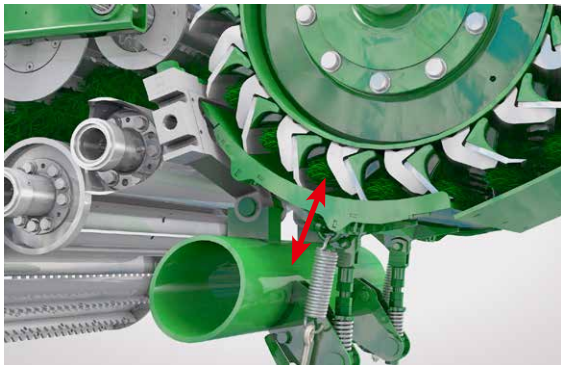
Springs make the difference

Every forage harvester operator is familiar with this: Lumps in uneven swaths absorb operator attention, reduce productivity and may cause blockages in the spout. The chopping drum floor and the rear wall of discharge accelerator are both spring-loaded to momentarily extend the crop flow channel when the volume surges temporarily. The flexible channel cross-section helps to relieve the engine and the chopper units and makes for quieter running and higher outputs.

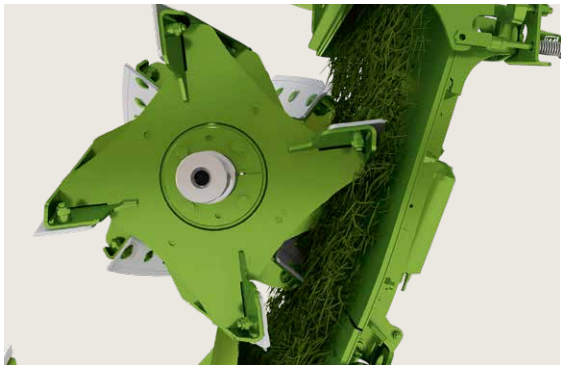
Improved utilisation

- **Consistently smooth performance**
  despite inconsistent crop flows
- **Extremely quiet running**
  even in uneven swaths
- **High throughputs**
- **Top quality chop**
- **Perfect operator comfort**

VariStream comprises spring-loaded floors beneath the chopping drum and behind the discharge accelerator rotor. The system ensures blockage-free and smooth operation, even in varying volumes of crop. The technology allows operators to utilise the forager to its limit and use less fuel per hour.



Top quality chop also with uneven volumes of crop
The spring-loaded chopping drum base is connected to the anvil of the counterblade at the front. As these are readjusted, the gap between the blades and floor does not change. So any movement of the spring-loaded drum base in compensation of bigger crop lumps will not affect the quality of chop.



Constant discharge with a concentrated stream
The spring-loaded rear wall of discharge accelerator ensures maximum discharge capacity and fills the transport wagon dead on target in all conditions.

KRONE StreamControl

Adjustable discharge distance from the driver's seat

Everything in control

- **Adjustable discharge distance** from the cab as an option
- **Tight crop stream** even with a long crop discharge
- **The shorter the crop discharge, the less power is needed**
- **Fills the transport wagon accurately without spillage**

The crop throw is controlled from the cab by adjusting the flap in the rear wall on the discharge accelerator.This way, operators can adjust the throw quickly to the current filling situation. As the accelerator needs less power to cover a short distance, the operator can free up engine output and use it for chopping and higher throughputs.

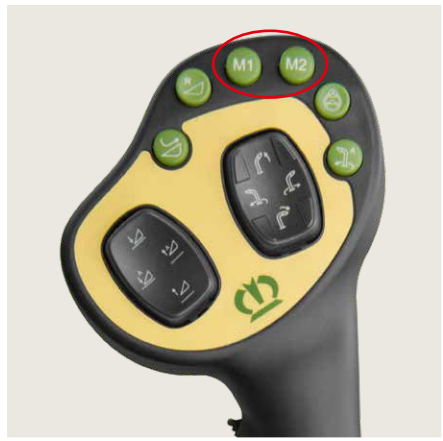
Short-distance discharge
For a small discharge distance and trailers driving in parallel, it is of advantage when the crop stream is ejected at slow speed. The 'weaker' stream frees up power reserves that can be used for an increased chopping performance.

Long-distance discharge
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.

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

Adjusting the discharge distance
The crop discharge is controlled via the hinged flap on the rear wall of discharge accelerator. For a short-distance discharge, the flap moves out of the crop flow, so there is little contact between the crop and the accelerator. For a long-distance discharge, the flap moves into the crop flow, so there is more contact between the crop and the accelerator.

Stepless electric motor control
The hinged flap on the rear wall of discharge accelerator is adjusted infinitely via an electric motor.



Via control lever
The throw is quickly changed on the joystick controls.

Armrest control
The additional discharge distance control in the armrest offers maximum operator comfort.

The KRONE headers

Quick and reliable coupling and uncoupling of the headers

The perfect solution
The robust carrying frame features guide rollers at the top and a carrying bar at the bottom with locking pins (hydraulic as an option) which make attachment and removal easy and convenient and give accurate control to the header.

Very adaptable
Hydraulic cylinders on the sides of the pivoting bottom carrier allow the header to actively follow the ground contours. The hydraulic cylinders are made pressureless to give free pivoting.

Straightforward
The two guide rolls on the base machine trap the curved round steel bracket on the header. Attaching the header to the base machine is as simple as that.

More harvesting time

- **Convenient attachment and removal**
- **Maximum safety**
- **Very short set-up times**
- **Compact combination**

The multi-coupler system of the BiG X allows operators to couple headers fast, easy and dependably from the seat, reducing changeover times when preparing for road travel or different crops.This way, more time is spent on productive work.

A unique pivoting system
The header pivots laterally on the hoop that is trapped in the guide rollers. This type of attachment is easy and straightforward and makes for a large pivoting range.

Convenient for operators
The header is locked by means of bolts at the bottom beam of the carrier frame. These pins can be operated hydraulically as an option from the seat for convenient header attachment.

Automatic
The multi-coupler couples the header reliably and easily. The coupler is spring-loaded as an option. The drive train is automatically locked in this process. The frictional connection copes with the highest loads.

KRONE EasyFlow 300 S · 380 S

The pick-up without cam track

Two working widths

With a working width of 3.00 m or 3.80 m and six rows of tines, the uncontrolled KRONE EasyFlow 300 S and 380 S pick-ups are extremely powerful and leave nothing lying around. Depending on the swath width and your working speed, you can vary EasyFlow rpm steplessly from the driver's seat or have it adjusted automatically to the current forward speed without the operator having to interfere. Its curved round steel bracket gives the header the flexibility to pivot through a large angle and makes for easy attachment and removal.

Convenience which lightens the workload

When the machine reverses, the auger conveyor and the crop press roller unit are raised automatically to give easy access to the intake system so foreign objects that were detected by the metal detector can be removed conveniently. When work is resumed, the holding-down clamp and the auger automatically return to their working position.

Maximum quiet running

- **More power,**
  quieter running, less wear
- Infinite speed adjustment
  from the driver's seat
- **Automatic pick-up speed adjustment**
  to the current driving speed
- **Quick coupler and coupling hoop**
  make for quick header attachment and perfect contouring
- **Six row of tines**
  for high throughput

The camless EasyFlow 300 S and 380 S pick-ups by KRONE have neither deflection rolls nor cam tracks. Compared with conventional pick-ups, EasyFlow has up to 58% fewer moving parts, which makes it impressively smooth running, low-wear and therefore inexpensive in service and maintenance. EasyFlow operates 30% faster for cleaner gathering and increased productivity.

High throughputs
Six rows of double tines allow for even crop collection while keeping the load and the power requirement to a minimum. Not only does this pick-up gather the crop effectively but it also maintains a consistent flow in lumpy swaths for an excellent quality of chop.

With crop press roller unit
The EasyFlow has an adjustable large-volume crop press roller unit as a standard feature. This ensures a uniform flow of material into the machine also at high work rates.

Adapting all the time
Its stepless height adjustment function and adjustable spring-loaded suspension allows the crop press roller to roll smoothly and adapt easily to varying swath widths.

Perfect adjustment to different swath thicknesses

KRONE EasyFlow 300 S · 380 S

Convincing in the most demanding conditions

Rapid travel between fields
The height-adjustable guide wheels which follow up on the sides move hydraulically into transport position – simply upon a touch of button.

Excellent ground tracking
Depending on the working width, one or two rear cam follower rollers optimise ground tracking. The height of the cam follower rollers is adjustable.

High throughputs
The large 600 mm diameter feed auger performs impressively even in dense, over-long crops.

Hardox wear plates
Replaceable Hardox wear plates increase the lifetime of the trough in the intake area. Hardox is extremely durable and convinces also in the most demanding conditions.

Adjustable infeed sheets
The serrated infeed plates can be set to one of two positions to provide different levels of aggressiveness, giving you the flexibility to respond to all conditions.

Strong drives
The side drives for the pick-up and the auger conveyor are robust enough to handle even the toughest loads. They are fitted with automatic clutches for overload protection.

NEW

KRONE XDisc 620 · 710

Mowing and chopping whole crop silage in one operation

XDisc

- **Direct cut headers**
  with 6.20 m or 7.10 m working width
- **High throughput**
  low power requirement
- **KRONE EasyCut mower technology**
  Proven the world over
- **KRONE SafeCut**
  Unique protection for cutting discs
- **Powerful feed auger**
  with replaceable HARDOX wear plates

Based on the proven KRONE EasyCut mower technology, the BiG X with the XDisc direct cut headers can mow and chop whole crop silage in one operation. SmartCut ensures high cutting performance with the best cutting quality, while SafeCut prevents damage from foreign objects.

XDisc 620

XDisc 710

Mowing and chopping in one work step
KRONE XDisc is the versatile specialist mower for whole crop silage that cuts the crop cleanly and without wastage. The huge 900 mm diameter auger makes the unit enormously powerful and has no trouble picking up very long and bulky material.


KRONE
KRONE
KRONE
Disc 620

NEW

KRONE XDisc 620 · 710

Durable and easy to handle

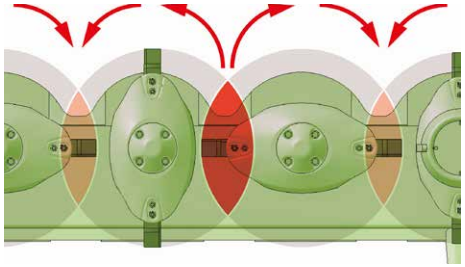
SafeCut – only by KRONE

You know it too well – foreign objects can cause great damage and costly repairs. KRONE SafeCut offers a maximum of protection and peace of mind. A unique technology protects the cutting discs from foreign objects. The XDisc comes with SafeCut as standard.

Safe as houses

If the system is suddenly overloaded, the impact is not directed to the spur wheels in the cutterbar, instead the roll pins in the sprocket drive shaft shear off. The pinion shaft, which continues rotating, turns the cutting disc upwards via a lifting thread. moving it out of the risk zone and the orbit of the neighbouring discs. As a result, SafeCut prevents damage to the spur wheels and the neighbouring discs. The roll pins are replaced within a few minutes, saving costs and minimizing downtime.

SmartCut for stripe-free cuts
With some cutting discs turning in pairs towards each other and others turning away from each other, it was necessary to redesign the degree of blade overlap to ensure cleanest swaths. For a stripeless swath, we have therefore increased blade overlaps on the cutter blades turning outwards between the discs turning away from each other. In addition, the blades turning to the rear are set further apart to encourage a smooth flow of large volumes of crop.



Changing blades in an instant
Quick-change blades are a must for many farmers and contractors, because this way they can replace blades quickly and easily on the site.

Powerful throughput
The powerful and massive 900 mm diameter feed auger works trouble-free even in dense and tall crops. It pivots freely and can be reversed. the auger coilings have replaceable Hardox steel wear plates.

Speed is of the essence
Fitting and removing the XDisc is quick and easy. With the rolls of the quick coupling, the harvester moves under the tubular frame of the XDisc. The spring-loaded quick coupling for the drive and the hydraulic locking system are available as options and increase the operator convenience.

KRONE XDisc 620

Reliable in all harvesting conditions

Clean cut
With the optional side-mounted and hydraulically driven cutting blades, even heavily intergrown vegetation can be cut cleanly. This ensures low losses when harvesting a number of whole-crop silage mixtures.

Blockage-free work
The XDisc can be equipped with an optional crop press roller unit to optimise the crop flow in bulky and tall crops. The roller enjoys blockage-free work even in extreme conditions.

Safe road travel at up to 40 km/h
The XDisc is placed quickly and easily on the bespoke trailer. The integrated brake system ensures safe travelling.

Efficient
With its working width of 6.20 metres, the KRONE XDisc 620 direct cut header achieves a high acreage output and therefore efficient harvesting of whole crop silage.


KRONE
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BIG X

NEW

KRONE XDisc 710

Powerful, reliable, robust!

Innovative and efficient: XDisc 710 with integrated transport chassis
With its impressive working width of 7.10 m, the KRONE XDisc 710 direct cut header sets new standards in terms of performance. Thanks to its precise cut and perfect crop flow, it offers an extremely efficient solution for harvesting energy crops. With its integrated transport chassis, it also makes it quick and easy to move between locations, further increasing efficiency.

Innovative and efficient

- **7.10 m working width**
  for even greater throughput
- **Clean cut**
  thanks to EasyCut mower technology
- **Optional: Side cutting blades**
  can be conveniently swivelled out of the cabin
- **Optional: Crop press roller unit**
  for an even crop flow
- **Optional: Integrated transport chassis**
  for minimised setup times

The KRONE XDisc 710, a direct cut header with a working width of over 7 m and optional integrated transport chassis, sets new standards in terms of throughput and comfort. The 900 mm diameter feed auger can be adjusted three times in the base height, enabling optimum throughput. Optional side cutting blades are available which can be conveniently swivelled out of the cabin.

Unbeatable efficiency

The powerful XDisc 710 is characterised by its exceptional robustness, enormous efficiency and high throughput. Two rigidly connected cutterbars are driven in a force-fit manner via universal shafts and angular gearboxes, starting from a central input gearbox. This guarantees an even cut even at maximum throughput, essential for outstanding chop quality.

The drive train is specially designed for high input power and does not require an overload clutch. The auger conveyor is protected by a star ratchet clutch integrated into the gearbox and is driven by an actively lubricated chain drive, thereby ensuring a long service life.

NEW

KRONE XDisc 710

Maximum performance, minimum effort

Lower power requirement per metre of working width

The large 900 mm diameter feed auger is designed for high throughputs. Its speed can be adjusted in three stages to the intake speed of the forage harvester, depending on the cutting length of the mown crop. In addition, the base height of the auger conveyor can be manually adjusted in three stages using eccentrics to allow the crops to pass through in the appropriate way. In addition, the free-moving auger conveyor can simply deflect upwards in the case of bulky crops.

Accessibility and maintenance

The KRONE XDisc 710 impresses not only with its performance, but also with its outstanding accessibility and ease of maintenance. To change the blades, the guard cloth is folded up and the blades are replaced using the quick release fastener. The blades can be removed quickly and easily using the standard spare blade drawer. In addition, the centre hood can be easily swivelled upwards to allow free access to the intake rollers.

Cutting angle and sliding skid
For a consistently clean cut in all conditions, the bearing pressure can be infinitely adjusted from the cabin of the forage harvester. The cutting height can be adjusted very easily and without tools using the centrally adjustable ground skids. If it is necessary to adjust the cutting angle, this is possible via a 3-way adjustable hole pattern on the round arch holding fixture.

Active central lubrication unit
The drive chain for the auger conveyor is actively lubricated – this helps to minimise maintenance work on the direct cut header and to increase the service life of the drive chain.

NEW

KRONE XDisc 710

Success through innovation!

Minimised setup times thanks to integrated transport chassis
The integrated transport chassis of the XDisc 710 offers an extremely practical, time-saving and unique solution:

Road travel
For transport on public roads, the chassis is swivelled under and the drawbar hydraulically next to the direct cut header. After the folding process, the direct cut header is attached to the tow coupling of the forage harvester. The integrated transport chassis replaces the additional transport wagon which was previously required, thereby making field changes considerably easier. Thanks to its innovative design, the direct cut header can be transported on the road safely and in compliance with the law as a stand-alone unit with an integrated lighting unit.

Working position
As there is no need to find a parking space for the transport wagon, there is also no need for awkward manoeuvring before harvesting begins. The XDisc 710 is easy to handle thanks to a swivelling single axle on the right next to the header adaptation and a folding drawbar with support jack on the left front side. By hydraulically swivelling the drawbar and axle, both chassis parts disappear behind the header during field work, leaving the working area clear

Harvesting without losses

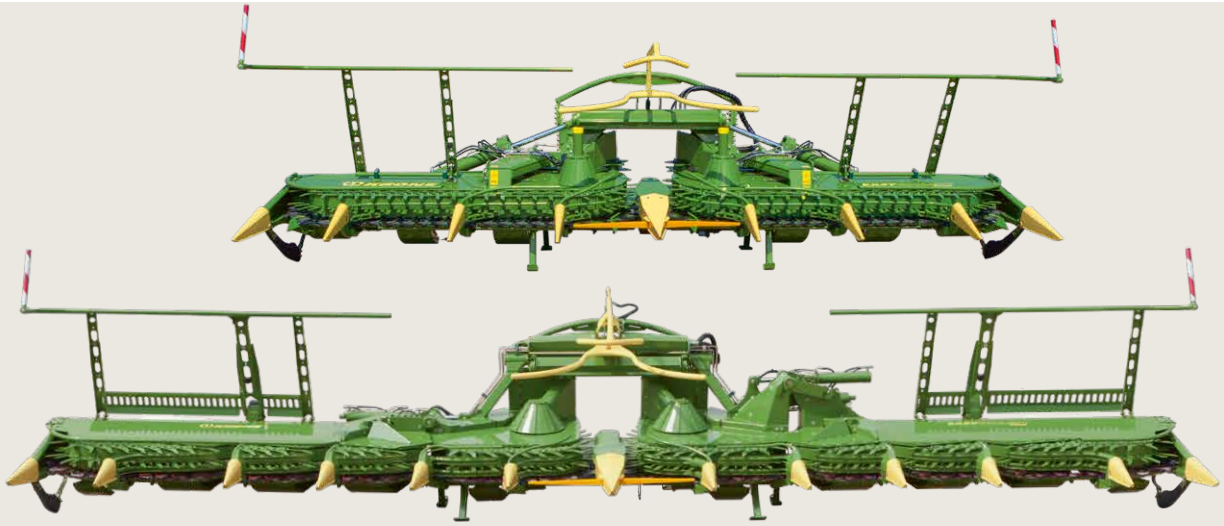
The XDisc 710 can be optionally equipped with side cutting blades which can be easily and conveniently swivelled up and down independently of each other hydraulically from the cabin of the forage harvester. This innovative and unique function offers an enormous advantage: efficient utilisation of the maximum working width prevents harvest losses from laterally protruding ears or climbing plant parts at the edge of the crop; this would occur if the cutting blade was not actively swivelled upwards.

The crop press roller unit

To ensure a continuous crop flow even in dense and tall crops, the XDisc 710 can be optionally equipped with a crop press roller unit. This ensures an even crop flow to prevent blockages and enables smooth operation even under extreme conditions.

KRONE EasyCollect

Chop quality begins at the header



Unique – High-power & high-efficiency

With working widths from 6 m to 9 m, the BiG X 480, 530, 580 and 630 can be equipped with two or three-part, variable-row headers for chopping maize. The endless collectors convey the cut plants to the middle, where they are fed lengthwise to the intake. This guaranteed top chop quality with few excess lengths.

Model	work width	No. of rows	Design
EasyCollect 600-2	6.0 m	8	2 sections
EasyCollect 600-3	6.0 m	8	3 sections
EasyCollect 750-2	7.5 m	10	2 sections
EasyCollect 750-3	7.5 m	10	3 sections
EasyCollect 900-3	9.0 m	12	3 sections

Best chop quality

- **Variable-row maize headers**
  with 6 m to 9 m working widths
- **Best quality of chop,**
  fewer overlength fractions from linear crop feed
- **Simple technology and low input power**
- **The central gearbox**
- **An extra running gear is available**
  as an option for the two-piece EasyCollect model offering maximum road safety.

The variable-row EasyCollect header is a versatile unit that feeds the stalks lengthwise into the machine, which 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.

Pulling the crop over the blades
Rigid multi-section blades and endlessly moving blades combine to sever the stalks with scissor-like cuts. The blades are self-sharpening and easy to replace.

Straightforward and good
The two-piece maize headers stand out for their straightforward design and uncluttered build. Its narrow transport width, its slim design and excellent visibility translate into safe travel between fields.

Central drive
The drive power flows efficiently from the central gearbox down auto-coupling driveshafts to the folding collectors.

Convenient for operators
An additional running gear is available for the two-piece maize headers which shifts weight to the front axle for safer and even more convenient road travel. The running gear is conveniently locked and unlocked from the cab.

KRONE EasyCollect

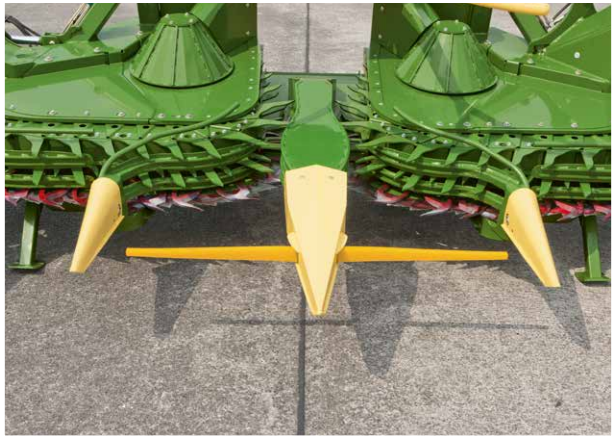
Compact and precise

Simply ingenious
EasyCollect maize heads are built to a simple and modular design with endlessly moving collectors. This design leads to a much lighter weight, less maintenance and a long service life.

Clean gathering
EasyCollect can handle any situation. EasyCollect gathers the individual rows of maize firmly and feeds them to the middle of the header and into the chopper unit. It is this tidy and lengthwise feed that accounts for the outstanding quality of the chop.

Uniform stubble height
The ground tracers on either end of EasyCollect help maintain a uniform stubble height even in undulating terrain. They signal EasyCollect to follow the set working height in and across the direction of travel.

Optimum crop flow
The plant divider adjusts its height hydraulically to different stalk lengths, so the tubular bars at the top grab the stalks and pull them into the chopper unit.



Great stability and excellent tracking
When the autopilot is enabled, the sensor arms on the central tip of the maize header scan the distance between two maize rows. Then the BiG X is guided automatically along that row, which helps reduce operator fatigue.

Widest intake system
The EasyCollect intake channel dimensions match the width of the chopping drum and ensure maximum throughput and a top quality chop The inline flow of the crop and the large intake combine to provide a steady and very tidy crop feed.

KRONE XCollect

The header that uses sickle discs.

Three working widths
The XCollect maize header is available in three work widths:
600-3: 6 m (8 rows),
750-3: 7.5 m (10 rows) and
900-3: 9 m (12 rows).

The three-section headers work to the well-proven EasyCollect collector principle. The XCollect splits the action of cutting and feeding into two separate processes.

The XCollect models

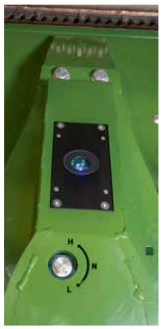
Model	No. of rows	work width	Transport width	Design
600-3	8	6.00 m	3.00 m	3 sections
750-3	10	7.50 m	3.00 m	3 sections
900-3	12	9.00 m	3.29 m	3 sections

Maize harvesting in a class of its own

- **Available work widths are 6 m, 7.50 m and 9 m**
- **Variable-row harvesting**
  with rotating sickle discs
- **Operates to the collector principle,**
  splits the processes of cutting and feeding
- **A smooth and soft cut eliminates vibrations**
  and crop loss
- **Operators adjust the cutting frequency**
  infinitely variably to suit the prevailing harvest conditions

KRONE adds new XCollect headers to the long-standing and well-proven EasyCollect series. The XCollect headers split cutting and feeding into two separate processes, responding to customer demands to deal with diverse harvest conditions around the world.

Cutting without counterblade
The stalks are cut by high-rpm sickle discs which rotate on massive bolts that connect them to the drive train. The cut stalks are then fed to the chopping drum by endless collectors above the discs which ensure a uniform lengthwise feed.



The central gearbox
Operators can select one of two speeds to adjust the cutting frequency to the individual crop and harvest conditions.

Convenient guard
The ingenious guard for the maize header is an option that forms an integral part of the header. It moves automatically in and out of position when the header folds into road or work position. The operator just presses a button. No need to leave the cab. A very convenient solution that reduces changeover times and boosts productivity.

KRONE XCollect

One maize header for all applications

Harvesting without losses
The sickle discs rotate on one plane, cutting the stalks without squeezing them. This technology minimizes vibration avoiding cob loss.

Everything under control
The well-proven collector feeds the stalks lengthwise to the chopping drum.It is this linear crop feed that enables precision chops and minimum overlengths. The variable collector speed is standard and ensures a consistently high quality of chop.

Fractured stubble
The high-speed sickle discs cut the stalks and defibrate the stubble for optimum breakdown.

Hovering over the ground
The header has three sensor skids, one in the middle and two out on the ends, for optimum contouring and clean cuts in undulating fields and for clean forage.

Protected driveline
Star ratchet clutches protect the sickle disc driveline from overload. Speed sensors scan the speeds of two discs and send potential overload information to the operator terminal. In addition to this, a friction lining on each disc offers additional protection.

Compact design
The wings on the three-piece XCollect headers easily fold up into their transport position. This design leads to a 3 m transport width for the XCollect 600-3 and 750-3 and a 3.29 m width for the XCollect 900-3 which have optimised hydraulic rams that lift and lower the wings even faster.

The stubble is intensively fractured

The engine

High economic efficiency and optimum weight distribution

Transverse in-line engines

The engine is mounted sideways and far back for optimum weight distribution. The power flows from the engine directly to the components for crop flow – a setup that ensures maximum efficiency. The Common Rail injection makes the MTU in-line engines very efficient.

Cooling

With a rotating sieve and an active exhaust above the discharge accelerator, the cooling system provides cooling also in the presence of dust and crop residues in the air. The active exhaust is initiated with the start of the chopping drum, the sieve with the start of the engine.

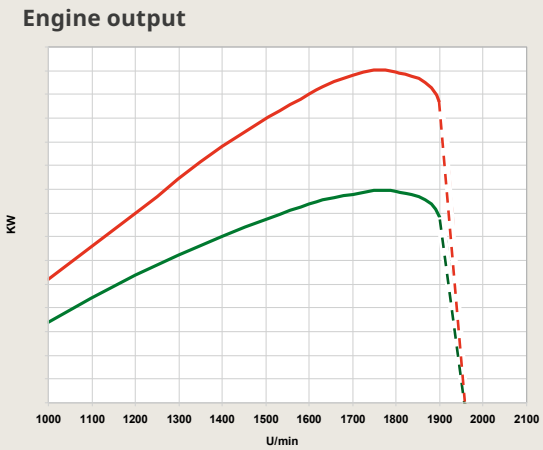
Model	Engine (Emission Stage V/Final Tier 4)		Engine displacement litres	Engine continuous output in kW / hp	Continuous chopping output X-Power in kW / hp	Continuous chopping output Eco-Power in kW / hp
BiG X 480	MTU 6R 1300	R6	12.8	360/490*	338/460	–
BiG X 530	MTU 6R 1300	R6	12.8	390/530*	368/500	–
BiG X 580	MTU 6R 1500	R6	15.6	436/593**	408/555	338/460
BiG X 630	MTU 6R 1500	R6	15.6	480/653**	452/615	338/460

* Certified engine output to ECE R120 in kW/hp: 390/530 ** Certified engine output to ECE R120 in kW/hp: 480/653

The engines

- 6-cylinder MTU in-line engine
- Final Tier 4 / Stage V compliant
- 490-653 hp continuous engine output
- High efficiency and quiet running

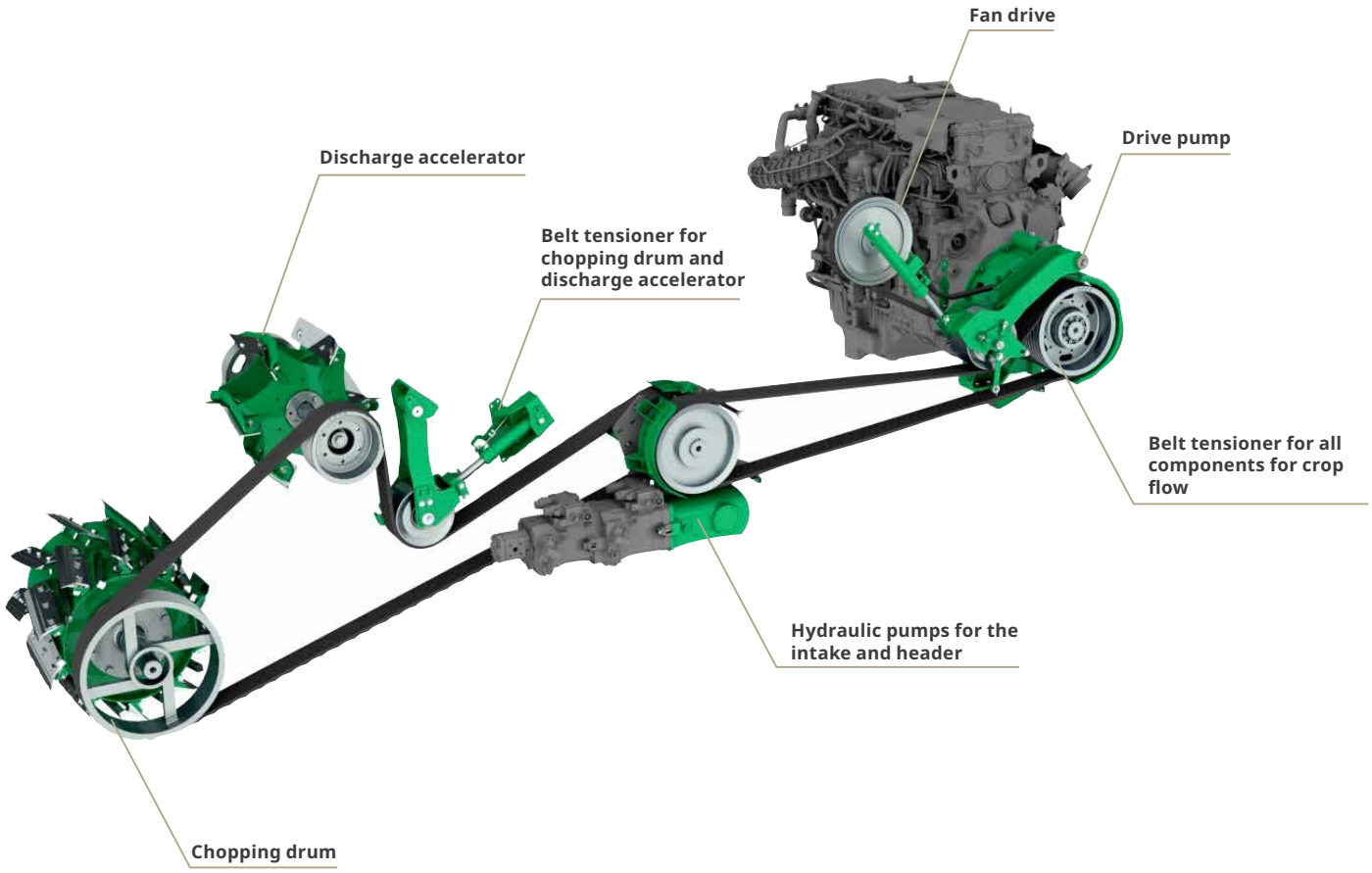
Cutting-edge technology from MTU takes engine power and economy to a new dimension. Common Rail injection and optimal torque synchronization translate into smooth running, low fuel consumption, high efficiency and minimal maintenance. The innovative KRONE power management guarantees highest efficiency with maximum throughput.



BiG X 580 and 630: PowerSplit
As an option, operators can control the engine output with a touch of a button. They can operate the machine in the fuel-efficient Eco-Power mode whenever the full power is not needed. Vice versa, when the full power is needed, you simply switch to X-Power mode. Depending on the application, the machine automatically and continuously switches between different engine performances. Another useful feature is the optional engine speed management which boosts efficiencies and fuel economy.

The drive concept

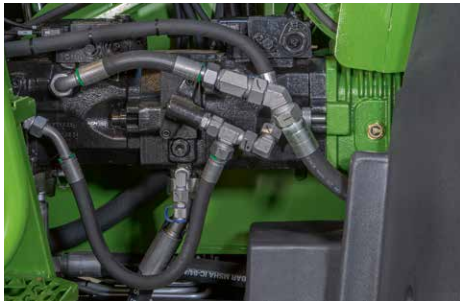
Direct power transmission



A powerful drive

- **Simple design**
- **An extra-strong kraftband**
  transmits engine power to the crop assemblies
- **Long service life**
- **Separate drive for the intake and the headers:**
  Reversing when the chopping drum is at a standstill
- **Separate and dependable driveline**
  to the drive pumps

The transversely mounted engine allows the drive pump, the chopping drum, the discharge accelerator, the header and intake pumps to take the engine power directly off kraftbands. No power take-off gear is required. All components for crop flow are activated via belt coupling.



Clever
The header and intake system are driven by oil pumps. Flange mounted to a gearbox, these pumps are driven by a separated kraftband that transmits engine power directly to the pumps. This concept allows for infinite adjustment of header and intake speeds.

CVT transmission
Courtesy of a hydro pump that is flange-mounted on the main gearbox, BiG X changes its ground speed infinitely variably.

Drive of the components for crop flow
All components inside the crop flow are powered by two 6-groove kraftbands. The hydraulic pumps that drive header and intake are arranged in the centre of the vehicle and can be switched on and off independent of the components for crop flow. This design allows for reversing of intake and header with the cutter drum at standstill. The brake of the chopping drum is integrated in the drive and offers maximum reliability.

The running gear

Innovative travelling

Front-wheel drive

4WD

Front-wheel drive – four-wheel drive
BiG X 480, BiG X 530, BiG X 580 and BiG X 630 are available with hydraulic wheel motors on all four wheels as an option. Front wheel drive models have the wheel motors on the rear axle replaced by hubs. Both drives are dimensioned for driving speeds of up to 40 km/h.

An ideal system
The drive concept with hydraulic wheel motors provides for additional ground clearance, frees room for a larger diameter chopping drum and also leads to a more even weight distribution. The spring-loaded rear suspension ensures maximum driving comfort.

Higher productivity

- **Front-wheel drive is standard;** four-wheel drive is an option
- **Powerful wheel motors** from Bosch-Rexroth
- **Traction control** with three travel modes
- **Infinitely variable 0-40 km/h speed range**

The hydrostatic wheel motors offer greater productivity and a higher level of automation and operator convenience. At the same time, this type of power train reduces maintenance and frees valuable space to fit a bigger and more powerful chopping assembly and move this further to the rear of the machine.

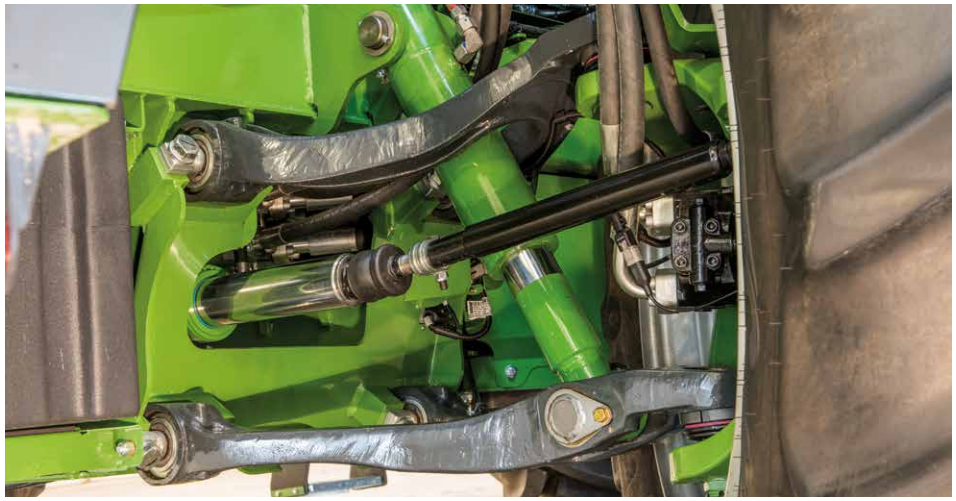
Infinitely variable drive concept
Courtesy of a hydro pump that is flange-mounted on the main gearbox, BiG X changes its ground speed infinitely variably. Thanks to standard independent wheel monitoring and traction control system, the BiG X has no trouble mastering difficult terrains.

Planetary gearbox
The wheels are driven by Bosch planetary gearboxes. Planetary gearboxes offer the advantage of distributing the load to several planetary wheels which are compact and enable high torques.

Traction control
with three switchable travel modes
The operator decides which of the three travel modes to use. The mode that reduces wheel slip is usually selected when the focus is on protecting the sward. Maize foraging usually takes place in a mode that tolerates a higher wheel slip or even with traction control deactivated.

The running gear

Meeting the requirements of farmers and contractors



Great manoeuvrability from independent wheel suspension
The independent wheel suspension system offers plenty of room for steering so that even when clad with massive tyres, the BiG X remains a very nimble machine in undulating terrain. The spring-mounted independent suspension provides premium operator comfort.

A KRONE exclusive!
The wheel motors are mounted eccentrically on the front axle which allows you to fit small or large tyres and still retain the position of the pick-up, the intake system and chopping drum floor relative to the downstream crop flow. This detail warrants an optimum and consistent crop flow.

Superb manoeuvrability
The use of wheel motors allows the wheels to turn through 50° for tightest turns and perfect match-ups after headland turns with an 8-row maize header.

3.00 m machine width
When clad with tyres sized 710/70 R 42 and 800/65 R 32, the machine width is 3.00 m – for safe travel on narrow roads.

Extremely agile

- **Extremely manoeuvrable**
  Independent wheel suspension and wheel motors
- **Sprung steering axle**
- **3.00 m transport width**
  depending on tyres
- **Large choice of tyre options**
- **Height adjustable wheel motors**
- Optional tracks
  minimize compaction

Travelling on narrow roads and lanes and manoeuvring in tight space are particular challenges for the operator. Therefore, BiG X features a compact build, hydrostatic drives and independent wheel suspension that make it agile enough to manage any corner and turn on tight headlands. With the matching tyres, its width remains under 3.00 m – perfect for narrow farm roads.

Tracks
Tracks are available for the BiG X 480, 530, 580, 630 models so these can go into wet and boggy fields. The advantage of tracks over wheels is that they offer a larger footprint for reduced compaction in difficult conditions. The 76 cm tracks bring the total machine width to 3.00 m.

Tyres with a purpose
The BiG X 480, 530, 580 and 630 can be fitted with up to 900/60 R 42 tyres. The massive tyres guarantee maximum ground clearance, smallest ground pressure and ultimate operator comfort.

Optimally equipped

Excellent equipment

Turns the night into day
16 headlights for optimum illumination make night work easier and safer. If you who want even more light you can opt for the LED lighting kit.

Full rear visibility
The low back section gives the operator excellent rear visibility – ideal for manoeuvring and turning on headlands.

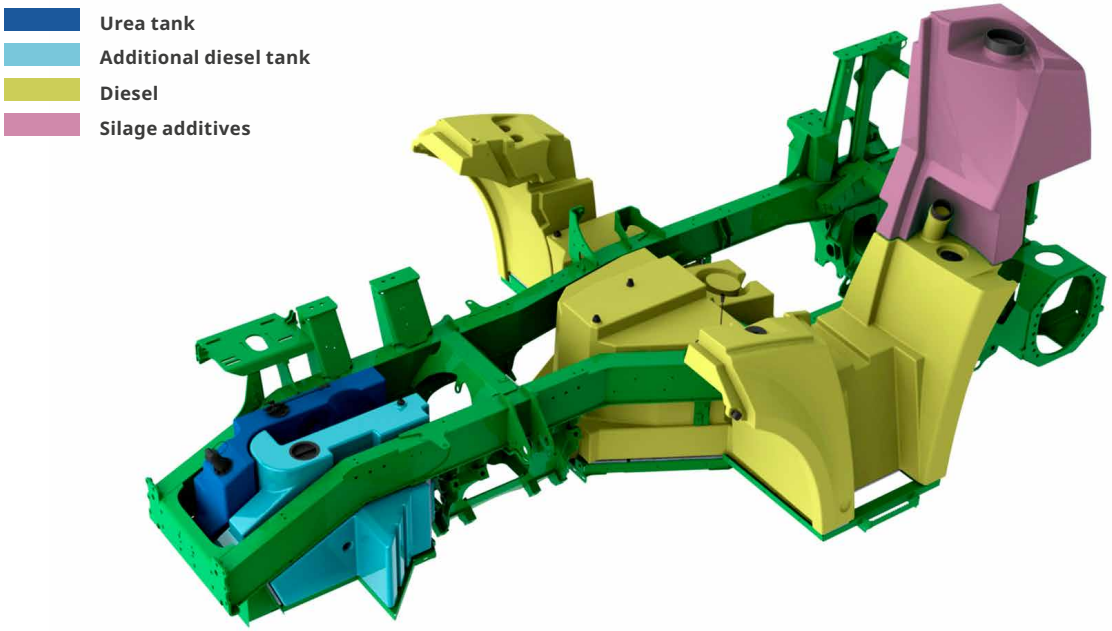
Panoramic view
The hoods open wide and the rear mudguards give perfect access to all assemblies. LEDs are in place for easy service and maintenance even in poor light conditions.

Plenty of room
The BiG X 480, 530, 580 and 630 have plenty of room between the cooling system and the crop flow, offering good accessibility for cleaning and maintenance.

For long working days

- **Best visibility in the dark**
  Optionally with LED light package
- **Huge fuel capacity**
  up to 1,450 litres of diesel with optional additional tank
- **Easy access**
  for maintenance work

Long working days, sometimes even deep into the night, take a toll on the operator's endurance and concentration. This obviously requires excellent all-round visibility and full illumination at night, which is exactly what BiG X offers. The up to 1,450-litre fuel tanks hold enough diesel reduce the number of time-consuming top-ups and boost productivity Optimum access to all components ensures trouble-free service and maintenance.



Up to 1,450 litres of diesel on board
The huge fuel tank provided as a standard holds up to 1,220 litres of diesel. An additional tank holds 115 litres of urea. The result are many hours of work without interruption for fuelling up. In addition to that, you can also opt for a 230-litre fuel tank.

Silage additive options
The 275-litre dispenser for adding silage additives at high rates (0.5-7.5 l/min) is integrated on the offside platform next to the cab. Two 20-litre silage additive dispenser for small dose rates (0.03-0.25 l/min) can be installed on the left platform. In addition, it is possible to fit an external silage additive system. The silage additive can also be added relative to yields (option).

The cabin

With feel-good character

Wider, quieter and brighter
The wide and slim posted cab offers plenty of space and best view of the headers with wide working widths. The double floor gives effective insulation from noise. 14 halogen head lights and work lights or 17 LED lights as an option provide perfect illumination in any situation and make your job easier in poor light conditions.

Clear view all-round
No matter the conditions – rain or dust – BiG X operators always enjoy a clear view thanks to three optional wipers on the windscreen, two on the side windows and one on the rear window. All wipers have spray nozzles for optimum cleaning.

Sun blinds
A roller blind on the windscreen and optional blinds on the rear and side windows protect against glare and bright sunlight.

The cockpit
The new Premium (Comfort) cab offers a most comfy working environment where you'll like to spend the day. The seat is ventilated and heated and has pneumatic suspension and all controls are in easy reach. The steering column offers three setting options that allow you adjust the tilt to your individual needs. The Comfort cab also has a cooled thermos box under the buddy seat. This working place is a pleasure to use.

Keeping you informed
An 8" touch colour touch screen with USB and camera ports is standard specification on the BiG X (12" as an option). The terminal logs all major machine and harvest data and displays the camera feeds from the spout and rear end. Here you enter all kinds of settings including the infinitely variable chop length.

Ergonomic, convenient, good
The ergonomic shape of the multi-function lever with its user-friendly icons makes work easier and increases the operator comfort. Designed specifically for the BiG X, it fits the hand nicely. With more than 20 functions programmed to it, the lever not only controls driving speed and direction of travel but also the header and spout.

Premium cabin

- **Plenty of space**
  and optimum climate control
- **Large window screens**
  offer perfect all-round visibility
- **Maximum seating and operator comfort**
  throughout a long working day
- **User-friendly operator terminal**
  with colour-display touch screen

New premium cab developed to the latest ergonomic insights. Providing generous space and an extra seat, it offers a fully air-conditioned and absolutely functional working place, where the operator feels at home and has full command of all functions and controls.

Driver assist systems

Electronic helpers on board

Driver assist systems

- **AutoScan**
  enables operators to adapt the chop length relative to the current degree of maturity of the crop
- **ConstantPower**
  ensures minimum diesel consumption at maximum throughput
- **XtraPower**
  increases engine power on demand
- **EasyLoad**
  supports operators in filling the harvest fleet trailers to capacity
- **RockProtect**
  protects the harvester from damage by stones
- **Steer with a joystick**
  and enjoy maximum comfort in field work

KRONE offers a range of different systems which help utilise our BiG X forage harvesters to their full potential and ease the strain on the operator. The electronic assist systems supply relevant data on the crop and provide reliable Information in extremely difficult position.

AutoScan
The photo-optical sensor in the middle of the maize header records the degree of maturity of the maize plant and ensures that the chop length is adapted automatically. For better structure and less silage effluent in the silo, the chopping length for green maize is longer. For dry maize, however, a shorter chopping length is used for better compaction in the silo. AutoScan eases the strain on the operator and saves fuel because the plants are cut only as short as necessary, no longer as short as possible. In KRONE machines, AutoScan is the standard, not an expensive extra equipment.

ConstantPower
ConstantPower controls the haverster's driving speed in relation to the engine load. You press a button to select the engine load of your choice. The machine automatically adjusts the driving speed to the crops and to the volumes to be gathered. This feature eases the strain on the operator and provides for top throughput with very low diesel consumption. In combination with AutoScan, the system takes the overall quality of chop and machine performance to a whole new level.

Steering from the joystick
You can also steer the BiG X from a joystick on the left armrest and enjoy a real boost in comfort. Using this joystick takes the hard work out of steering. You are seated in a more ergonomical position and both your arms rest on the armrests for relaxed and fatigue-free work. Thanks to proportional control, the steering is accurate and convenient.

XtraPower
The innovative XtraPower technology allows owners of a BiG X 480 / 580 to book more engine power (about 50 hp) from the new KRONE E-Solutions shops. Once this extra power is booked, it can be retrieved whenever it is necessary to boost throughputs temporarily. The machine must be in field mode and the chopping drum revolving to enable the feature. The XtraPower function is paused when no extra power is needed.

EasyLoad
The EasyLoad auto loading system in tandem with the camera-based 3D image analysis make it so much easier to fill low- or high-sided trailers running alongside or behind the harvester. In doing so, the functions of the spout are controlled fully automatically. Different filling strategies can be set. Monitoring all functions from the in-cab screen, operators are more at ease.

RockProtect
The six pre-compression rollers are powerful yet gentle. The optional RockProtect system provides intelligent protection from damage by stones. It fully automatically halts the pre-compression rollers within milliseconds after a stone is detected. The sensitivity of the RockProtect system is adjustable for added protection.

Automatic counterblade adjustment
As an option it is possible to adjust the counterblade automatically and from the cab. Based on a knock sensor that measures the gap between the counterblade and the blades of the chopping drum and a rotary encoder that triggers two motors that adjust the counterblade, the system reduces operator stress as he or she can concentrate on the work at hand. At the same time, it is also possible to adjust the counterblade manually from the external control unit.

Driver assist systems

Always stay in the right track

KRONE GPS Guidance – The KRONE steering system
Equipped with KRONE GPS Guidance, the BiG X can be steered comfortably and safely by autopilot. Thanks to this automatic steering system and the correction signals received by the GPS receiver, the BiG X can drive over the area to be harvested true-to-track and with minimum overlap. For the driver, this means fatigue-free work and a high level of comfort. In addition, the BiG X can also be optionally pre-equipped for ISOBUS steering systems from various manufacturers.

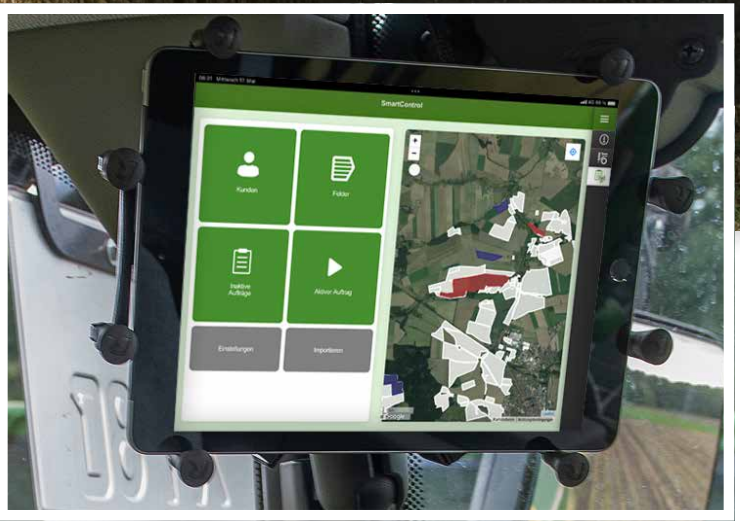
CropControl
The optional KRONE CropControl yield metering system measures the volume of crop harvested per field quickly and accurately at the touch of a button. With CropControl you document all yield data from all fields harvested.

SmartConnect
Another standard feature on the BiG X is the KRONE SmartConnect control unit which provides GPS and Wi-Fi functionalities for the data management. All relevant data are recorded automatically and quickly sent from the harvester to the office PC – for straightforward and easy billing in less time.

Greater comfort

- **GPS Guidance**
  for automatic steering
- **CropControl**
  for accurate yield metering
- **KRONE NIR Control dual**
  measures moisture and nutrients on the move
- **Optional automatic counterblade adjustment**
  from the cabin
- **KRONE SmartConnect is a standard feature**
  for convenient data management

The ISOBUS steering system guides the machine automatically along the preset way line without any operator interference. There are further systems available from KRONE that help operators measure, log and communicate the harvested crop weight per field and also measure moisture and nutrient levels.



KRONE SmartControl order management

KRONE SmartControl allows orders to be received, started, stopped and sent via the X-Touch terminal or mobile terminals in conjunction with SmartConnect. This means that orders can be enriched with information such as customer and field names directly in the cab and evaluated by Smart Telematics. In addition, orders can also be pre-planned and field boundaries imported via farm management systems connected to the agrirouter.

Metering moisture and nutrient levels

The optional KRONE NIR Control dual system records data on the moisture and nutrient levels (see table) of the crops when harvesting maize, grass and whole crop silage. This data can be recorded in the machine terminal and assigned to the harvested area. The optional KRONE NIR Control dual system provides accurate measurements on crop moisture and nutrient levels. Another advantage: dual use of NIR sensor to determine nutrient levels in the VanControl dual system from Zunhammer.

Crop type	Maize	Grass	TPS
Dry matter	✓	✓	✓
Raw protein	✓	✓	✓
Raw fibre	✓	✓	✓
Crude fat	✓	✓	✓
Crude ash	✓	✓	
Sugar	✓	✓	
ADF	✓	✓	
NDF	✓	✓	
Starch	✓		✓

Technical data

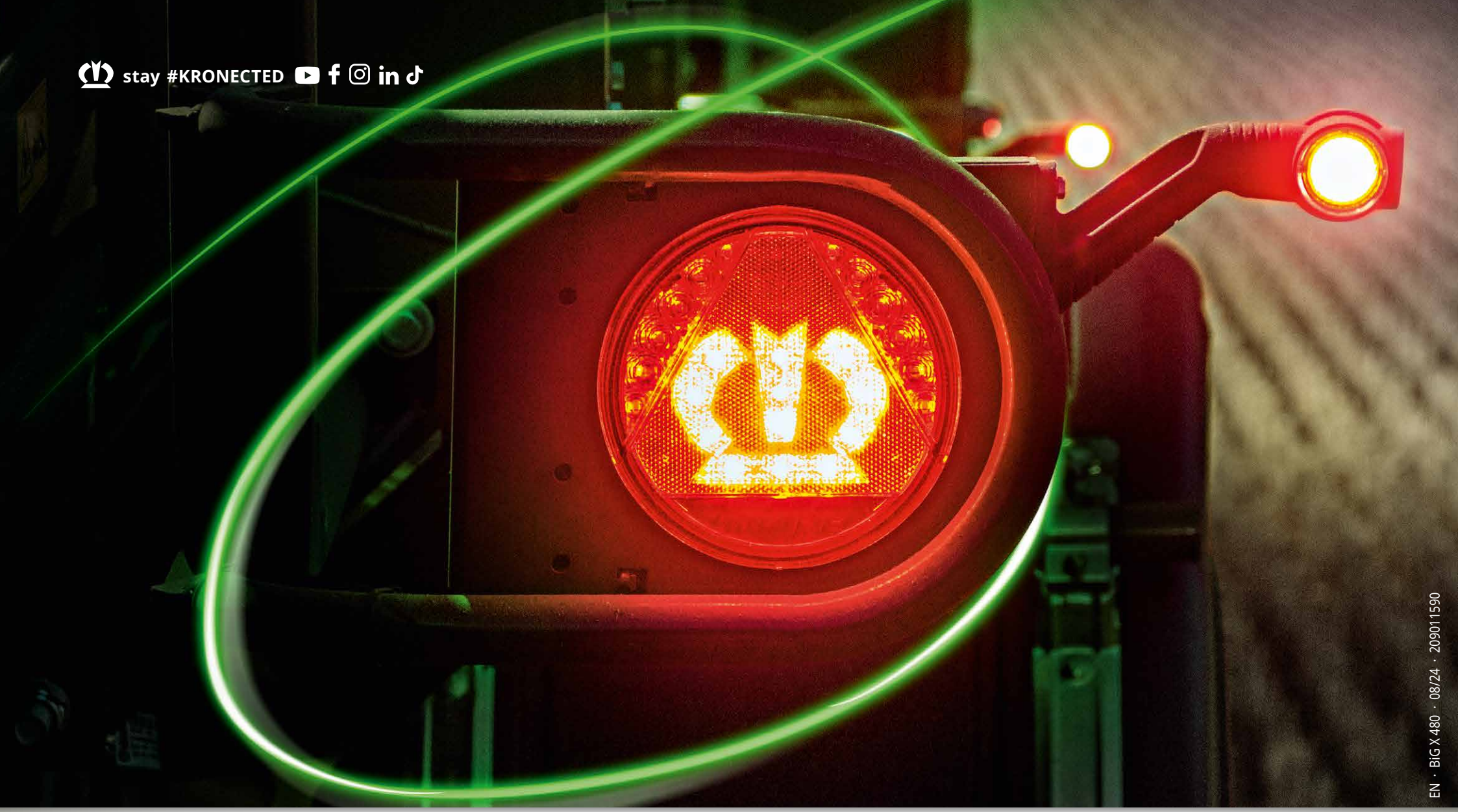
			BiG X 480	BiG X 530	BiG X 580	BiG X 630
Engine	Model number		MTU 6R 1300	MTU 6R 1300	MTU 6R 1500	MTU 6R 1500
	No. of cylinders		6	6	6	6
	Engine capacity	Litres	12.8	12.8	15.6	15.6
	Sustained engine power	kW/hp	360 / 490*	390 / 530*	436 / 593**	480 / 653**
	Max. continuous chopping output X-Power	kW/hp	338 / 460	368 / 500	408 / 555	452 / 615
	Max. continuous chopping output Eco Power	kW/hp	–	–	338 / 460	338 / 460
	Tank content / volume additional tank diesel	Litres	1,220 / 230 optional			
	SCR tank capacity	Litres	115			
	Tank content silage additives	Litres	275 optional			
Ground drive	Model		infinitely variable hydrostatic drive with wheel motors for up to 40km/h			
	Speed in field mode	km/h	0-25 (0-16 mph)			
	Speed in road mode	km/h	0-40 (0-25 mph)			
	Selectable anti slip control		Standard			
	4WD		Option			
Axles	Steering angle on rear axle	Degrees	50			
	Rear axle suspension		Hydraulic			
Drives	Header		Infinitely variable			
	Pre-compression rollers		Infinitely variable			
Pre-compression rollers	Pre-compression roller throat volume		Funnel shaped			
	Service position		Quick attach system (also with header attached)			
	No. of rollers/metal detector/no. of magnet coils		6 / series / 6			
	Metal detector – counterblade distance	(cm)	82 (2'8")			
	Chop length adjustment		Infinitely variable from the cabin			
Chopping drum	Drum width/diameter	(cm)	63/66 (2'1" / 2'2")			
	Arrangement of blades		chevron style, at 11° to counterblade			
	No. of blades		20, 28, 36, 40			
	LOC range	mm	5-31/4-22/ 3-17/ 2.5-15 (0.2"-1.2"/0.2"-0.9"/0.1-0.7"/0.1-0.6")			
	Cuts per minute		11,300/15,820/20,340/22,600			
	Stepless drum floor adjustment / spring-loaded drum floor		Standard			
Corn conditioner maize	OptiMaxx 250					
	105/123 slanted teeth		Option/Option			
	HD, Busa®CLAD***, slanted 105/123 teeth		Option/Option			
	123/144 slanted teeth		Option/Option			
	HD, Busa®CLAD***, slanted 123/144 teeth		Option/Option			
	Speed differential	%	30 / option: 40 – 50			
	Roller diameter / width / roll gap	mm	250 / 570 / 0.5 - 7 (10" / 0"- 0.3")			
Corn conditioner GPS	166 teeth: saw tooth profile		Option			
	Roller diameter / width / roll gap	mm	250 / 570 / 0.5 - 7 (10" / 0"- 0.3")			
	Distance control from the cab in combination with central lubrication		Standard			

* Certified engine output to ECE R120 in kW/hp: 390/530 ** Certified engine output to ECE R120 in kW/hp: 480/653
*** Busa®CLAD is a registered trademark of Gebrüder Busatis Gesellschaft m.b.H.

			BiG X 480	BiG X 530	BiG X 580	BiG X 630
Crop accelerator	Rotor diameter/width/no. of paddles		560/595/8			
	Paddle arrangement		arranged chevron-style			
	Speed	rpm	1,980			
	Stepless adjustment of the backplate / spring-loaded backplate		Standard			
Spout	Angle of rotation	Degrees	210°			
	Unloading height	m	6.00 (19"8")			
	Cross-section dimensions	(cm)	34x23 (1"1" x 9")			
	Automatic mirror function/parking position		Standard			
	Rotary drive system		Gearboxes			
	Spout lined with wear plates throughout		Standard			
Service & maintenance	Auto lubricator with compressor		Standard			
	Self-diagnosing system via operator terminal		Standard			
Cab	Air seat and buddy seat		Standard			
	Comfort air seat and buddy seat		Optional			
	Automatic climate control		Standard			
	Windscreen wipers on front and sides / Rear window wiper / 3 windscreen wipers		Standard / Option			
Dimensions	Length/width*/height*	m	7.52-8.25/3.00-3.30/3.91-3.98 (24'8"- 27'1"/ 9'10" - 10'10"/ 12'10" - 13'1")			
	Base machine weight (without header)**	Approx. kg (lbs)	13,900	13,900	14,100	14,100
	Weight distribution with EasyFlow 300 pick-up	F / R %	57/43			
	Weight distribution with EasyCollect 750-3 (7.50m ww)	F / R %	60/40			
Tyres* **	Front axle	Optional	710/70 R42			
		Optional	800/65 R32			
		Optional	800/70 R38			
		Option	900/60 R42			
	Rear axle	Option	540/65 R30			
		Option	620/70 R30			
		Option	710/60 R30			
Headers	EasyFlow: Pick-up	m	3.00 – 3.80 (9'10" - 12'6")			
	EasyCollect variable row width header	m	6.00 / 7.50 / 9.00 (19'8" / 24'7" / 29'6")			
	EasyCollect variable row width header	m	6.00 / 7.50 / 9.00 (19'8" / 24'7" / 29'6")			
	Autopilot and active ground contouring for EasyCollect		Option			
	XDisc: the direct cut head	m	6.20 / 7.10 (20'4" / 23'4")			

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

* Depending on tyre configuration ** Depending on level of specification *** Not freely combinable
1) Further options on request



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