



BiG Pack HDP II

High Density big baler



BiG Pack HDP II en

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- HDP II – Up to 70 % higher throughput over BiG Pack 1290 HDP
- HDP II – Up to 10 % higher density over BiG Pack HDP
- HDP II – Eight double knotters for maximum densities in material with a strong tendency to expand
- HDP II – Hydraulic fold-down twine boxes for easy maintenance, cleaning and filling





Taking baling to a new dimension

“Achieve up to 70% higher throughputs and 10% higher bale densities over the existing BiG Pack HDP model.” These were the ambitious goals the KRONE designers set for BiG Pack HDP II. Read on the following pages how these plans evolved over more than five years of research and development.

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HDP – How the idea evolved

KRONE – The High Density specialist

- More than 10 years of experience in High Density baler manufacturing
- Greater haulage efficiencies from up to 25 % higher bale densities
- HDP II: Up to 70 % higher throughputs at the same density and up to 10 % more density from the same ground speed over HDP
- 8 for weight: Eight double knotters warrant high-density bales even in little straw and at high work rates



2003:

KRONE seeks ways of optimizing the straw hauling logistics and perceives a substantial increase in straw bale density as the solution. The idea of a 'High Density Press' (HDP) is born.

2006:

Except for identical chamber dimensions, the new models are by now totally different in build from the traditional square balers. To absorb the enormous forces applied during baling, the HDP models have become substantially stronger now that more than 2.5 tonnes of steel are being used on each machine. The bale chamber is made 80 cm (2'8") longer to offer more resistance. The HDP delivers up to 25 % more density.



KRONE BiG Pack 1290 HDP II – the benchmark in bale density and ground speed

Do you haul straw long distance? Do you have to bale large masses of straw within only small time windows? Do you wish to make more efficient use of your storage capacities? KRONE engineers have developed the machine that suits just these purposes. Based on more than 10 years of experience with BiG Pack



1290 HDP (High Density Press), KRONE now presents a completely redesigned higher-capacity stable mate of the enormously successful BiG Pack HDP square baler. In doing so, KRONE has strengthened its leadership position in the high-density segment even further. The name 'BiG Pack HDP II' equates to even higher baling densities at substantially higher ground speeds!

2011:

The new HDP HighSpeed model is presented at Agritechnica, taking HDP throughputs to another dimension. Compared with its predecessor, this machine achieves a 20% higher throughput while densities remain unchanged.

2013:

Ten years on after the HDP project started the HDP II is launched. KRONE engineers have been developing a totally new BiG Pack square baler since 2009. The goal of this machine is to bale at significantly higher rates and significantly higher densities.



Active Pick-up

EasyFlow pick-up with powered feed roller

- 30 % higher pick-up speed for enhanced results
- Powered feed roller for superior performance in brittle material
- Camless design for quieter running
- 68 % fewer moving parts for low wear
- Maintenance-free and long-lasting



Nothing is left behind

Working at a width of 2,350 mm (7'9") (DIN 11220) and specified with five rows of tines that are spaced 55 mm (2.2") apart, the camless EasyFlow pick-up gives absolutely clean rakes. Resulting in a substantial increase in throughput, the powered feed roller and the feed augers on either side tick all boxes in dry and brittle material. The special mounting of the massive crop press roller leads to an optimised crop flow in wide windrows.

Gentle on the sward

The pivoting pneumatic wheels offer height adjustment without the need of tools and follow every curve. Their excellent casting capabilities reduce wear and tear on the mountings and give enhanced protection of the valuable sward.

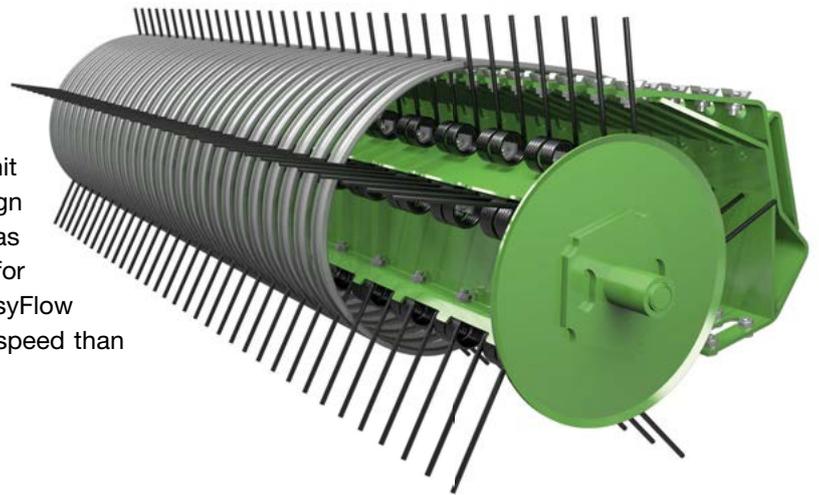


Active pick-up – greater throughputs from a powered feed roller

The KRONE 'Active pick-up' is the well-proven camless EasyFlow pick-up that benefits from the addition of a powered feed roller. The highlight of this pick-up is the special design of the galvanized strippers, which ensure a continuous and smooth flow into the machine as the tines retract. EasyFlow revolves at an up to 30 % higher speed to match the higher ground speeds and deliver higher throughputs.

Obvious benefits

The new EasyFlow pick-up unit impresses by a straightforward design and fewer moving parts as well as quieter running and reduced wear for less service and maintenance. EasyFlow operates at an approx. 30 % higher speed than traditional systems.



Standard depth control

The standard depth limiter adjusts the pick-up to work in long stubble and thereby reduces the strain on the gauge wheels, which will lift the pick-up in extremely undulating patches only.

Standard crop press roller

The massive crop press roller ensures a continuous flow of crop into the machine. This crop guard eliminates the risk of pushing up crop in uneven swaths. The machine operates permanently at maximum pick-up and output levels.

Easy adjustment

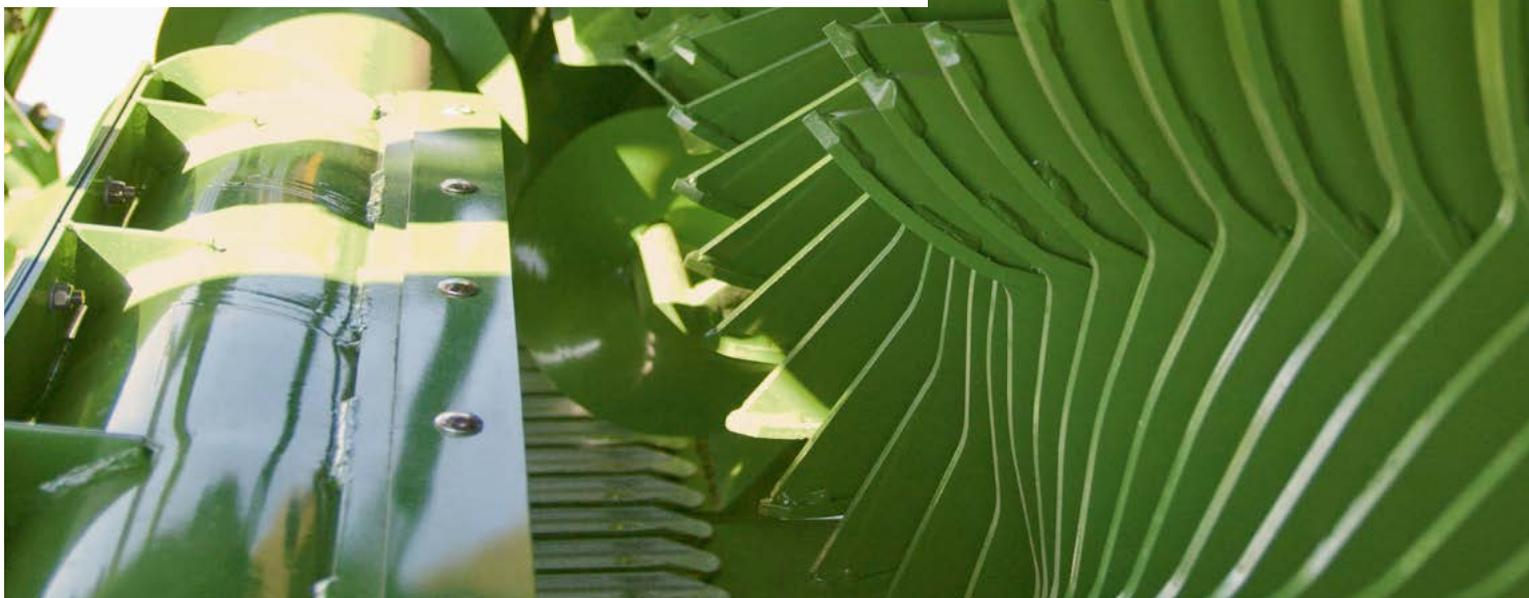
Tension springs control the ground pressure of the crop press roller and the pick-up. The roller's extremely low height is adjusted without tools by refitting chains.



KRONE X-Cut

Precision cuts from two drawers

- 26 knives accommodate in two drawers
- Tines feature wide and hard-wearing Hardox steel plates
- Hydraulic lowering knife bank with pull-out drawers
- Central selection of 0, 13, 13, 26 knives
- Individual knife protection from foreign objects



Massive rotor for even higher throughputs

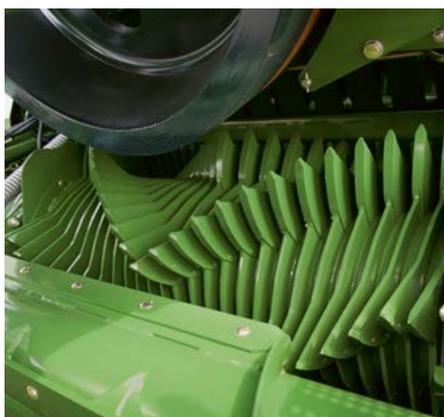
The 30 % bigger rotor cutter features five rows of tines for highest throughputs. These V-shaped tines pull the crop through the knives with a minimum of input power and ensure the bale chamber is consistently filled up to the sides.

Separate driveline

The pick-up and the rotor cutter are powered by a separate 4-groove poly belt, which shuts off automatically should there is a blockage inside the machine. Once the blockage is cleared, the pick-up and rotor are enabled only after the plunger resumed operation.

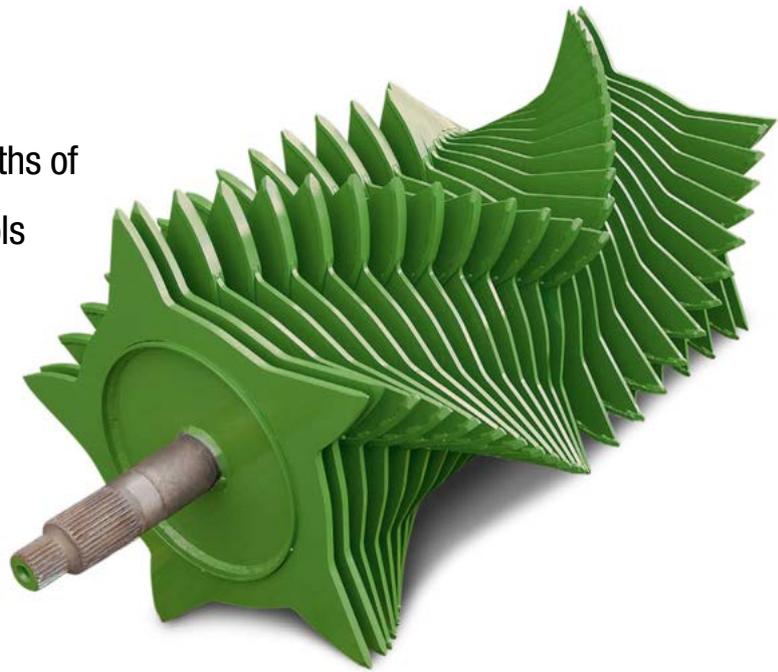
Wide Hardox plates on the feed tines

Higher throughputs, clean scissor-like cuts and harder wearing – the 20 mm (0.8") wide Hardox feed plates warrant high-quality forage. Any squeezing is eliminated.



Finest quality cuts!

Select 26 knives to achieve nominal cutting lengths of 44 mm (1.7"). The knife operation system controls the knives quickly and without the need of tools to use only half of the number of knives or no knives. The feed tines are arranged in a V and are plated with wide Hardox steel to provide finest cuts, highest throughputs and maximum longevity. In addition, the knife floor was modified to adapt to the crop flow and make BiG Pack even more efficient.



The 'pull-out drawer'

The X-Cut cutting system uses two knife drawers, each housing 13 knives. To swap the knives, the operator simply lowers the knife bank hydraulically and pulls each 'drawer' out to the side.



Maximum protection

All knives feature individual spring protection for trouble-free operation when picking up foreign objects. Once the object has passed, the knives automatically resume their working position.



Quick and easy

The central knife selection system provides for various cutting lengths: select the full number of knives to obtain a nominal length of 44 mm (1.7"); select half the number of knives for an 88 mm (3.5") length. 0 knives means the crop is not cut.

VFS

The Variable Filling System

- High throughputs, filling the chamber in 4 stages
- Pre-compressing the crop inside a feed chamber maximizes bale chamber efficiency
- Well-shaped bales from small windrows
- Straightforward mechanical design, no shear pins
- Auto overload protection clutch for high daily outputs



BiG Pack 1290 HDP II – baling at two different pto speeds

KRONE BiG Pack 1290 HDP II suits any situation and application. In big windrows, operate your BiG Pack baler at 1,000 rpm and 45 strokes per minute whereas in light windrows, reduce the rates to 800 rpm and 36 strokes and still continue producing solid bales.



Rock-hard bales at any one time



The VFS Variable Filling System from KRONE delivers rock-hard and well-shaped bales even from thin windrows and at slow forward speeds.

The VFS principle relies on a system of packer and feeder rakes, which feed the material into the pre-compression chamber where it builds up to receive an initial compression. After this pre-compression chamber is packed to capacity, the feeder rake feeds the material into the baling chamber.

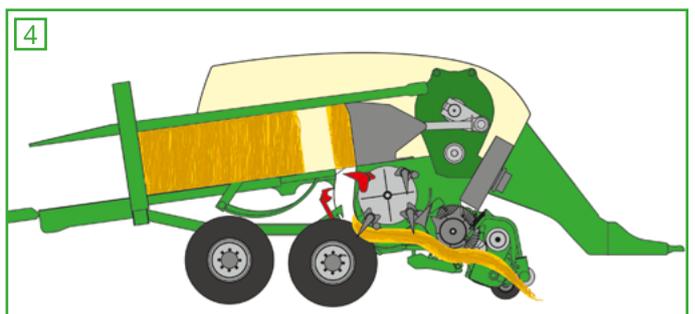
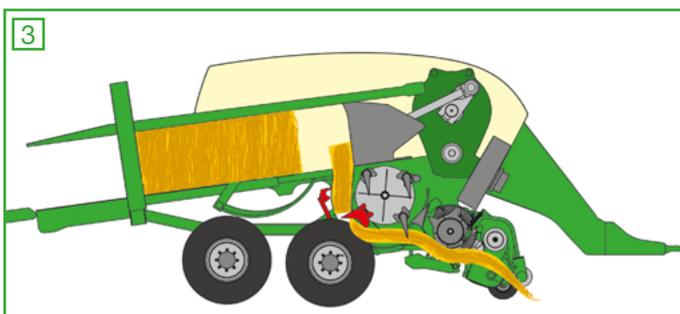
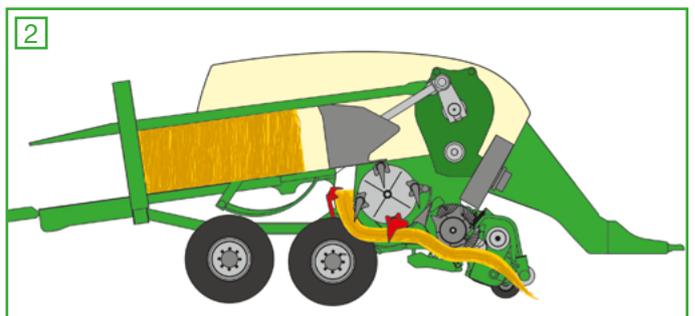
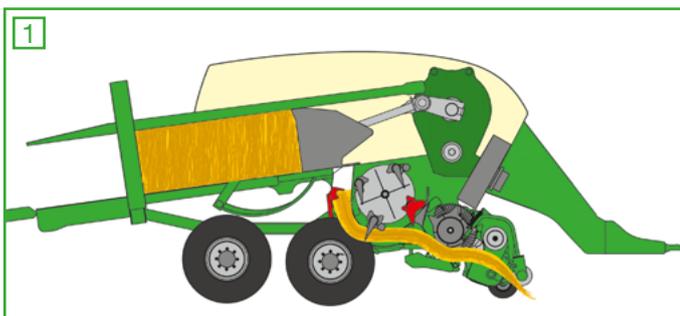
The Variable Filling System is just another KRONE solution that has received great praise and appreciation from the farming world. A prime example of the innovative power that drives KRONE and pioneering big baler technology, the VFS combines the best of two worlds – the benefits of systems that feed material continuously and of those that feed material in portions. VFS translates into maximum efficiency at any one time, irrespective of the shape and volume of the windrow.

Figure 1
VFS comprises three packer rakes, one feeder rake and one hay dog. The packers run in a shared cam track whereas the feeder rakes run in a separate and moving cam track.

Figure 2
As long as the feeder's cam track does not swing out of its way, packer and feeder continue feeding material into the feed chamber, pre-compressing it as they do so. The hay dog retains the material in the feed chamber, preventing it from entering the baling chamber.

Figure 3
When the feeding chamber is filled to capacity, the hay dog gives way to the pressure and clears the way for the material to enter the baling chamber, releasing the VFS clutch as it does so.

Figure 4
The clutch swings the entire feeder cam into a different position to enable the feeder to feed the crop into the baling chamber. Once this cycle is completed, the hay dog and feeder resume automatically their initial positions.



The driveline

Direct driveline for greatest efficiency and power

- Standard hydraulic start assist system
- High inertia and high speed result in quiet running
- The power flows down clutch-protected drive shafts
- No shear pins for maximum operator comfort



Starting up smoothly

All BiG Pack HDP II models are equipped with a hydraulic start assist system, which consists of a hydro motor that accelerates the flywheel to 300 rpm before the tractor pto is engaged.

High speed

The new intermediate gearbox on the drawbar brings two advantages: it reduces wear on the drive shaft as this is not angled and boosts pto speed to 1,180 rpm – a clever solution that helps maximizing the flywheel's inertia.

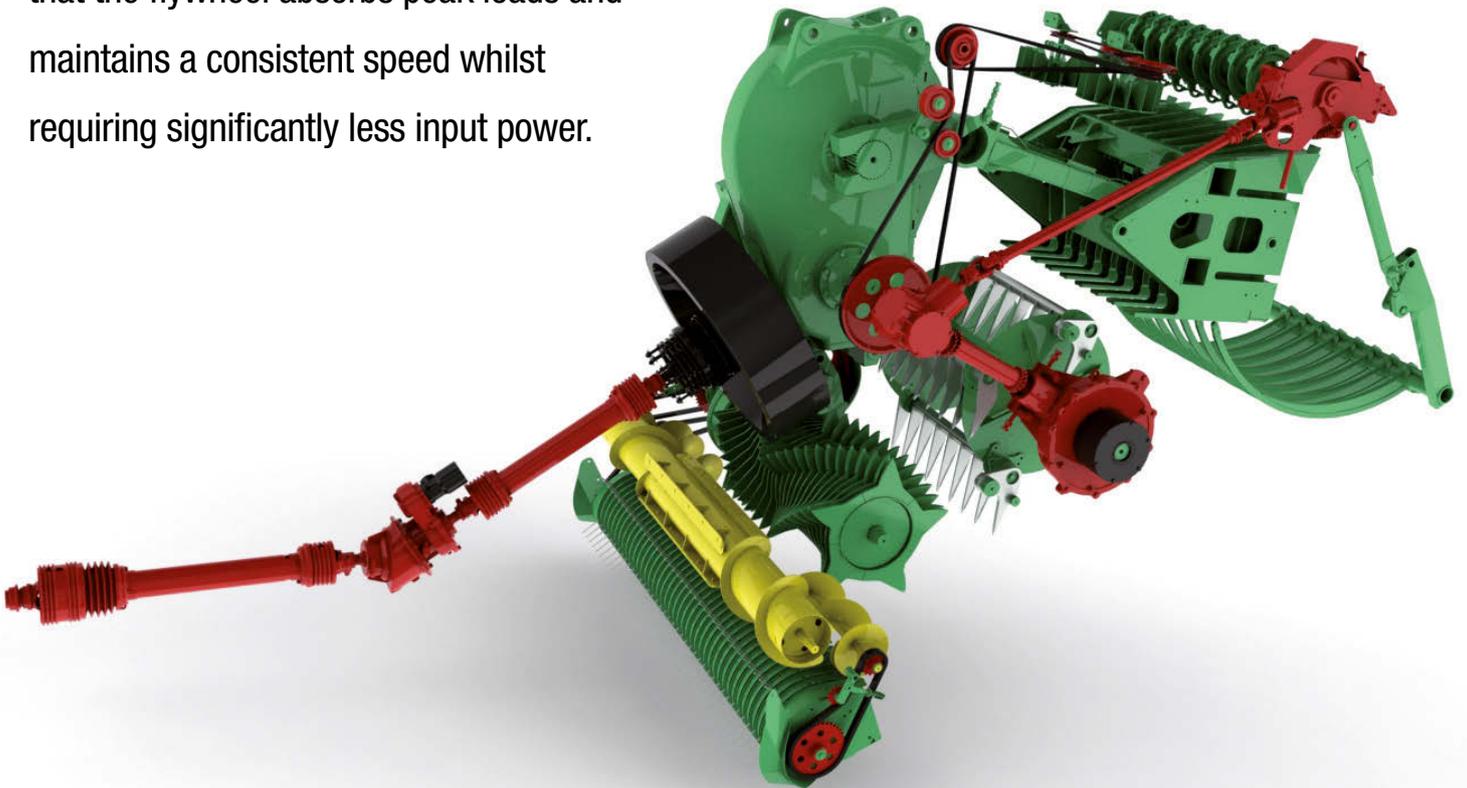
The biggest of its kind

The flywheel on a KRONE BiG Pack 1290 HDP II weighs in at 600 kg (1,323 lbs) and has this weight distributed as evenly as possible. Operating at 1,180 rpm, it develops as much rotary energy as possible and offers very quiet running at the same time.



Quiet please!

Every baler operator is all too familiar with rough running and mounting vibration, which are typical problems of plunger-operated balers. To cure the problem, KRONE gave its balers really massive flywheels from the very beginning. After all, it is by its sheer size that the flywheel absorbs peak loads and maintains a consistent speed whilst requiring significantly less input power.



Direct driveline

All drive power on a KRONE big baler flows down robust and low maintenance drive shafts and gearboxes as well as overload protection clutches. There are no chains and no shear pins. Buying this technology is buying into dependability and comfort.

Selectable driveline

The machines that are specified with a cutting system have the pick-up and rotor cutter activated via a separate belt. It is these separate drivelines for the plunger and the cutting system that make for smoother and more power efficient start-ups.

Efficiency to match

The pick-up on a VFS machine is powered directly by the main gearbox and drive shaft which has an integral cam clutch to protect the pick-up from overload.



The baling chamber

High-density and well-shaped bales

- A sensor on the star wheel ensures uniform bale lengths
- Robust yoke with massive hydraulic rams accounts for highest densities
- Electronic baling pressure control for uniform densities in varying conditions
- Easy unloading by de/selectable pusher dogs
- On-board hydraulic system supplies the baling chamber



Baling force control

Two sensors on the two flywheel con rods measure the current force of the plunger. A control system compares this measurement with the operator settings and corrects the pressure exerted on the chamber sides as necessary.

On-board hydraulic system

The baler features its own on-board hydraulic system, with a high-pressure pump supplying the plunger with oil from a separate oil reservoir. The pump is driven by the main gearbox.

Full power for rock-hard bales

Six massive rams operate the top and the side walls of the chamber. The heavy-duty yoke is designed to cope with highest stresses in non-stop operation.



In best shape

BiG Pack will be the baler for you.

Rock-hard bales of uniform densities and with tidy and smooth edges – these are the qualities that have made BiG Pack so famous.

The on-board hydraulic system with automatic baling force control ensures the shape is maintained and the edges are tidy, even in moist conditions and varying crops.

Greatest densities are achieved by the long funnel-shaped baling chamber with its retainers that temporarily retain the crop.



The retainers

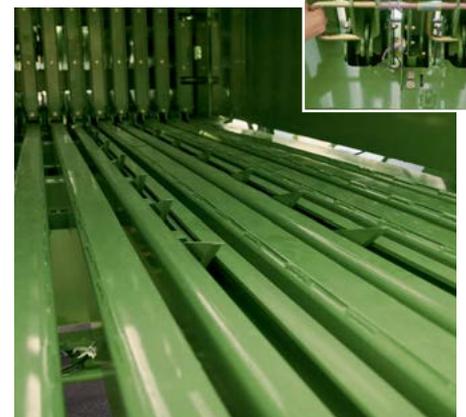
New and strong spring-loaded retainers on the sides and the top of the baling chamber retain the parcel of straw compressed last to ensure the chamber is filled uniformly.

Identical bales

KRONE uses an electronic system that measures the length of each bale on its big balers. The operator sets the length on the control unit or starts the knotter as required.

Deselectable pusher dogs

A pin sets the system, either enabling all pusher dogs to clear the entire bale chamber or disabling the dogs at the front so that solely the finished bale is unloaded.



The knotter

A world first:
8 double knotters for highest bale densities

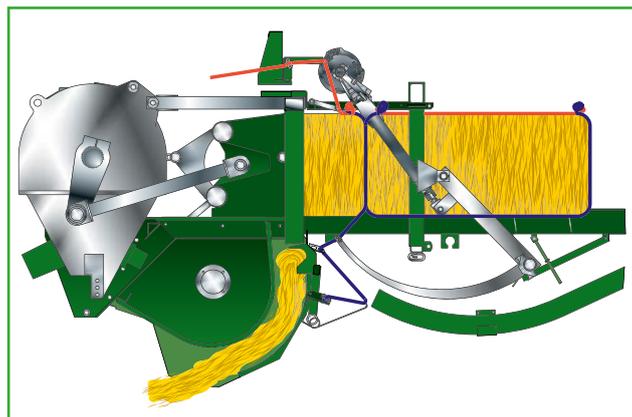
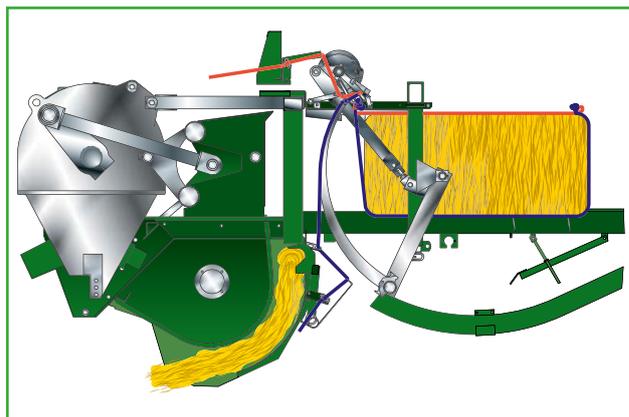
- Patented knotter system with 8 double knotters warrants dependably tied bales of maximum densities
- Standard knotter fan
- Mechanical high-performance blower is an option
- Standard storage capacity for 54 balls of twine



How the double knotter works

The knotter feeds an upper and a lower twine to the bale as this is being pressed and ties the threads to two knots – one at the bale's front end (starter knot no. 1) and one at its rear end (finishing knot no. 2). The lower twine is threaded through the tensioning system to the needle

and covers the bale's base as well as its front and rear faces whereas the upper twine takes care of the bale's top. It is this concept of tying ensures that allows the machine to bale any type of crop at maximum densities.



Always a perfect knot

Extremely high-density and well-shaped bales produced at very high ground speeds are a challenge for any twine, especially when the crop has a high tendency to expand. Therefore KRONE in association with Rassepe developed a brand new and patented knotter system especially for the BiG Pack HDP II. This system comprises eight slim double knotters, which expose the individual threads to only a minimum pull, which are thus able to hold denser packs.



High-capacity knotter fan

The optional knotter fan is a boon in very brittle material. The fan consists of two belt-driven rotors that provide a continuous flow of air to avoid debris collecting in this area.

Cleaning by air

The airlines are directed at the heart of the knotter to keep the area free of debris and warrant an absolutely dependable operation even in extreme conditions.

On-board compressor

The on-board compressor is an option if the tractor is not specified with air brakes. So you can clean the knotter with air nevertheless.





The twine boxes

Fold-down boxes for easiest access

- Standard storage capacity for 54 balls of twine
- Hydraulic fold for convenient access and easy refills
- Extra boxes for another 12 balls are an option



Always plenty of twine in supply

Each twine box on either side of the machine holds 27 balls of twine – abundant material to make it through long working days and make more than 800 bales without ever getting off the tractor. Four bottom twine rolls and two top twine rolls can be tied together before field work commences.

How about some extra twine?

In addition to the two standard twine boxes, an optional twine box is available at the rear end of the machine to accommodate 12 balls of twine or 10 balls plus a toolbox.



How about some extra twine?

A machine that operates eight knotters and churns out two bales per minute does have a healthy appetite for twine. To ensure there is plenty of tying material in store, KRONE expanded the twine boxes on BiG Pack HDP II and added another shelf. Each box now holds 27 balls. Add to this those extra 6 balls stored in each of the optional twine boxes. So, there is plenty of supply to make it through long working days without halting for refills. The boxes fold down for easy refills.



Hydraulic rams

The twine boxes fold down hydraulically and conveniently from the cab for easy refills and access to the service points.

Night becomes day

We naturally took care of an excellent visibility at night and fitted LED lights where ever these are required. This level of lighting provides best visibility up in the knotter bay, down on the needles and inside the twine boxes.





Control units

Putting you in control

- High-resolution colour touch screen
- Specified to ISOBUS standards, the CCI terminal controls all ISOBUS-compatible machines from KRONE as well as from other manufacturers
- CCI and ICAN: The CCI terminal offers a variety of different applications in addition to machine operation
- If KRONE BiG Pack is hitched to an ISOBUS compatible tractor, you can use the existing tractor terminal to control the baler



Delta terminal

The Delta terminal is a convenient display unit that makes it easy to control and monitor the KRONE machine attached. The easy-to-read colour touch screen gives the operator a full overview of all machine features and functions. But that's not all. The terminal is up to more! Provided the tractor is suitably specified, it uses tractor data to control the baler, such as by locking the steered axle automatically when the combination reverses.

Towards a digital future

With the ISOBUS-compatible BiG Pack, KRONE customers make a huge step towards a digital future today. Yet it's up to you how many steps you want to take at a time. The KRONE Delta terminal is extremely easy to operate and offers a colour touch screen, which reads out all relevant machine data. Include the ISOBUS-compatible CCI terminal in your order and enjoy a virtually unlimited potential.



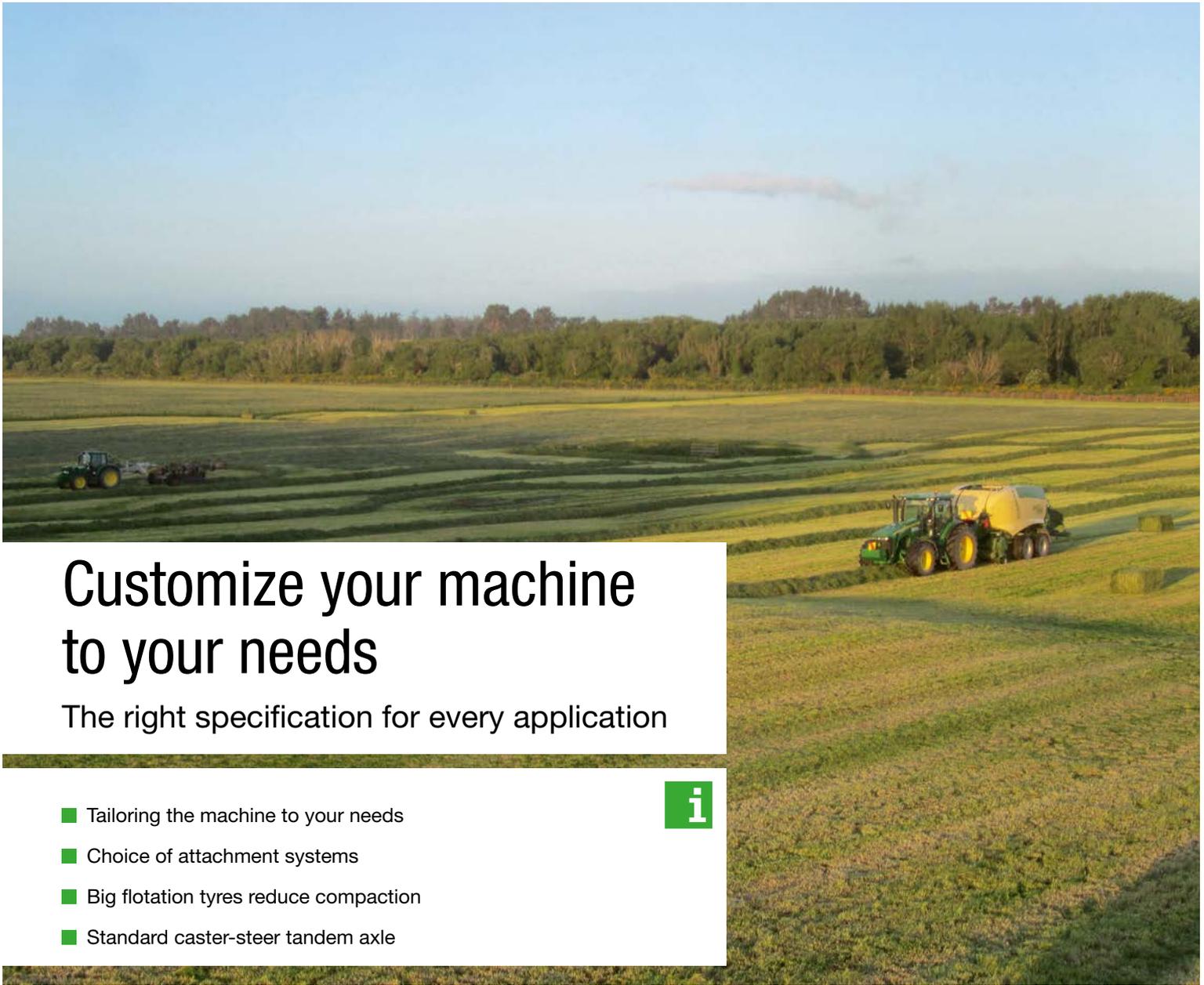
CCI terminal

The ISOBUS compatible CCI terminal is your admission ticket to the digital data world. Here is an example of what it can do for you: Send a specific job from your office PC directly to the in-cab terminal and its field navigation system will guide the operator reliably to the relevant field, where he starts the job from the Task Manager. Once the job is activated, the system starts collecting all relevant data. At the end of the job, the operator communicates the data to the office PC either via the Internet or by saving it to a USB drive. The data may then be imported into a farm management software for further processing. Last, the invoice drops out of the printer or a screen map shows the bales as they are scattered in the field. This is what you get from a suitably specified CCI terminal. For more information, please refer to our ICAN brochure.

ISOBUS-compatible tractor terminal

All ISOBUS-compatible KRONE machines can be controlled from the tractor's existing ISOBUS terminal. Simply connect one single line and enjoy your customized user interface on the existing tractor's display screen. In addition, further controls like the WTK joystick can bring further convenience, depending on tractor specification.





Customize your machine to your needs

The right specification for every application

- Tailoring the machine to your needs
- Choice of attachment systems
- Big flotation tyres reduce compaction
- Standard caster-steer tandem axle



Match making

Farmers in different countries use different attachment systems. BiG Pack HDP II gives you the choice to choose the attachment system that suits you best and that complies with the statutory requirements in your country. Choose from the K80 ball hitch, the BallHitch which is the perfect choice for the pivoting drawbar, or the ring hitch for VFS machines.

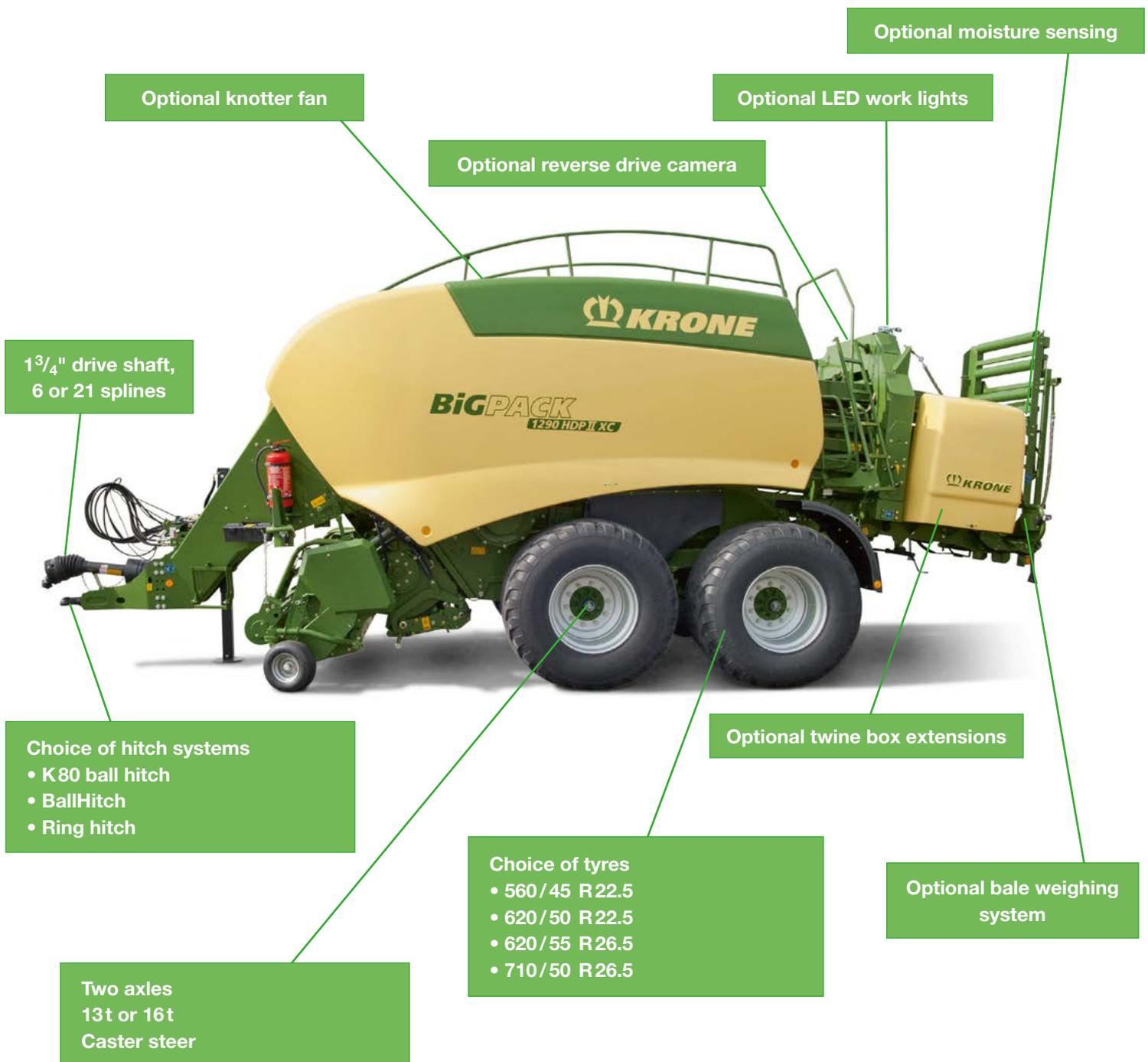
Better safe than sorry

All BiG Pack HDP II models have caster-steer tandem axles as standard specification; the VFS models are available with two different axle sizes and all machines with cutting systems have the bigger 16t axle as standard specification.



The right system for every application

Varying conditions sometimes ask for different specifications and options. KRONE offers a large choice of options that help you customize your BiG Pack 1290 HDP II to your needs.



Options

Customize your machine to your needs

- Option: Moisture sensor inside the baling chamber
- Option: Bale chute with integral weighing system
- Option: Extra twine boxes at the rear
- Option: High-capacity knotter fan
- Option: LED work light



Harvesting quality

The optional moisture sensor keeps the operator updated on the current crop condition, who reads the information on the in-cab display screen and receives a warning whenever the current level exceeds the preset limit.

Watching the bale weight

HDP stands for 'High Density Press', the hallmark feature of this KRONE big baler. The optional bale chute integrates a weighing sensor and does not unload a single bale without weighing it. The weight is read out on the terminal and the total bale weight is accrued in the bale counter.

Everything under control

Why not specify your BiG Pack HDP II with a camera system? This is nearly an indispensable feature for best rear view on the unloading process and when reversing. The colour screen display unit has two camera ports.



Enjoying in-field convenience

The standard specification KRONE BiG Pack 1290 HDP II already offers great operator comfort, including electric bale length adjustment, overload protection clutches instead of shear pins, auto lubrication and much more. For even greater convenience and effectiveness, choose from a number of options that add further features to your machine, including moisture sensing and bale weighing systems that give accurate information on the job at hand or LED work lights and reverse cameras for unobstructed vision and full overview.



Plenty of twine in store

To avoid twine supply is the bottleneck of your capacious BiG Pack HDP II, KRONE offers additional twine boxes that are attached at the rear. These carry 12 extra balls of twine or 10 balls and a toolbox.



A clean affair

An optional blower is available to support the knoter fan in very thin and brittle material. The blower is powered mechanically via a belt and provides a consistent flow of air to keep the knoter bay effectively clean.



Let there be light

A three-piece LED work light kit is available for all BiG Pack models to specify the machine for night work. The machine's harness provides already for the necessary connections for two lights on the yoke and one on the pick-up. All lights are controlled from the in-cab control unit.





Technical data

BiG Pack

		BiG Pack 1290 HDP II	BiG Pack 1290 HDP II XC
Chamber width x height	mm	1.200x900 (3'11" x 2'11")	1.200x900 (3'11" x 2'11")
Bale length	mm	1.000 - 3.200 (3'3" - 10'6")	1.000 - 3.200 (3'3" - 10'6")
Min. input power	kW/hp	170/231	190/258
Pick-up work width DIN	mm	2.350 (7'9")	2.350 (7'9")
Length (transport position)	mm	9.050 (29'8")	9.050 (29'8")
Length (working position)	mm	10.800 (35'5")	10.800 (35'5")
Height	mm	3.700 (12'2")	3.800 (12'6")
Width	mm	depending on tyres	
Weight	approx. kg	14.000 - 14.700 (30,864 - 32,408 lbs)	15.400 - 15.800 (33,951 - 34,833 lbs)
Tyres on tandem axle 50 km/h (60 km/h) (31 mph (37 mph))		560/45 R22.5 (width 2.995 mm (9'10")) 620/50 R22.5 (width 2.995 mm (9'10")) 620/55 R26.5 (width 2.995 mm (9'10")) 710/50 R26.5 (width 3.190 mm (10'6"))	560/45 R22.5 (width 2.995 mm (9'10")) 620/50 R22.5 (width 2.995 mm (9'10")) 620/55 R26.5 (width 2.995 mm (9'10")) 710/50 R26.5 (width 3.190 mm (10'6"))
Brakes*		Air	Air
Twine ball storage		54	54
Double knotter		8	8
Max. no. of knives			26 (0/13/13/26)
Min. cutting length	mm	–	44 (1.7")
Stroke length	mm	800 (2'8")	800 (2'8")
Strokes / minute		45 (36 at 800 rpm)	45 (36 at 800 rpm)
Drive shaft		1 3/4" Z=6 / Z=20	1 3/4" Z=6 / Z=20

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

*Hydraulic brake is available in specific markets.

KRONE is serious about aftersales service,

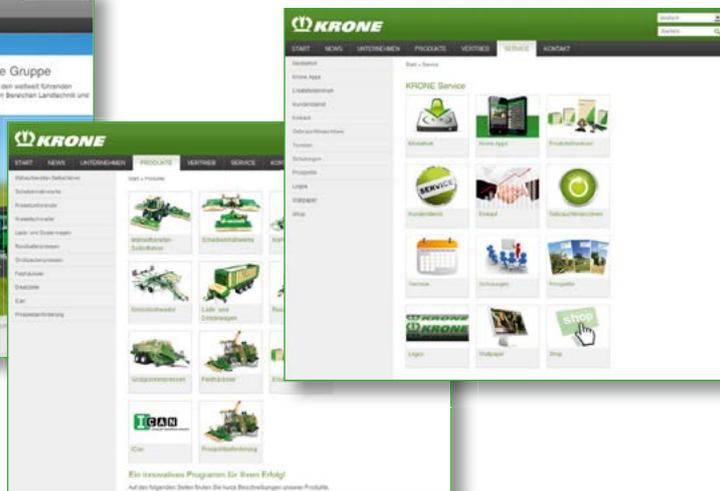
because every operator has at least once seen his harvest chain grind down to a halt because of a downed machine – clearly an experience we all can do without. However, when this does happen then every minute counts. KRONE is aware of that and operates a dense network of professional dealerships, which operate well-stocked warehouses near your operation. For you to get your parts faster.

Original parts are more cost-effective, because it is approved quality that really pays.

Haven't you been through the experience that your local dealer claimed a part was high-quality and then it turned out that it did not work? Tests conducted by agricultural magazines have shown that manufacturer-tested quality parts last longer and operate more reliably. Do not compromise on quality; and always trust genuine KRONE parts.



KRONE Internet



Discover the world at KRONE and browse through our website pages to find facts and figures and also new developments plus a wide range of services. Explore our website and find out how versatile the KRONE world is.



News

Click here to find up-to-the minute information about KRONE – from new product presentations to show reviews. Here you are at the pulse of KRONE life.



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.



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.

Your KRONE dealer

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