



Just chop it!

The all-new 8000 Series Self-Propelled Forage Harvesters



WELCOME TO A NEW WORLD

Choose John Deere and you invest in more than a world-beating machine. You join a team. A team that provides world class service and support to keep you chopping non-stop. But that's not all. Something extra comes as standard: John Deere's unrivalled reputation. One company. One name. Ever since 1837.

We have invested more in research and development for this new generation of forage harvesters than ever before. We have listened to you at every stage – evolving and fine-tuning to ensure we support your business growth.

Welcome to the new 8000 Series. Welcome to a new world.





THE ALL-NEW 8000 SERIES.
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GIVE YOUR OPERATORS MORE
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GIVE YOUR BUSINESS MORE
Engine efficiency, fuel economy, dealer and
parts support, John Deere FarmSight 51 – 75





CREATED BY ONE HAND. BUILT BY ONE COMPANY.

John Deere is the only agricultural equipment manufacturer to design and build its own engines, drivetrains, hydraulics, cooling systems, electronics and telematics.

The result? A fully integrated machine with every component designed to work together as efficiently as possible.

A guaranteed parts supply for the future and a professionally trained dealer support network familiar with every detail.

It's why the new 8000 Series gives you more than any other forage harvester.





THE ALL-NEW 8000 SERIES. GET MORE.

Our customers gave us a clear brief for the new 8000 Series. World beating performance in six key areas: power efficiency, forage quality, comfort, reliability, traction and cost efficiency. It was a huge challenge. But we believe we've delivered.



GET MORE

MORE RELIABILITY

Made for more power. The new 8000 Series is designed for the power demands of the future..

Made for quality. The new 8000 Series is made without compromise. Quality bearings and gearboxes set new standards for efficiency and durability.

Made for all conditions. From the high altitude, arid plains of Arizona to the soft, wet fields of northern Europe, our durability test programme covered all crops in all conditions.



MORE POWER EFFICIENCY

Made with an intelligent engine layout. The longitudinal position of the engine delivers outstanding rear visibility and smart cooling for a better air flow and efficiency.

Made for a dynamic crop flow. The new feedroll and header drive minimise intake losses and allow our low resistant cropflow to boost throughput per HP into a new dimension.

Made for less weight. It's the easiest way to gain efficiency. Smart design, high strength steel and the use of aluminium allowed us to optimise the overall weight.

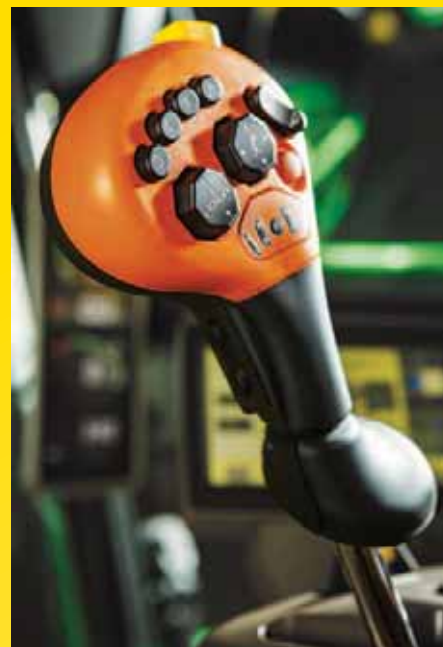


MORE COMFORT

Made for the operator. Designed by you and built by us it includes everything you asked for. You'll enjoy panoramic views, plenty of space and intuitive controls and displays.

Made for less maintenance time. Easy servicing, less daily maintenance points, excellent access to all areas and an integrated toolbox compartment with cleaning facilities make it easier to keep you and your forager in perfect shape.

Made for more extras. Our operator package includes our new 8000 Series driver's collection, training and a toolbox. Make the machine fit your needs even better with the optional i-, Profi or Longlife Package.





GET MORE

MORE GRIP

Made for the toughest soil conditions. The combination of 42" tyres and less weight is a simple and efficient formula that gives you more traction and less compaction. Add to this higher ground clearance and the 8000 Series will handle any field conditions.

Made for a compact design. With a minimum transport width of 3 m and even weight distribution, the 8000 Series is highly manoeuvrable on the road and in the field.

Made for ProDrive. ProDrive, the outstanding automatic transmission on the market, has been further improved for the next generation. More torque on each axle gives you the best traction in all conditions.



MORE COST EFFICIENCY

Made for low wear part costs. Go several seasons without exchanging our ultra hard wearing DuraLine crop flow components and our new generation of long lasting shearbars and DuraLine grass and maize knives.

Made for an unbeaten fuel economy. Our new driveline concept perfectly fits to our unique engine speed management which is already proven by Profi and customers to reduce fuel consumption by almost 20% when harvesting.

Made for predictable maintenance costs. PowerGard service packages give you the peace of mind of fixed service and repair costs for accurate budgeting of running expenses.



MORE FORAGE QUALITY

Made for more precision. Dura-Drum not only gives you the best forage quality and the flexibility of a very wide length of cut range, we've made it even better with an improved crop flow and less adjustment for lower wear.

Made for revolutionary kernel processing. Choose your option for more starch release. All kernel processors in our new 8000 Series feature a huge diameter and KernelStar2 even offers up to 50% more surface area for aggressive tearing action and excellent starch release.

Made for intelligent forage management. John Deere Harvest Lab measures both moisture and constituent content in real-time for accurate analysis of silage quality. Add to this our automatic dosing system and you can actively manage your feedstock better.





GIVE YOUR CUSTOMERS MORE

The quality of a farmer's feedstock is critical to his business. Better quality silage means lower winter concentrate costs. Reliable constituent measurement means more accurate planning and management of feedstocks. Only the new 8000 Series gives your customers more.

“*With accurate information on the nutrient value of my silage I can plan my feedstock with greater confidence.*”

TAKING THE BEST. CHANGING THE REST.

We kept what you told us was great about our previous generation forage harvesters and we changed the rest.

The DuraDrum cutterhead was already renowned for producing the best quality forage. Now it's even better. When you add our infinitely variable length of cut and patented KernelStar processing technology you can cut any combination of high quality forage to satisfy even the most demanding farmers and biogas operators.

Wide cut length range

So you can give your customers the flexibility they demand.

Less power consumption

Set the length of cut to exactly what you want and burn less fuel with every cut.

Extra fast sharpening

The drum stops in just 5 seconds and automatically starts the reverse grinding process if required. It means it only takes a moment to keep your knives razor sharp for a longer life and more efficient cutting.

Adjustment-free

The combination of the new shearbar adjustment and revised knife design uses the full width of the tungsten coating without having to readjust the knives. So there's less work for you and the knives.

DuraLine knives

We've increased the length of the tungsten carbide coating (+33% for grass and +43% for maize) so knives last longer and running costs are lower.

Better cropflow protection

The combination of the new knife system and foreign material detection system provides improved protection of cropflow components and minimises unplanned stoppages.





ONE CUTTERHEAD. ALL CROPS.

Our new universal cutterhead is designed to perform equally well for the very different requirements of both biogas producers and livestock farmers. It gives you the flexibility to meet the demands of all your customers without having to compromise forage quality. Depending on your specific requirements, you can also choose from either 40, 48, 56 or even 64 knife configurations (limited availability).

Smooth crop flow

Using advanced high speed video cameras we were able to understand and refine the crop flow in ways that were not possible a few years ago. The larger diameter 680 mm drum creates a faster crop flow which makes a big difference when the harvester is working at extra short cut lengths. The net result is higher throughput for lower power consumption.

High efficiency cutting

The combination of a new knife holder design and longer knives, with a 20 mm tungsten carbide coating, means you can keep chopping without any loss in performance as the knives wear. What's more, with our new smart shearbar system there's no need to make any adjustments so it's never been easier to cut high quality silage all season long.

Lower fuel consumption

The newly designed knife holders help create a more uniform and focused crop stream. They also optimise the point of exit for the crop, helping to reduce the overall power demand of the crop flow by up to 20 KW. When you're chopping non stop, day after day, that adds up to significant fuel savings. On top of that, they can carry up to 35% more crop.



IMPROVED KERNEL PROCESSOR. BETTER ALL ROUND.

Our traditional roller kernel processors have a well proven reputation with hundreds of thousands of hours of field testing. For the 8000 Series we've completely redesigned the entire processor for even more reliable performance and better kernel cracking.

Improved reliability

Stronger springs and an improved labyrinth sealing system for the drive bearings significantly extends the long term reliability, even in challenging conditions.

Better adjustment

An independent drive for the adjustment mechanism takes the load off the adjustors for better long term reliability.

Higher throughput

All processors now have 240 mm diameter rolls for more efficient processing and lower wear.

5 minute crop to crop changeover

The kernel processor can be removed in just five minutes for rapid changeover during overlapping harvest seasons. The 'swing out, swing in' design lets you lift out the kernel processor and easily replace it with the grass chute. And, when the season is over, you can use the integrated crane to lift it out of the machine for servicing with no additional support or tools.





KERNELSTAR2. PROCESSING REDEFINED.

Our revolutionary KernelStar multi-crop processor has set a new standard for kernel processing. Now meet its successor: KernelStar2. Its patented design has two key advantages over straight-edged or cylindrical roller kernel processors.

The bevelled discs produce a more aggressive tearing action which smashes every kernel for maximum starch release and higher nutrient value. And it has a higher throughput so you can cut faster, even in heavy, tall maize. Building on our field experience over past years, the processor has been completely redesigned for the 8000 Series.

KernelStar2 features an up to 50% larger disc surface and the same new adjustment mechanism and stronger springs as the roller processors.

Releases more energy
Smashes every kernel
for maximum nutrient value.

Higher quality forage
More consistent lengths.

Higher throughput
20% bigger discs, up to 50% more
surface area, greater capacity compared
to the previous KernelStar.



ACCURATE CROP ANALYSIS. BETTER FEEDSTOCK MANAGEMENT.

Mounted on the crop spout, HarvestLab measures both moisture and crop constituents in real-time. The most popular system in the industry, it was developed and patented with Carl Zeiss and uses Near Infrared technology to measure harvested crop 17 times every second. Independently certified by the DLG (Deutsche Landwirtschafts-Gesellschaft) to an accuracy of $\pm 0.78\%$ for dry matter content, HarvestLab takes the guesswork out of producing high quality silage. When you add to this our real-time constituent measurement, it also has the power to transform the way your customers manage their feedstocks and plan their future choice of crop varieties.

No set-up

HarvestLab is pre-calibrated and the new mounting bracket requires no adjustment. So you'll enjoy accurate readings all season.

Works in any crop

Provides accurate constituent data in alfalfa, barley, corn earlage, grass, maize, wheat and whole crop.

Better silage quality

By linking the HarvestLab measurements to the cutterhead control system, the optimum cut length based on the moisture reading is automatically set.

More efficient silage packing

Tests have shown that silage packing is improved by up to 25% with the correct length of cut. This reduces air pockets for better anaerobic digestion and higher silage quality.

Better feedstock management

Customers can now calculate the composition of their clamp for better planning of feed rationing and identify any requirements for supplementary additives.





Crop	Material	Moisture	ADF*	NDF**	Starch	Protein	Sugar
Corn Silage	Freshly harvested and ensiled	X	X	X	X	X	
Alfafa		X	X	X		X	X
Snaplage		X	X	X	X		X
Whole Crop Silage		X	X	X	X	X	
Grass		X	X	X		X	X

*ADF = Acid Detergent Fibre
 **NDF = Neutral Density Fibre

INTEGRATED CROP DOSING. INCREASED NUTRIENT VALUE.

Another unique added value feature of the 8000 Series is the fully integrated Advanced Dosing System, ADS Twin Line. Featuring two separate tanks, a 30 litre concentrate tank positioned alongside the cab for easy access and a second, 300 litre tank located under the shielding at the rear of the machine, ADS Twin Line is a highly versatile feedstock management tool.

The liquid dosing nozzles are located in the spout for easy access and you can choose either fixed or variable dosing rates based on moisture or constituent readings from HarvestLab. Twin tanks also allow two different inoculants to be added together or at different

times. So, for instance, when chopping grass, acid could be added from one tank to a wet area of grass to prevent mould growth and then, in a dry area, a microbial inoculant could be added to support fermentation.



Easy to read display



30 l concentrate tank



HarvestLab moisture and constituent measurement







“ *I am impressed by the new 8000 Series after having worked with it in grass. The possibilities this new machine offers, especially in regard to forage quality, are unique. All the requirements we – as a group of nutritionists – were discussing with John Deere for a new and modern additive dosing system and an improved forage quality have been taken into account.* **”**

Heinz-Günter Gerighausen
NUTRITIONIST





OPTIMUM CUT. MORE ENERGY.

The 8000 Series doesn't just produce the optimum short cut length silage required for biogas production, it also helps customers manage their operations with greater certainty. The combination of HarvestLab and our fully integrated dosing system gives biogas producers the information they need to maximise gas production.

Extremely short chop length

The DuraDrum cutterhead cuts as short as 3 mm, giving you the maximum flexibility for biogas production.

Excellent crop packaging

Even cut lengths ensure excellent compaction for better anaerobic fermentation and higher gas yields.

Every kernel smashed

Our new KernelStar2 processor delivers superior kernel processing for more efficient fermentation of maize and other whole crops.

Better production management

HarvestLab moisture and constituent measurement gives customers the information they need for better biogas production.

Multi-crop versatility

Just change the knives or cutterhead configuration on the DuraDrum cutterhead and you can harvest different crops with the same machine.

Accurate fermentation control

The integrated Advanced Dosing System lets you add fermentation inhibitors or accelerants based on the HarvestLab readings to ensure optimum fermentation.

Clean silage

All of our headers have excellent ground following qualities which avoids soil contamination for more effective fermentation.





GIVE YOUR OPERATORS MORE

Everyone wants to drive a breathtaking forager: Design, Styling and technology are all important in attracting the best operators.

A motivated operator means more acres cut in a day. An operator in control means more efficient cutting. Only the new 8000 Series gives your operators more.

“The cab is a place I enjoy working in and the controls and systems help me do the best possible job I can.”



DESIGNED BY YOU. ADMIRIED BY EVERYONE.

Beautiful ... Dynamic ... Powerful ...

When people see the new 8000 Series for the first time it brings on different emotions. Some break into a big smile, others find their heart beating faster. What will it drive like? How will it cut?



The temptation to climb up into the cab and find the answer to these questions is overwhelming. It's designed to be driven.

From the very first concept, we shared everything with you, our customers. What did they like? What would they change? We revised our concepts and then we shared them again. And again. And again. For more than 5 years we refined our designs. We tested different concepts back to back with the competition. For us, design was more than sleek lines and purposeful looks.

It was about the whole experience of owning, driving and maintaining the 8000 Series. We checked every last detail. How easy was it to get the kernel processor in and out? Could it perform well in difficult crops? Was it easy to service and maintain? What did operators think?

It's why driving and owning the new 8000 Series is a completely new experience. It's better by design.



The design of the 8000 Series mirrors the innovative technology and functionality of John Deere. The power, dynamic, ruggedness and precision of the machine become tangible and intense.

Prof. Matthias Schönherr
DESIGNER







PREMIUM WORKSPACE. USER-FRIENDLY ENVIRONMENT.

Quiet. Well equipped. Relaxing.

We've considered every last detail. The clear displays keep you informed, a refrigerator keeps your food and drink cool, and Bluetooth connectivity keeps you in touch. We think you'll find the 8000 Series cab is worth staying inside for several extra hectares every day.

Anti-glare screen

The front screen has been designed to minimise reflection, giving you clear visibility of the crop and header at night and in rainy conditions.

Bluetooth connectivity

Connect your devices to the harvester's audio system for hands-free calling or music playback.

Handy storage

There are plenty of areas to store all your personal and work items.

Automatic air conditioning

Adjustable from the CommandARM, you set your ideal temperature.

Better visibility

Slim cornerposts minimise any obstructions and taller glass side panels give better visibility for safer and more accurate trailer loading.



Excellent back protection

The air suspension seat cushions your back from jolts and vibrations on uneven surfaces.

Ergonomic control console

Programmable keys for repeatable tasks. All the main switches and controls are conveniently placed on the CommandARM which moves with the seat.

Optimum driving position

The seat is placed in the centre of the cab and the steering column pivots in two places so you can achieve the optimum driving position.

Instructor seat

Conveniently placed for operator training, the seat folds up to create a work space.

Central information display

The CommandCenter has all the main machine operating information including ground speed, engine rpm, length of cut, etc.

Chilled food & drink

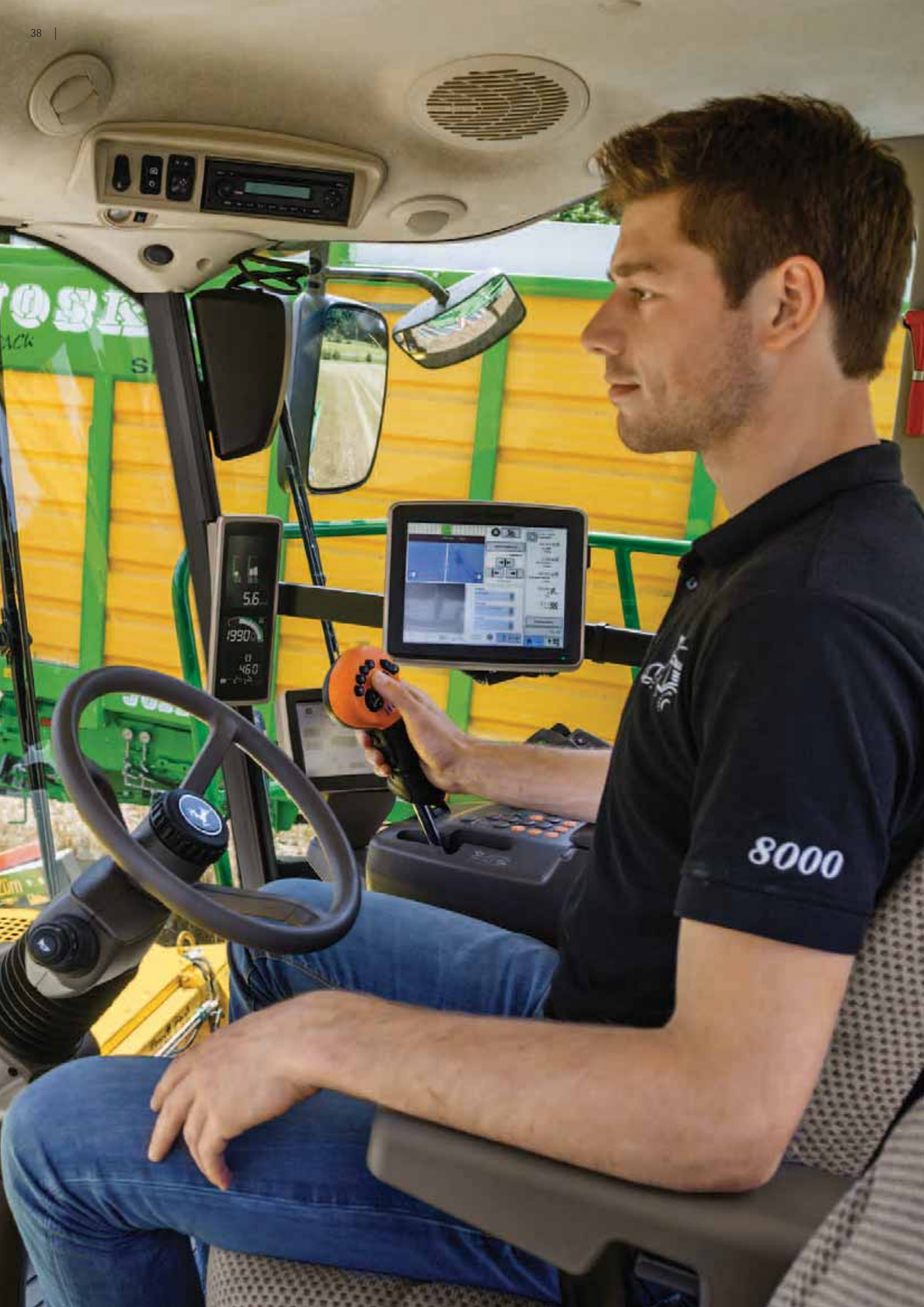
The large refrigerated compartment is essential for long, hot days in the cab.

One-handed control

All the key controls, ground speed, header folding and lifting, spout turning and lifting, feedrolls and cutterhead engagement can be controlled from the multi-function lever.

Plenty of power

A series of 12 V sockets enable you to charge all your phones, tablets and other electrical items



DESIGNED FOR COMFORT. BUILT FOR WORK.

Hour after hour. Day after day.

Operating a harvester is hard work. That's why comfort was a priority for the design team. We consulted operators at every stage of the machine's development to see what features would make their job easier. Apart from designing a premium cab that felt more like a mobile office, we looked at every task throughout the working day. From early morning set up to road transport, harvesting and end of day maintenance, the 8000 Series takes operator comfort to a new level.

On-board cleaning facilities

The integrated water tank is handy if you need to clean up after a job. And the high pressure air line is equally useful for removing dust from the radiator screen or cleaning the cab.

On-board tools

All the important tools for everyday maintenance and repair are included as standard.

Fast access

You can access the cutterhead and knives quickly, so routine checks and maintenance can be done in a few minutes.

High driving position

The large tyres and anti-glare front screen give you a commanding view ahead. The high driving position also lets you see over the top of maize – a real benefit when you're cutting all day long.

All-weather visibility

High glass panels to the front and rear and wipers on the side doors and rear screen give great all-weather visibility. And, when it gets sunny, you can always pull down one of the sunblinds.

Excellent rear vision

Electrically adjustable, heated rear view mirrors and a longitudinal, low positioned engine layout give you excellent rear vision. On board video cameras, viewable through the GreenStar display, are also available.

Minimum maintenance

An automatic greasing system, sealed for life drives and bearings, and an efficient, low friction crop flow all help to minimise routine maintenance. You can also specify an oil and greasing system which allows you to lubricate the pick-up from the cab, saving even more time.

Hands-free control

AutoTrac RowSense and RowTrak II are two tried and tested guidance systems which take away the stress of high speed harvesting. Bluetooth connectivity also means you can take calls without the distraction of pressing buttons or checking screens.

Easy to read displays

All the in-cab displays have text and graphics designed for easy reading, so you can check all the key indicators at a glance.

Exclusive operator package

Operator training is included for up to two operators in the first year of ownership. Every machine also comes with a range of 8000 Series clothing, workwear and a coffee mug.

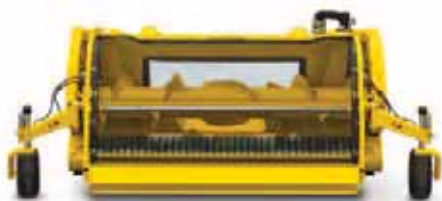
HIGH EFFICIENCY HEADERS. ALL CROP CAPABILITY.

All crops. All conditions.

Our header range has been exhaustively tested as part of the 8000 Series development programme. Designed and engineered for high horsepower you can rely on excellent crop handling and efficient and reliable operation.

Connecting is easy too. We've taken our experience of drive-on tractor/loader couplings and brought it to forage harvesting. The attaching points are self centring and there is now a single lever locking mechanism and a multicoupler for all hydraulic and electrical connections.

Changing between heads has never been easier, as the 'header recognition' eliminates the need to recalibrate after header changeover.



Grass

A completely new grass pick-up has been designed exclusively for the 8000 Series. Featuring a variable auger speed it gives you better feeding at all cut lengths. An optional tine drive is also available which links the tine speed to the harvester's ground speed to help minimise losses.

Wholecrop

The ProfiCut 620 is a high efficiency header that's the ideal solution when you want whole-crop silage with clean, low-cut stubble. Featuring a well-proven, disc cutterbar, the auger speed is adjustable to the length of cut to help you optimise throughput and forage quality.



Maize & Wholecrop

Famous for their legendary reliability our row independent rotary headers are available in a wide range of widths for the perfect power to throughput match. Their low maintenance design will give you thousands of hours of reliable harvesting.

NEW GRASS PICK-UP. VALUE ADDED SILAGE.

Stronger. Better throughput. Cleaner collection.

Our new grass pick-up has been completely redesigned from the ground up.



A new and unique auger design

The new auger with the unique design of the flights helps to improve the crop flow significantly, especially in heavy, wet windrows.

Variable auger speed

Thanks to the variable auger speed you can optimise crop flow to boost forage quality and chopper performance, especially in difficult conditions.

Variable tine speed

An optional variable dual header drive adjusts the pick-up tines independently of the auger. This is particularly useful when harvesting light windrows. As the ground speed increases, the pick-up tines automatically speed up, so no crop is left on the ground.

Quality silage

The pivot frame with the additional centre wheel adapts to uneven ground, avoiding soil contamination of silage.

Improved reliability

Extra heavy-duty chain drives give you dependable performance season after season. Add the automatic greasing to further minimise your daily maintenance.







ROW INDEPENDENT. LEGENDARY RELIABILITY.

Built by Kemper, a John Deere company, several thousand of our row independent headers have been sold worldwide. Legendary for their high capacity, reliability and low maintenance there's a wide choice of small or large drum models to match different crop heights and horsepower requirements.



Even feeding – better forage quality

The sloping conveyor drums in the centre ensure active feeding into the harvester's feedrolls and improve forage quality, thanks to the automatic synchronisation of speed with the length of cut.

Self cleaning

The open design lets crop debris and soil fall to the ground and avoids contamination.

Excellent in down crop

The low profile crop dividers pick up down crop more effectively.

Faster stubble decomposition

Sharp edged blades protect tyres against punctures and encourage rapid stubble decay.

Easy road transport

The compact folding design leaves a perfect view of the road. Wider headers are available with a centre transport wheel for reduced front axle load.

BETTER GRIP. BETTER CONTROL.

ProDrive provides automatic shifting across two pre-set speed ranges.

Although it works on a very different principle, it performs like the cruise control on a car, maintaining a constant speed even if you are harvesting downhill on slopes. In automatic mode you simply select the speed you want to go at from one of two pre-set ranges – up to 20 km/h in the field and up to 40 km/h on the road. It's easy to operate as well. No gear lever. No parking brake. Just push the master control lever forward and ProDrive does the rest.



Gentle on soft soils

A speed differential between the front and rear axles prevents the wheels from disturbing the soil when turning.

Excellent traction

On harvesters equipped with 4WD, if a wheel starts to lose traction the hydraulic flow is redirected to those wheels which still have traction.

Powerful braking

If you need to stop quickly just pull back the control lever and 2 brake units – each with 4 discs – stop the harvester immediately and the automatic parking brake engages.

Spill-free trailer loading

A constant speed (also during downhill work) makes it easier for trailer drivers to match their speed to the harvester for accurate loading.

Save transport time and fuel

Travel up to 40 km/h between fields at only 1250 rpm.



HANDS-FREE GUIDANCE. STRESS-FREE HARVESTING.

Automatic hands-free guidance is essential for high volume harvesting operations when you need to fully load the harvester hour after hour. Apart from ensuring you get a full header width with every pass, it saves fuel by eliminating missed or skipped sections and lets you consistently harvest at higher speeds hour after hour.

Guidance also has the added benefit of taking away the stress of harvesting tall maize and other row crops. So you can relax and concentrate on trailer filling and cutting the best quality silage.

Manual RowSense

Exclusively designed for harvesting maize, Manual RowSense is an electro-mechanical system which uses digital feelers mounted in the maize header to follow the position of the stalks. The signal from the feelers is relayed to a wheel angle sensor and the wheels are automatically adjusted to align the harvester precisely in line with the crop. It is very flexible and will work in row spaces from 35 cm up to 1 m.

Using Manual RowSense couldn't be simpler. Operated via a single button on the multi-function control lever it automatically compensates for any uneven planting or field contours. The steering is adapted to the ground speed of the harvester and becomes more responsive as the machine's speed increases.

AutoTrac

AutoTrac is perfect for harvesting by using the full working width in whole-crop or maize to further improve the efficiency of the chopper.

AutoTrac RowSense

AutoTrac RowSense integrates the satellite positioning data from the StarFire receiver with the information from the row sensors located on the header to accurately guide the harvester, even when the crop is down.









GIVE YOUR BUSINESS MORE

Reliability, cutting performance and cost of operation are the three most important factors when choosing a new forager. Better reliability means more uptime. Precision cutting brings more value to your customers. And lower cost of operation delivers more profitability. Only the 8000 Series gives your business more.

“ I want certainty in my business so that I can plan for the future. It’s about having the best machine with the latest technology. And it’s about reliable support from my dealer. ”

Fast header attachment

The self-adjusting header locking system connects the driveline automatically.

Positive crop handling

The toothed profile on the feedrolls ensures better pick up of the crop from the header.

High capacity feedrolls

The feedrolls are fully synchronised with the header for smooth crop flow. The heavy duty layout in combination with the new springs applies up to 35% more pressure creating a flatter crop mat for more even, precise cutting.

Patented quick stop system

A patented hydraulic system instantly switches off the feedrolls without the stresses of traditional mechanical linkages.

Wide profile knife mountings

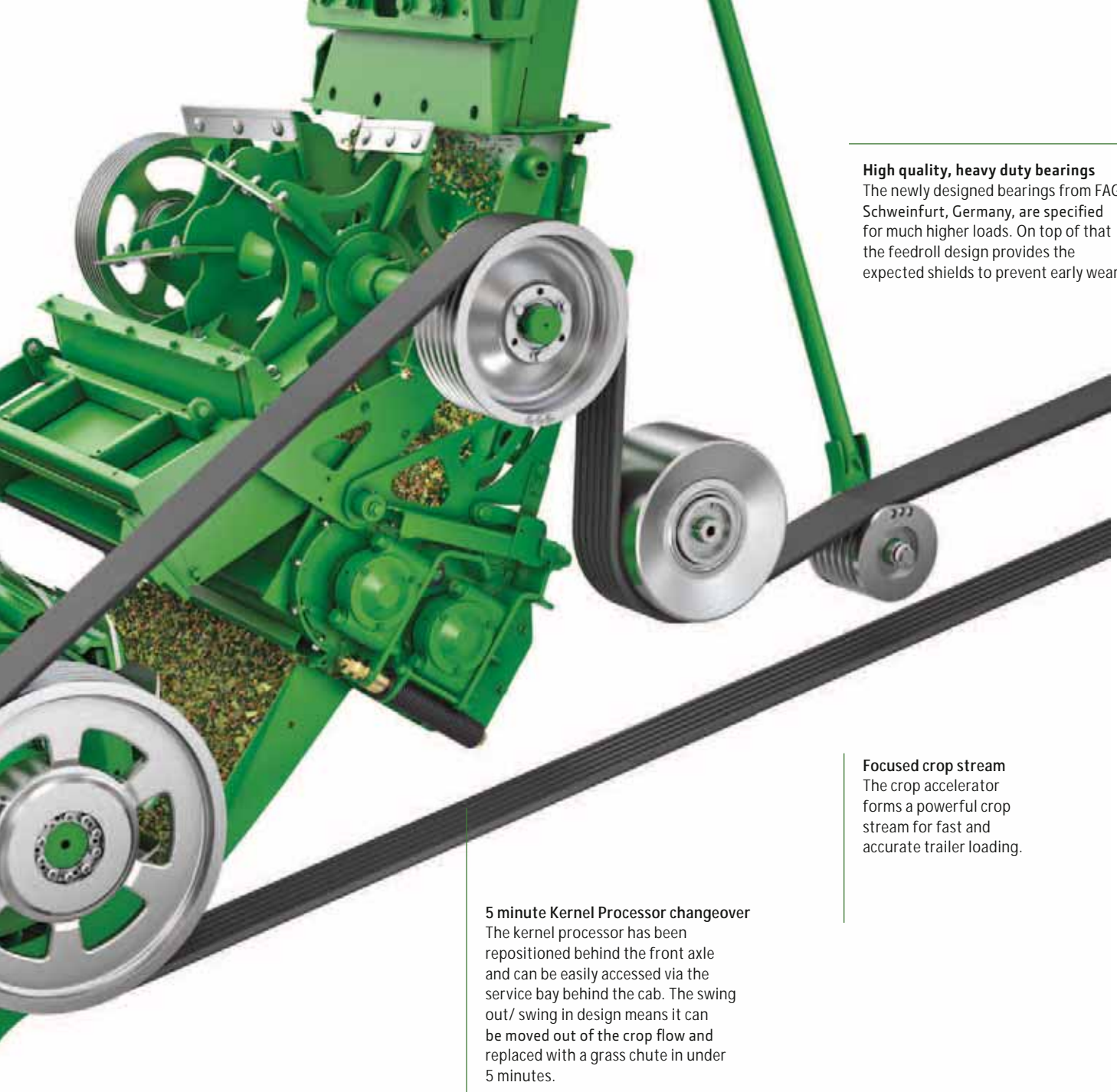
The knife mountings are wider and the profile is designed to channel the crop for a more stable and even flow.

**Extra fine shearbar adjustment**

The shearbar is mounted on a rock solid platform for better stability and finer adjustment. The adjustment pivoting point is positioned far below the shearbar, ensuring minimum horizontal change when adjusting to worn out knives.

Long lasting hydraulic knife sharpener

The new all hydraulic system is more resistant to vibration for improved reliability.



High quality, heavy duty bearings

The newly designed bearings from FAG Schweinfurt, Germany, are specified for much higher loads. On top of that the feedroll design provides the expected shields to prevent early wear.

Focused crop stream

The crop accelerator forms a powerful crop stream for fast and accurate trailer loading.

5 minute Kernel Processor changeover

The kernel processor has been repositioned behind the front axle and can be easily accessed via the service bay behind the cab. The swing out/ swing in design means it can be moved out of the crop flow and replaced with a grass chute in under 5 minutes.

HIGH POWER. LOW FRICTION.

The crop flow channel has been completely redesigned with extra heavy duty components for engine horsepower outputs of much more than today's industry power line up and a maximum throughput of more than 400 tonnes per hour. On the models from 625 hp, the crop channel is 17 cm wider to provide the most efficient balance between horsepower and throughput.

The smooth, gentle arc of the channel also minimises resistance for an even cropflow stream and lower wear.

LIGHTER MATERIALS. STRONGER CONSTRUCTION.

As headers become larger and heavier, the overall machine weight is an important consideration to help reduce soil compaction. This is particularly important for no-till farming operations as well as biogas harvesting where crops are often planted on less stable soils.

Weight minimisation was a design requirement from the first 8000 Series concept, with the designers not just looking at new, lighter materials, but alternative weight-saving drive technologies. For the 8000 Series, lighter also means stronger as specialist high tensile steels and lightweight alloy castings are more rigid for a longer, more reliable working life.

High tensile steel panels

Twice the strength of standard mild steel, the extensive use of high tensile steel enables thinner but stronger panels.

Hydraulics replace mechanics

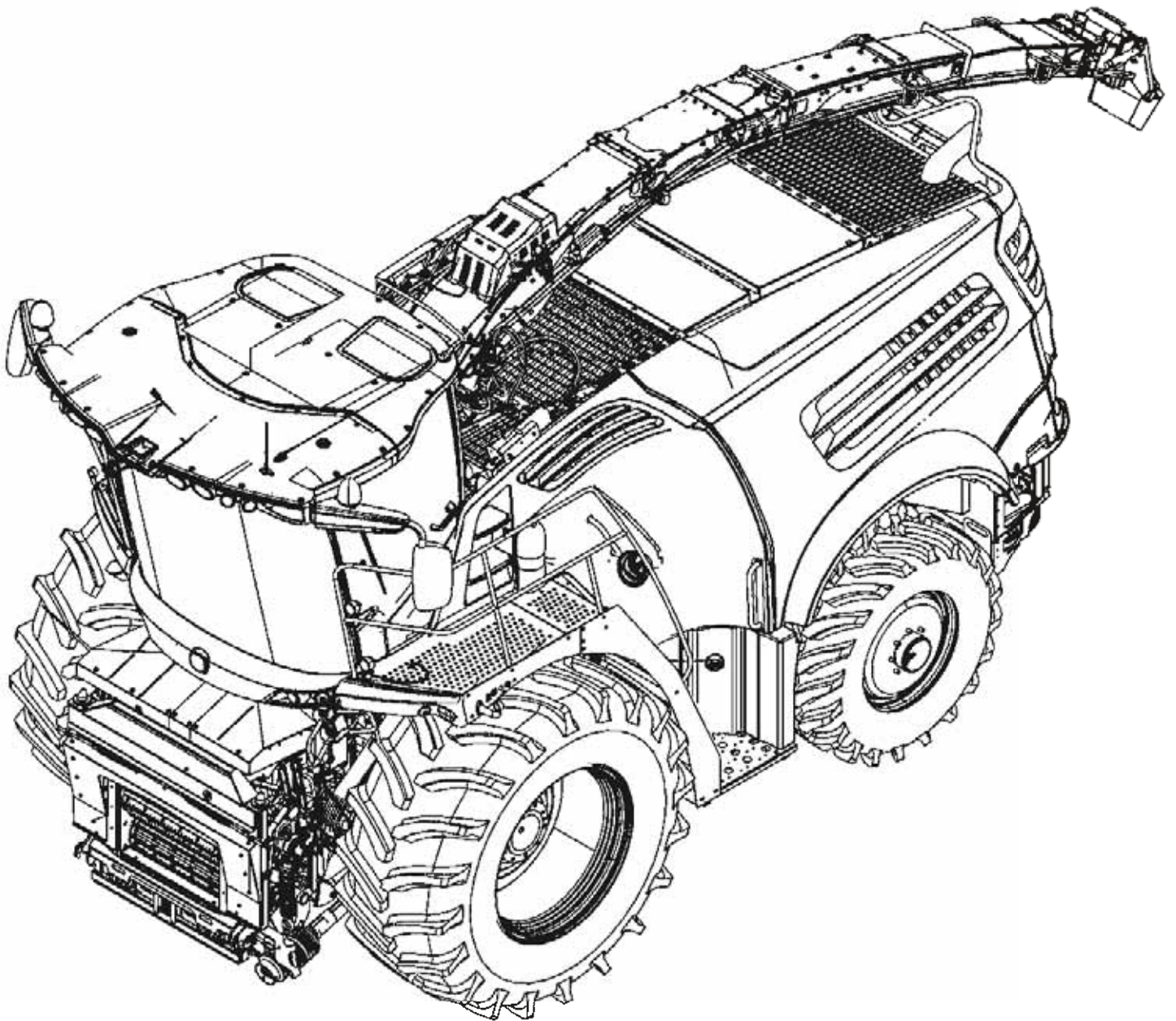
In many cases conventional gearboxes have been replaced with hydraulics. With fewer moving parts, they are lighter, with the added benefit of being able to transmit more torque. Dry sump greasing also brings significant improvements in efficiency and functionality

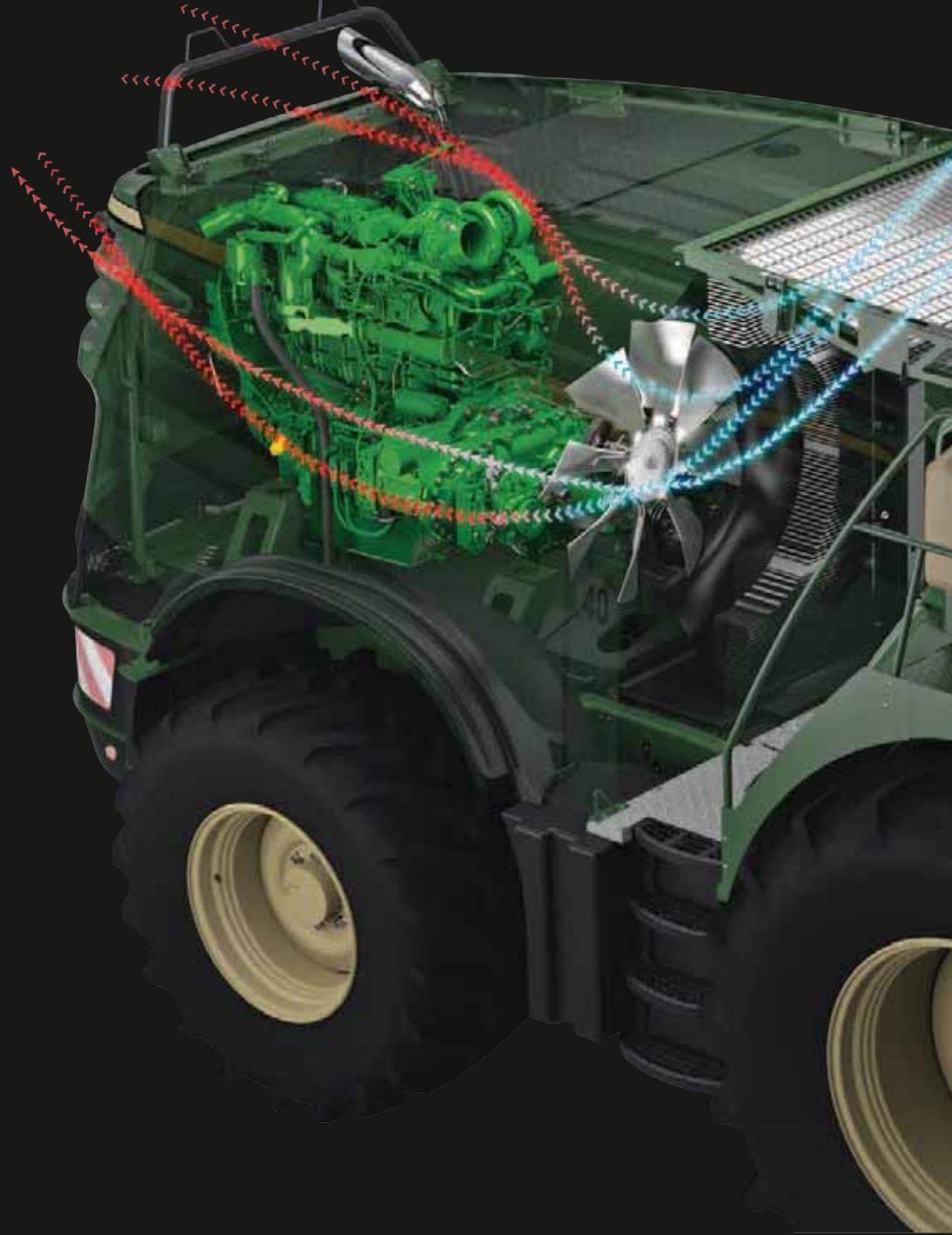
Cast aluminium components

Many of the drive casings are made of heat treated cast aluminium. With a higher stiffness to weight ratio than steel they are 1/3 the weight by volume, bringing considerable reductions in the machine's overall weight.

Perfectly balanced

The longitudinal layout means the engine can be positioned lower within the forager's chassis. This lowers the machine's overall centre of gravity for better stability when working on steep slopes or travelling at high speed on the road.





LONGITUDINAL ENGINE. OPTIMUM POSITION.

The longitudinal engine layout has many advantages for the overall stability, efficiency and comfort of the 8000 Series.



Extensive testing of the cooling was carried out in our own wind tunnel. Big enough to fit a full forage harvester, it's unique in the agricultural industry and allows us to test the cooling efficiency at different ambient temperatures. Infrared heat maps identified hot spots for optimised cooling.

Optimum cooling

With low forward speeds forage harvesters cannot rely on the ram cooling effect of motor cars. So to ensure the engine runs at its optimum temperature, efficient cooling is essential. The longitudinal layout means more of the engine's surface area is on the outer edges of the machine, unobstructed by other components.

Cool air is drawn in through the channels behind the cab and is guided along the sides of the engine to the rear vents. This layout eliminates the need for the larger, power intensive cooling packages with transverse engine layouts.

Efficient driveline

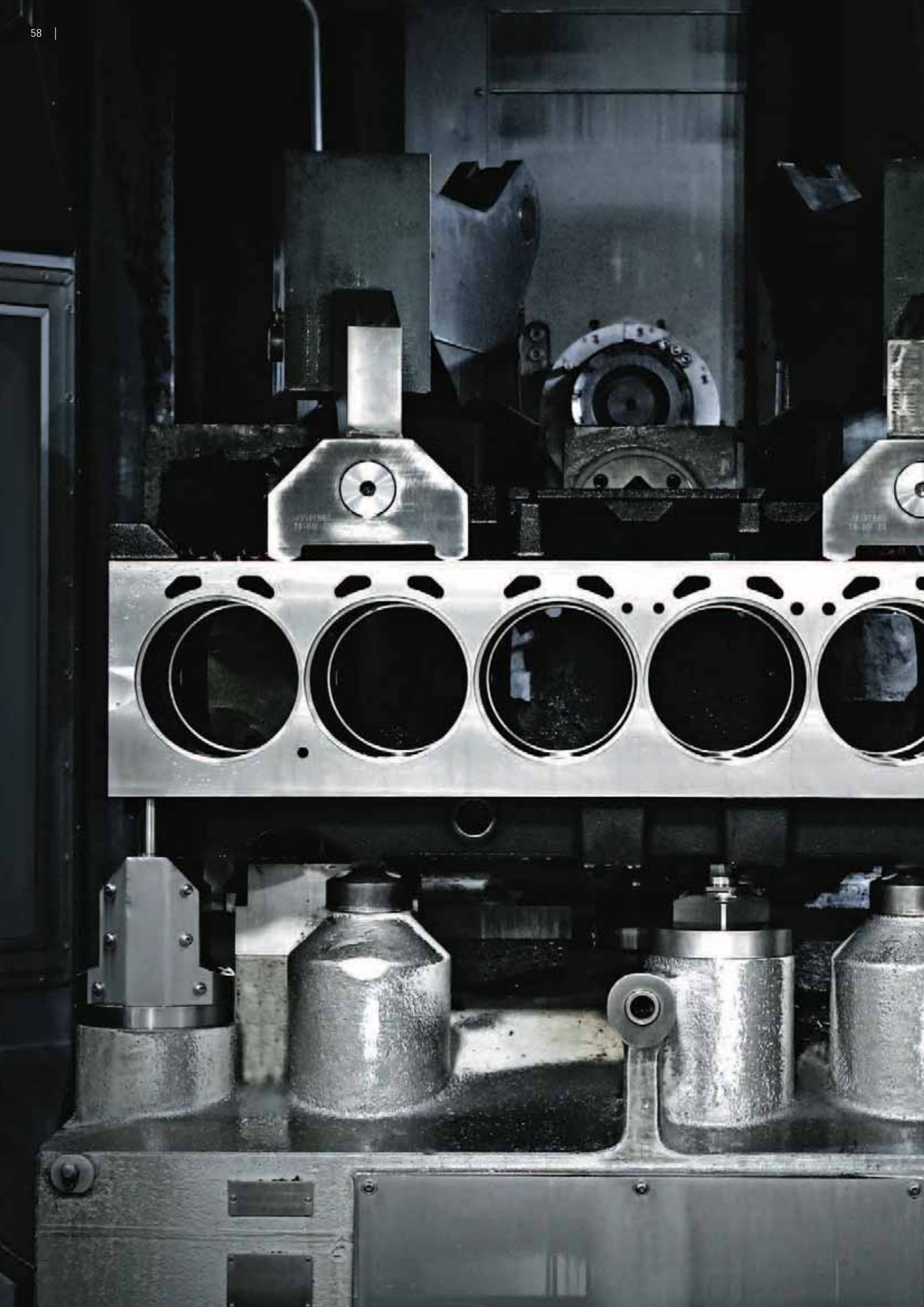
The angular gear transfers power to the drive systems with minimal power loss ~ 0.5% thanks to the new, dry sump greasing technology. An added advantage of this layout is all the hydraulics and the fan are driven directly from the engine without the need for complex couplings and additional belts or pulleys.

Better rear vision

The longitudinal engine results in a narrower body with better rear visibility for trailer filling and safer manoeuvring.

Excellent engine access

The side and rear panels provide uninterrupted access to all the regular maintenance items for rapid servicing and maintenance.



CLEANER POWER. BETTER ECONOMY

John Deere is the only agricultural equipment manufacturer to design and build its own engines. Why? Because we recognise the needs of agricultural equipment are very different from the needs of on-road vehicles/machinery.

The 8000 Series is equipped with the latest Stage 4 PowerTech engines offering excellent performance, torque and responsiveness – ideal for handling rapid changes in harvesting throughput.

EXPERIENCE LIKE NO OTHER

7+

million off-road diesel engines produced.

60+

million operating hours with IT4 engines.

22+

million operating hours with after-treatment technologies.

200+

million operating hours with Variable Geometry Turbocharging (VGT) and cooled Exhaust Gas Recirculation (EGR).

INTELLIGENT DESIGN. 6% MORE FUEL EFFICIENT.*



The advantages of one designer and one manufacturer become very clear when it comes to fuel efficiency. Better fuel efficiency is not just about more efficient engines. It's about the way the whole machine is designed and built. Because our engineers developed every critical component, they were able to ensure the best possible balance.

Lighter components

We made the 8000 Series almost one tonne lighter. Less weight means less fuel consumption.

Less crop flow resistance

The crop flow and cutting system consumes almost 75% of the total engine power, so small improvements in efficiency bring big fuel savings.

Engine speed management

Harvesters equipped with ProDrive benefit from fuel saving engine speed management. This automatically matches engine rpm to the harvester's power requirements for different field and road conditions.

Dry sump gearboxes

The extensive use of dry sump gearboxes removes the friction associated with gears splashing through oil sumps and minimises power losses and the need for oil cooling.

Larger tyre footprint

The larger tyre footprint spreads the machine load for better traction and less power loss in soft soil conditions.

Optimised cooling

The longitudinal engine position and high performance cooling package provide more efficient cooling so the engine operates at optimum temperature.





LESS MAINTENANCE. MORE UPTIME.

The 8000 Series is designed with minimal maintenance to maximise chopping time. Extensive use has been made of high performance materials and new technologies with some components even sealed for life. An integrated toolkit in the rear storage compartment also provides all the necessary tools for regular maintenance and repair.

Automatic greasing system

The automatic greasing system is located in the service area behind the cab and removes the need for daily greasing.

Easy clean radiator screen

The engine radiator screen slides out for easy cleaning with the integrated high pressure air hose.

Long lasting components

Extra wide tungsten carbide coatings on the knives extend their service life significantly. Ultra hard wearing DuraLine components are also available for the crop flow wear panels. They last 5 times longer than standard parts.

Maintenance-free components

Many of the heavy duty bearings are sealed for life and the new spout rotation drive, including the integrated break-away system, is completely maintenance free.

Common parts

The air and engine filters and many other maintenance parts are common to other John Deere machines and are held in dealer stock. Other parts are also designed for greater commonality.

Fewer moving parts

The extensive use of hydraulic drives reduces the number of moving parts for better reliability.







YOUR PROFESSIONAL TEAM. DEDICATED SUPPORT.

When you invest in the 8000 Series you don't just get a cutting edge, efficient harvesting machine, you also get a support network that's geared up to keep you harvesting.

Professionally trained service technicians know every part of your machine and using the latest diagnostic tools can identify any issues. During the harvest season you'll also find they're open late when you need them. And when the season's over they don't stop working either. Offering a comprehensive winter inspection check, they'll make sure your harvester is as good as the day it left the factory.

BUDGET YOUR MAINTENANCE

A PowerGard service plan helps you budget your running costs with complete certainty. Using only genuine components, lubricants and coolants you'll maximise your harvester's uptime and resale value. There's a choice of three plans:

PowerGard Maintenance

Covers all scheduled servicing and can be tailored to suit your individual needs.

PowerGard Protection

Repairs on all engine, transmission and frame components as well as scheduled servicing for up to up to 3 years or 3,000 hours (whichever is sooner).

PowerGard Protection Plus

Includes everything from PowerGard Protection but also covers engine auxiliaries, electrical components, steering and brakes, hydraulics and the cab.



MYJOHNDEERE.COM. YOUR OPERATIONS AT YOUR FINGERTIPS.

Unlock the full productivity of your operations through MyJohnDeere.com. The agricultural web portal enables you to monitor and run your fleet of machines and manage your land – all from a central location. Go to the Operations Centre to allocate your equipment, track the work progress of your machines and view what they have achieved during the day. Utilising John Deere Wireless Data Transfer you can easily transfer the information from your GreenStar 2630 display in the cab to your MyJohnDeere account, for example yield data or as-applied maps.

MyJohnDeere is also your gateway to JDLink, John Deere's remote monitoring and fleet management tool. With JDLink track your machine's working hours and analyse detailed machine utilisation to identify productivity and logistic gaps or monitor fuel consumption to improve fuel efficiency and cut costs.

What's more, every new 8000 Series has one year's subscription to JDLink Ultimate included as standard.

Service and Support is just one click away

With your permission your dealer can remotely manage your machine's maintenance, perform remote diagnostics and assist the operator with machine operation and setup using John Deere Remote Display Access. A powerful tool for operator training and to share live data from the GreenStar 2630 display.

	JDLink Select	JDLink Ultimate*
Machine location	•	•
Geofencing	•	•
Machine hours	•	•
Maintenance planning	•	•
Fuel consumption		•
Utilisation		•
Diagnostics		•
Settings		•
Productivity data		•
Service ADVISOR Remote	optional	optional
Remote Display Access	optional	optional

LONGER LASTING PARTS. ON-TIME DELIVERY.

Your dealer holds an extensive stock of regular maintenance and wear parts. And, if what you need isn't available off-the-shelf, they can get it to you quickly. Our European supply network holds more than 375,000 parts from a pick-up auger to a feedroll spring – all ready for next day delivery.

JDPARTS ONLINE ORDERING

If you prefer, order online through JDParts and get it delivered to your dealer. <https://jdparts.deere.com>

Instant pricing and availability

Check whether a part is in stock at your local dealership and find out how much it will cost.

Open 24/7, 365 days a year

We're open whenever you need to buy. Early in the morning. Last thing at night.

Fast search

Find what you want quickly by part number, model or keywords.

See before you buy

Access the entire John Deere parts catalogue and view product images so you know exactly what you're ordering.

Multi-make parts available

Our catalogue doesn't just include genuine John Deere parts. Use it as a one stop shop for your other equipment.

FOUR SEASONS IN ONE PART

Fit your harvester with DuraLine ultra hard wearing parts and you can lower your operating costs even further. Developed exclusively for John Deere by Busatis, DuraLine sets a new standard for wear resistance, lasting more than 5 times longer than standard parts. DuraLine parts are available for all common wear parts including knife drum, shearbars, crop flow panels and chromed roller processors.



JOHN DEERE FARMSIGHT. PROFIT FROM INSIGHT.

John Deere's Farmsight service packages take your harvest operations to a new level of efficiency. Thanks to our revolutionary JDLink wireless technology, with your permission, your dealer can remotely monitor your machines in real-time for a fixed monthly fee.

Your dealer knows how to boost the uptime and performance of your forage harvester. Ask him, to learn more about the John Deere FarmSight packages on offer.



UPTIME

Better budget planning. With an all inclusive PowerGard maintenance package, running costs become a known quantity.

Preventative maintenance – regular servicing with genuine John Deere parts reduces downtime and maintains machine value.

Increased uptime – service alerts and remote diagnosis keep you chopping non-stop.



PERFORMANCE

Lower fuel costs. Identification of optimum settings to minimise fuel consumption.

Improve operator skills – analysis of individual operator's behaviour with tips and advice on driving technique.

Higher productivity – analysis of key performance indicators.



LOGISTICS

Optimise fleet management.

Ensure you have the right number of trailers for the job.

Reduce forager downtime – never have a machine waiting for a trailer.

Minimise fuel costs – eliminate unnecessary journeys and improve route planning.



AGRONOMICS

Better crop management.

Yield mapping helps identify the most suitable crops for replanting in different fields.

Manage forage better – constituent measurement gives your customers better control of their feedstocks.

Control field inputs – yield mapping gives valuable intelligence on field variations for accurate application of fertilisers, chemicals and other inputs.



Model specifications

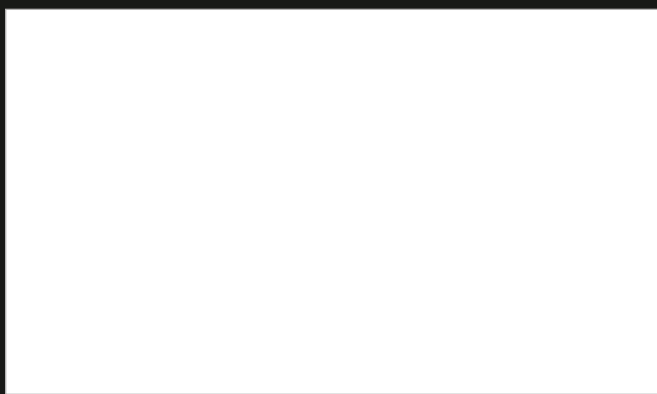
	8100	8200	8400	8500	8600
Power					
Rated power @ 2100 rpm [kW (hp)]	251 (341)	295 (401)	369 (502)	400 (544)	428 (582)
Maximum power @ 1900 rpm [kW (hp)]	279 (380)	317 (431)			
Maximum power @ 1800 rpm [kW (hp)]			397 (540)	430 (585)	460 (625)
Engine					
Exhaust Emission Regulation Compliancy	Tier 4 final	Tier 4 final	Tier 4 final	Tier 4 final	Tier 4 final
Manufacturer	John Deere	John Deere	John Deere	John Deere	John Deere
Type	PSX	PSX	PSX	PSX	PSX
Model	6090HZ014 (EU), 6090HZ015 (NA)	6090HZ014 (EU), 6090HZ015 (NA)	6135HZ014, 6135HZ013 (NA)	6135HZ014, 6135HZ013 (NA)	6135HZ014, 6135HZ013 (NA)
Displacement [L]	9	9	13.5	13.5	13.5
Cylinders	In line 6	In line 6	In line 6	In line 6	In line 6
Speed on road [rpm]	1650–2100	1650–2100	1250–2100	1250–2100	1250–2100
Engine/Speed Management Field Mode	Option	Option	Option	Option	Option
Fuel system	Common Rail + 4 valves	Common Rail + 4 valves	Unit injectors + 4 valves	Unit injectors + 4 valves	Unit injectors + 4 valves
Cooling fan drive	Direct	Direct	Direct	Direct	Direct
Driveline					
Main clutch	Dry Clutch	Dry Clutch	Dry Clutch	Dry Clutch	Dry Clutch
Number of discs	1	1	1	1	1
Main driveband	Reinforced with kevlar inserts	Reinforced with kevlar inserts	Reinforced with kevlar inserts	Reinforced with kevlar inserts	Reinforced with kevlar inserts
Belt tensioning	Active, hydraulic pressure	Active, hydraulic pressure	Active, hydraulic pressure	Active, hydraulic pressure	Active, hydraulic pressure
Main driveband – polybelt: no. of belts	6	6	6	6	8
Ground drive					
Type – Hydrostatic, 3 speed – manual shift, helical gears, Engine rpm on road 1650	Standard	Standard	Standard	Standard	Standard
Drive range (20 km/h) [km/h]	0–6.9 0–13 0–20	0–6.9 0–13 0–20	0–6.9 0–13 0–20	0–6.9 0–13 0–20	0–6.9 0–13 0–20
Drive range (25 km/h) [km/h]	0–8.6 0–19.6 0–25	0–8.6 0–19.6 0–25	0–8.6 0–19.6 0–25	0–8.6 0–19.6 0–25	0–8.6 0–19.6 0–25
Drive range (30 km/h) [km/h]	0–10.2 0–19.6 0–30	0–10.2 0–19.6 0–30	0–10.2 0–19.6 0–30	0–10.2 0–19.6 0–30	0–10.2 0–19.6 0–30
Hydro-mechanical rear axle	Optional	Optional	Optional	Optional	Optional
Prodrive, Autoshift transmission, differential lock, (automatic and manual), Automatic wet brake system, Engine rpm – Management 1250–2100	Optional	Optional	Optional	Optional	Optional
Drive range (20 km/h) [km/h]	0–20 (Field) / 0–20 (Road)	0–20 (Field) / 0–20 (Road)	0–20 (Field) / 0–20 (Road)	0–20 (Field) / 0–20 (Road)	0–20 (Field) / 0–20 (Road)
Drive range (25 km/h) [km/h]	0–20 (Field) / 0–25 (Road)	0–20 (Field) / 0–25 (Road)	0–20 (Field) / 0–25 (Road)	0–20 (Field) / 0–25 (Road)	0–20 (Field) / 0–25 (Road)
Drive range (30 km/h) [km/h]	0–20 (Field) / 0–30 (Road)	0–20 (Field) / 0–30 (Road)	0–20 (Field) / 0–30 (Road)	0–20 (Field) / 0–30 (Road)	0–20 (Field) / 0–30 (Road)
Drive range (40 km/h) [km/h]	0–20 (Field) / 0–40 (Road)	0–20 (Field) / 0–40 (Road)	0–20 (Field) / 0–40 (Road)	0–20 (Field) / 0–40 (Road)	0–20 (Field) / 0–40 (Road)
Hydro-mechanical rear axle + Full ASR	Optional	Optional	Optional	Optional	Optional
Crop Harvesting Units					
Grass pick-ups [m]	4.5/4.0/3.0	4.5/4.0/3.0	4.5/4.0/3.0	4.5/4.0/3.0	4.5/4.0/3.0
Kemper Rotary Header, Rows/Width [m]	8/6	8/6	10/8	12/10/8	12/10
Automatic steering for maize	Optional	Optional	Optional	Optional	Optional
Advanced Header Control	Optional	Optional	Optional	Optional	Optional
Harvest Channel	Standard	Standard	Standard	Standard	Standard
Feed Rolls					
Feed roll frame opening, Angle [°]	Swing away, 37–45	Swing away, 37–45	Swing away, 37–45	Swing away, 37–45	Swing away, 37–45
Number	4	4	4	4	4
Metal detector	Standard	Standard	Standard	Standard	Standard
Stone Detection	Optional	Optional	Optional	Optional	Optional
Width, front [mm]	660	660	660	660	830
Hydro Feed roll drive IVLOC	Standard	Standard	Standard	Standard	Option
Infinitely variable header drive speed	Standard	Standard	Standard	Standard	Standard
Cutterhead					
Cutterhead housing width [mm]	686	686	686	686	856
Cutterhead w/ knives: width/diameter [mm]	680/670	680/670	680/670	680/670	850/670
Number of knives*	56, 48 or 40	56, 48 or 40	64, 56, 48 or 40	64, 56, 48 or 40	64, 56, 48 or 40
Speed at rated engine speed [rpm]	1100	1100	1100	1100	1100
Knife types available (crop)	Straight (grass) Curved (maize)	Straight (grass) Curved (maize)	Straight (grass) Curved (maize)	Straight (grass) Curved (maize)	Straight (grass) Curved (maize)
Sharpening system	Reverse rotation	Reverse rotation	Reverse rotation	Reverse rotation	Reverse rotation
– Control	Remote from cab	Remote from cab	Remote from cab	Remote from cab	Remote from cab
Shear bar, reversible	Standard	Standard	Standard	Standard	Standard
Kernel Processor					
Type	Serrated roller/KernelStar Quick KP swing in/out	Serrated roller/KernelStar Quick KP swing in/out	Serrated roller/KernelStar Quick change and remove	Serrated roller/KernelStar Quick change and remove	Serrated roller/KernelStar Quick change and remove

*See availability by country

	8100	8200	8400	8500	8600
Serrated roller KP					
Roll width [mm]	638	638	638	638	718
Roll diameter [mm]	240	240	240	240	240
Speed differential [%]	24 (32)	24 (32)	24 (32)	24 (32)	24 (32)
Maize, saw/triangular teeth number	118	118	118	118	118
Wholecrop, saw teeth number	178	178	178	178	178
Sorghum, triangular teeth number	238	238	238	238	238
Roll spacing [mm]	0.5–5	0.5–5	0.5–5	0.5–5	0.5–5
KernelStar KP					
Roll width [mm]	640	640	640	640	15/14 + 2*1/2
Dia. of discs [mm]	240	240	240	240	240
Number of discs (top/bottom)	15/14 + 2*1/2	15/14 + 2*1/2	15/14 + 2*1/2	15/14 + 2*1/2	17/16 + 2*1/2
Roll spacing [mm]	0.5–3	0.5–3	0.5–3	0.5–3	0.5–3
Crop Accelerator					
Rotor Diameter / Housing Width (mm)	560 / 540	560 / 540	560 / 540	560 / 540	560 / 620
Number of blades	10	10	10	10	12
Speed @ rated rpm	1800	1800	1800	1800	1800
Accelerator band	6 mm Hardox, DuraLine HD Option	6 mm Hardox, DuraLine HD Option	6 mm Hardox, DuraLine HD Option	6 mm Hardox, DuraLine HD Option	6 mm Hardox, DuraLine HD Option
Spout					
Rotation	210°	210°	210°	210°	210°
Reach from centre line [m] (optional) [m]	4.73 (5.87, 6.71)	4.73 (5.87, 6.71)	4.73 (5.87, 6.71)	4.73 (5.87, 6.71)	4.73 (5.87, 6.71)
Hydraulic raise and lower	Standard	Standard	Standard	Standard	Standard
Double cap	Standard	Standard	Standard	Standard	Standard
Automatic Spout Positioning	Option	Option	Option	Option	Option
Length of Cut					
40 knives [mm]	7 ... 26 mm in 1 mm steps	7 ... 26 mm in 1 mm steps	7 ... 26 mm in 1 mm steps	7 ... 26 mm in 1 mm steps	7 ... 26 mm in 1 mm steps
48 knives [mm]	6 ... 22 mm in 1 mm steps	6 ... 22 mm in 1 mm steps	6 ... 22 mm in 1 mm steps	6 ... 22 mm in 1 mm steps	6 ... 22 mm in 1 mm steps
56 knives [mm]	5 ... 19 mm in 1 mm steps	5 ... 19 mm in 1 mm steps	5 ... 19 mm in 1 mm steps	5 ... 19 mm in 1 mm steps	5 ... 19 mm in 1 mm steps
64 knives [mm]	N/A	N/A	3 ... 15 1 mm Steps	3 ... 15 1 mm Steps	3 ... 15 1 mm Steps
Electrical System					
Voltage [V]	12	12	12	12	12
Batteries (numbers) x Capacity [AH]	(1) x 174	(1) x 174	(2) x 174	(2) x 174	(2) x 174
Alternator [A]	200	200	200	200	200
Tank Capacities					
Fuel [L]	1100	1100	1100	1100	1100
Hydraulic system [L]	50	50	50	50	50
Maintenance					
Rotary radiator screen cleaner	Standard	Standard	Standard	Standard	Standard
Automatic lubrication system	Standard	Standard	Optional	Optional	Optional
Engine oil and filter change after [h]	500 (JD + 50 II) 250 (other oil)	500 (JD + 50 II) 250 (other oil)	500 (JD + 50 II) 250 (other oil)	500 (JD + 50 II) 250 (other oil)	350 (JD + 50 II) 250 (other oil)
Cab					
Double Tilt and extend steering column	Standard	Standard	Standard	Standard	Standard
Air conditioning and heater (ClimaTrak)	Standard	Standard	Standard	Standard	Standard
Refrigerator	Optional	Optional	Standard	Standard	Standard
Trainee seat	Standard	Standard	Standard	Standard	Standard
Hectare counter	Standard	Standard	Standard	Standard	Standard
Operator information system	Corner post display	Corner post display	Corner post display	Corner post display	Corner post display
CAN-BUS electronics	Standard	Standard	Standard	Standard	Standard
Air suspension seat	Standard	Standard	Optional	Optional	Optional
Windscreen wiper	Parallel type	Parallel type	Parallel type	Parallel type	Parallel type
Side + Rear window wiper	Optional	Optional	Optional	Optional	Optional
Electric adjust and heated rear view mirrors	Optional	Optional	Optional	Optional	Optional
AMS Solution					
Harvest Mon	Optional	Optional	Optional	Optional	Optional
Harvest Doc	Optional	Optional	Optional	Optional	Optional
HarvestLab	Optional	Optional	Optional	Optional	Optional
AutoLOC	Optional	Optional	Optional	Optional	N/A
AutoTrac	Optional	Optional	Optional	Optional	Optional
Vehicle					
With front tyres	710/70 R42	710/70 R42	710/70 R42	710/70 R42	710/70 R42
With rear tyres	620/60 R30	620/60 R30	620/60 R30	620/60 R30	620/60 R30
Transport length (w/o header) [m]	6.52	6.52	6.62	6.62	6.62
Transport width (w/o header) [m]	3.0–3.5	3.0–3.5	3.0–3.5	3.0–3.7	3.2–3.7
Transport height (to cab roof) [m]	3.88	3.88	3.88	3.88	3.88
Working height (max) [m]	6.6	6.6	6.2	6.2	6.2







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