



# **John Deere S690 Combine**



**You planted it. You fertilised it. You protected it from insects, disease and weeds.** Now that it's time to harvest, you need to harvest as much of your crop as possible, with the highest possible grain quality. That's why you need to harvest with the new S690 combine from John Deere.

In addition to all the standard features you expect from John Deere equipment... proven reliability, a responsive dealership network, innovative features and options and easy operation... the new S690 combine offers a higher powered engine, along with a variety of internal enhancements to help you harvest more efficiently and with outstanding grain quality.

Each S690 is also available as an i-Series combine with the complete line of performance enhancements from John Deere Ag Management Solutions such as AutoTrac, HarvestSmart and HarvestDoc.

The new S690 combine from John Deere... ready to help you unlock your crop's potential. See your John Deere dealer for more information or to arrange for a demonstration.

# Unlock your harvest potential

## ***S690 Intelligent Features and Options:***

- *John Deere AutoTrac hands-free steering (optional)*
- *HarvestSmart automatic feedrate control (optional)*
- *CommandCenter Armrest Display Unit*
- *Unique moisture sensor concept, with outstanding accuracy*
- *Exterior cameras with in-cab color monitor (optional)*
- *Multi-Speed Feederhouse Drive System (optional)*



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# Maximise harvest potential with lower, faster cutting

Put one of the John Deere 600R Series Platforms on your combine and you'll get lower, faster cutting that you can easily adjust to suit your conditions. Available in widths to 9,14 metres, the 600R platforms feature heavy duty components like a 100 hp reverser that takes power directly from the engine, along with an automatic reel reverse so you don't have to raise the reel.

Stainless steel feed plates help keep crop sliding smoothly into the four-way adjustable auger, while the counterbalanced knife drive provides nearly vibration-free cutting with less shatter loss. And to help you start quickly every day, all 600R platforms feature single-point attachment of electrical and hydraulic lines, locking the platform in place.

### The John Deere Advantage

- Adjustable cutting height and ground pressure give you the versatility to harvest in a wide range of conditions.
- Four-way adjustable auger allows smooth feeding in wet or dry, or high-yield crops.



**Semi-automatic trailer hitch option** makes attaching the header trailer a one-person operation.



**Single-lever latching** gives you the ultimate in header hook-up convenience. One lever connects the electro-hydraulic multicoupler and engages the platform attachment pins. Fast, easy and clean.



**A positive, epicyclical gear case knife drive** provides in-line knife motion for vibration-free operation. The counterbalanced drive provides smoother cutting, less shatter loss. Non-clog knife guards fully enclose the knives for cleaner cutting. Higher knife speed and longer knife stroke enhance cutting capacity. Knife sections are self-cleaning and bolted for easy replacement in the field.

**A 100 hp electro-hydraulically controlled mechanical reverser** uses direct engine power to put more torque into the job so you can maintain a brisk harvest pace – even in difficult cutting conditions. With the automatic reel reverser, you won't even need to raise the reel to reverse the cutting platform.

**Stainless steel feed plates** in front of the auger will never rust. Crop is fed smoothly to the intake auger, year after year, season after season.



**Adjustable table length.** Set the three position cutting table from 545 to 715 mm to maximise performance in all conditions... from short, dry straw to long, wet crop.

MODEL	WIDTH
625R	7.60 m (25 ft)
630R	9.14 m (30 ft)

*All 600R Series platforms can easily be switched between any W, C, T and S-Series combine.*

**Composite side shields** eliminate chips and dents as well as rust. Release just one latch for full access to the drives.



**Maximise your yields and boost capacity in maize with the CornStar Rotary Corn Head.\*** Innovative intake system reduces vibration and promotes faster, smoother feeding with less grain loss. Plus, there are no chains and that simplifies maintenance. Award winning design allows row tolerant harvesting and folds quickly to 3.2 metre for fast, easy transport. Choose from 6 and 8 row models.

\*Not available in the UK and Ireland.



**Retractable fingers** are positioned the full length of the auger to smooth out feeding and boost capacity. Breakaway grooves and retainers are standard; the chance of a broken finger entering the feederhouse and combine are almost eliminated.



**Short and long folding crop dividers.** Simply fold the dividers into the platform for transport – no need to remove them before moving between fields or driving on the road. No need to carry heavy attachments or to look for a storage place.



**A massive, 660 mm intake for high capacity crop handling.** Plus, you can adjust the auger four ways (up/down and fore/aft) to ensure smooth, high capacity material flow.

# High capacity feeding system for high yielding crops

To handle the exceptional capacity of the 600R Series platforms and the S-Series separating system, we gave the S690 combine a high capacity feeding system designed for performance, reliability and ease of adjustment. Components like the heavy duty slip clutch give you exceptional capacity, even in the highest yielding crops. The 100 hp reverser gets power directly from the engine, so you can easily reverse out of tough blockages.

For farmers or contractors who harvest significant corn acreage, the S690 can now be equipped with our new CommandTouch multi-speed feederhouse drive system. This innovative header drive allows on-the-go shifting and offers 42% more torque and 33% more lifting capacity... plenty for a 12-row cornhead with stalk chopper.

### The John Deere Advantage

- Extra wide design matches the width of the threshing area for smoother material flow, less slug feeding
- John Deere extra long feederhouse provides excellent visibility to the cutting platform
- Heavy duty slip clutch for better feeding in heavy crops, tough conditions

### Excellent visibility.

*The S690 design positions the feederhouse lower and further forward than the majority other combines on the market, for an outstanding view of the standing crop and stubble.*



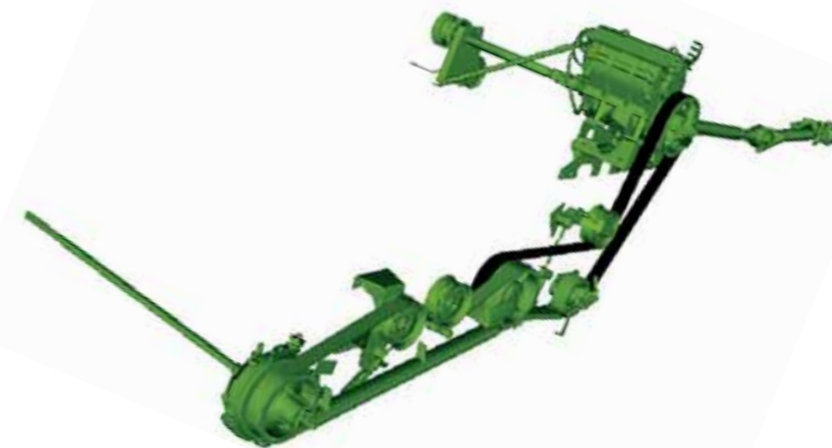
**The feederhouse width** perfectly matches the width of the threshing area, promoting smooth, uniform material flow and reducing the chance of slug feeding.



**Reverse out blockages from the cab.** The heavy duty reverser efficiently dislodges the worst platform and feederhouse blockages.



**Enhanced feederhouse slip clutch design** delivers higher capacity feeding in the heaviest yielding crops and the most demanding conditions. Provides 20% more torque to deliver consistent feeding for non-stop harvesting performance.



**Optional CommandTouch Multi-Speed Feederhouse Drive System** delivers higher capacity feeding in the heaviest yielding corn. A reliable PowrShift transmission provides up to 42% more torque capacity and enables operation of the cornhead in five speed ranges. Adjust the speed of your cornhead easily from the cab by pressing one button on the multi function lever and gain the advantages of more productivity and increased performance in corn harvest. And with the new larger feederhouse lift cylinders you are able to handle 12 row cornheads easily.



**Now you can harvest close to the ground without worry**, even in stony fields. The S690 stone trap catches stones before they reach the threshing module. Flip one lever for fast, easy cleaning.

# The perfect balance of capacity and quality

With John Deere S-Series separation, you don't have to sacrifice quality for capacity; the high performance rotor of the single tine separation system gives you both. How?

Capacity begins at the feeding system. The S-Series feederhouse and transition area sends crop to the separator module in three distinct streams, balancing the rotor's workload across three different areas and helping reduce roping and slugging, as well as lessening power requirements.

The high performance rotor design with tapered 'nose' section increases capacity even further and gives you longer, more baleable straw. Feed flights at the front of the separator send the crop mat toward the rear, giving you smooth material flow, even at higher loads.

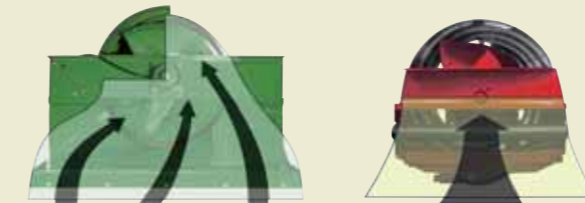
### The John Deere Advantage

- Innovative Hi-Performance rotor design gives increased capacity and smooth material flow
- Intelligent tine separation delivers outstanding capacity and grain quality
- Tine separation pull-and-release action reduces horsepower requirements, handles all crops, all conditions

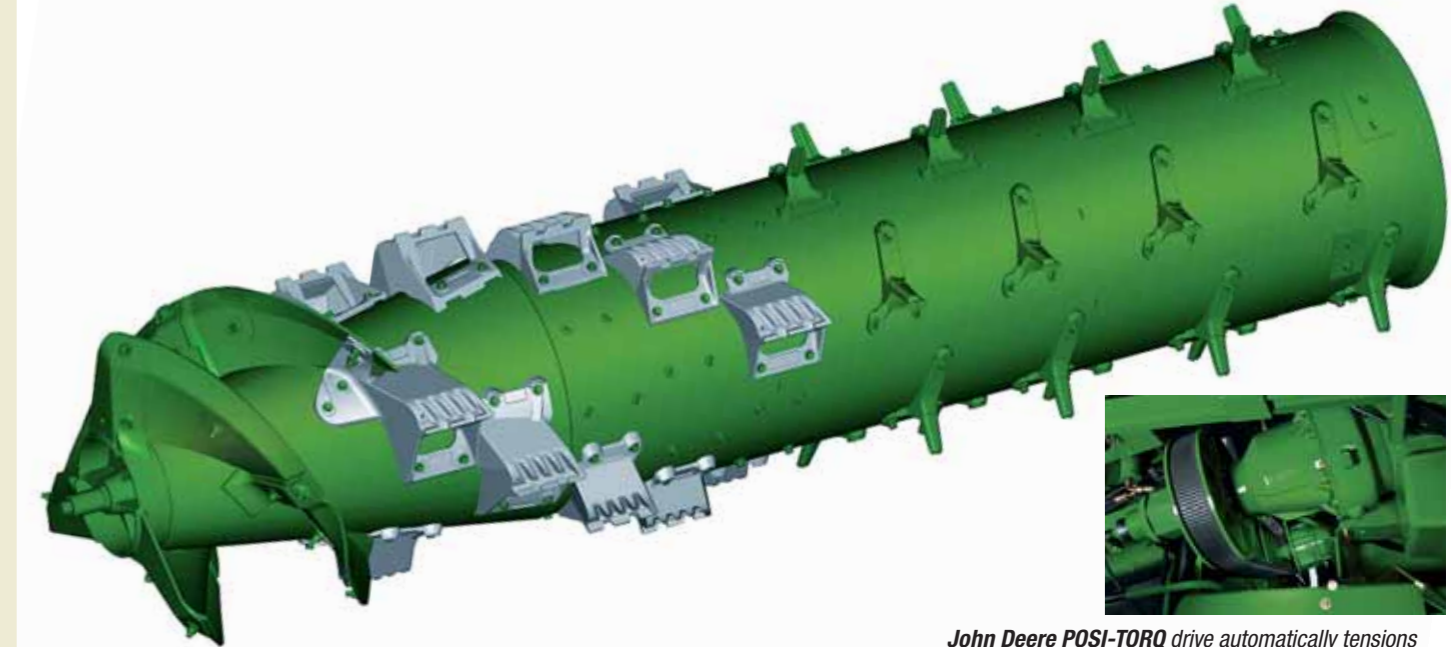


S-Series Tri-Stream Crop Flow    Conventional Rotary Designs

**How does the S-Series technology compare to other rotary concepts?** Unlike conventional designs that feature a concentric cage throughout the full length of the rotor, the John Deere S-Series module features a step design with three distinct cage diameters. The outer cage gets bigger, allowing the crop mat to expand as it travels through the module. This reduces the chance of roping and lowers the power requirements. This John Deere Tine Separation technology provides a pull-and-release action that frees trapped grain in the crop mat.

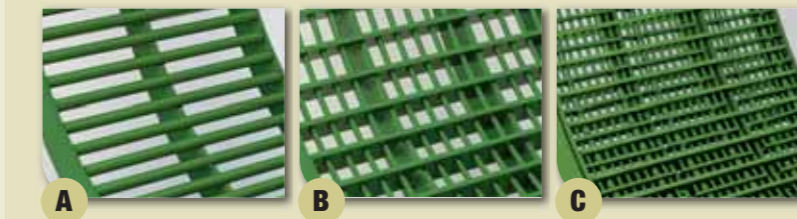


**John Deere tri-stream feeding** overcomes the problems often associated with conventional rotary designs. Rather than pushing the crop mat into the separator module in one large clump (right) – a prime cause of slug feeding and crop roping – the John Deere design guides crop into the module in three streams (left). This provides more uniform material flow, especially in high moisture or high yielding crop and green conditions. What's more, the John Deere design doesn't sap horsepower like conventional rotary concepts.



John Deere POSI-TORQ drive automatically tensions the rotor drive belt to match loads. This improves torque, reduces maintenance and increases belt life.

### Choice of three concaves



**Three concaves are available:** Large wire concaves (A) are standard equipment and give excellent performance in a wide range of crops including high yield wheat, barley, oilseed rape, peas and beans; round bar concaves (B) are available for use in maize; small wire concaves (C) are available for small grains with low yields and very brittle straw conditions.

The S690 features our innovative High Performance Rotor for improved performance in a variety of crops. This rotor design can reduce rotor power requirements by up to 20%, increase separator capacity up to 10% and give you longer straw that's easier to bale. You'll also get better performance from the cleaning system, as well as reduced cage and rotor wear.

**Crop flows** from the feed accelerator directly to the specially designed S-Series module. Notice the front of the module is composed of three feed flights; as the module spins, each flight takes a "bite" of the incoming crop to begin the tri-stream feeding process. This ensures that the feed housing is constantly filled with material, promoting smooth, uninterrupted flow. Feed flights are tilted forward at the front to grab material; the flights spiral towards the back of the feeding section to release the crop to the top of the separator cage.

# The High Performance Rotor: Quality without compromise

If you measure the value of a combine by the range of conditions it can handle, then no combine offers a higher value than the new S690 from John Deere. Equipped with the exclusive High Performance Rotor, the S690 gives you higher capacity, along with reduced power requirements, in nearly every crop.

The High Performance Rotor features a tapered front section to reduce rotor load and engine power requirements and to improve the efficiency of the entire threshing and separating system. Because the amount of force required to drive crop through the system is reduced, higher ground speeds are possible in a wide range of crops. Finally, single tine separation... pioneered by John Deere... gives you an ideal balance of capacity and grain and straw quality.

### The John Deere Advantage

- Tine separation combing action provides superior separation and grain savings
- John Deere stepped rotor cage design gives crop room to expand, reduces roping – ideal for heavy, green, tough threshing conditions



**New Discharge Housing and Discharge Beater** quickly sweeps crop material away from the rear of the STS module. A longer discharge grate below the beater boosts separation in high yielding crops and makes sure even the last remaining kernels get into the grain tank. Vanes on the discharge housing spread material for a more uniform flow to the chopper.



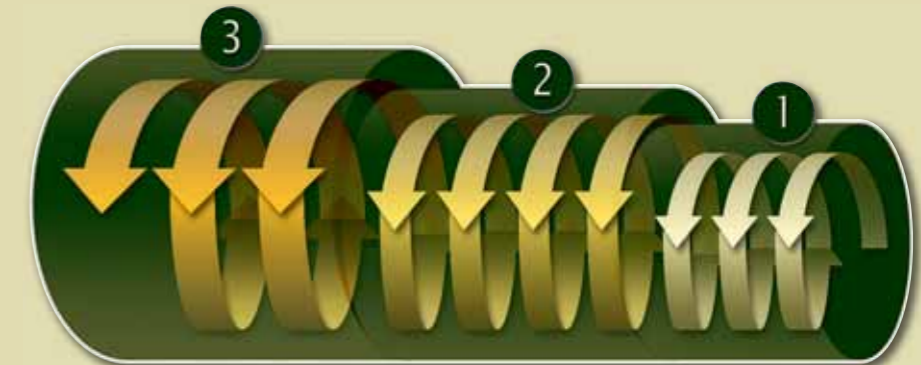
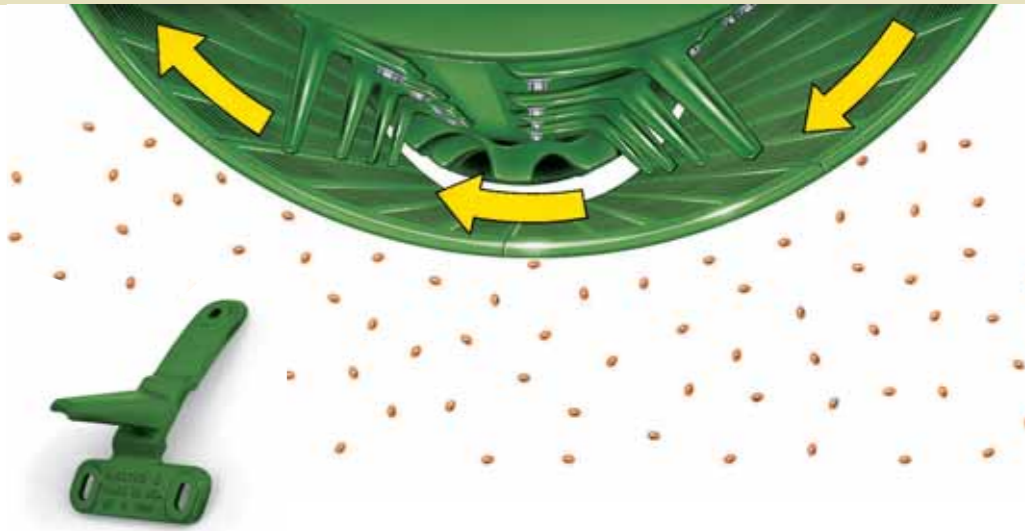
To give you a better picture of your combine's performance, the S690 combine lets you monitor performance of the separator and cleaning shoe simultaneously to maximise grain savings.



The S690 unique concept provides low specific power consumption. Gentle crop handling and the eccentric rotor cage concept allow the crop to be guided, not forced, through the S-Series module. The result: lower fuel consumption and less straw damage in various crops and conditions.



Six rows of tines are angled to aggressively comb and penetrate the crop mat, freeing any remaining grain. You'll put more grain in the tank, especially in green conditions and crops with heavy material loads. Fingerbar separator grates are made of rugged, cast, nodular iron. Removable sections give you easy access to the tines and the open finger design virtually eliminates plugging.



S-Series Tri-Stream Crop Flow

Compare the innovative S-Series module to other rotary concepts and the advantages are easy to see. The S690 combine's stepped module allows the crop mat to expand as it moves through the separator. Its tine combing action, combined with pull-and-release expansion, helps free grain trapped in the crop mat, resulting in significant grain saving and efficient use of horsepower.



Conventional Rotary Designs

## High capacity cleaning with easy in-cab adjustment

Threshing and separating capacity is of no use without the cleaning capacity to match. So to give you exceptionally clean grain samples, no matter what the yields or crop conditions, the John Deere S690 features our DynaFlo II cleaning system.

The DynaFlo II system was developed specifically to match the capacity of the S690 combine. DynaFlo II cleaning offers you high volume cleaning action, with in-cab electronic adjustment of sieve settings. Choose from the general purpose chaffer or speciality chaffers for maize and grass seed.



### The John Deere Advantage

- John Deere DynaFlo II cleaning system delivers high volume cleaning action for extra clean, high quality samples
- Electronic shoe adjustments let you quickly match cleaning performance to crops and conditions on-the-go, from the cab

*Four conveyor augers are located beneath the concave, where the volume of separated material is highest, to evenly move material into the cleaning system. Note the deep auger troughs; they provide uniform distribution of material to the cleaning system, with less bunching, even on side slopes.*

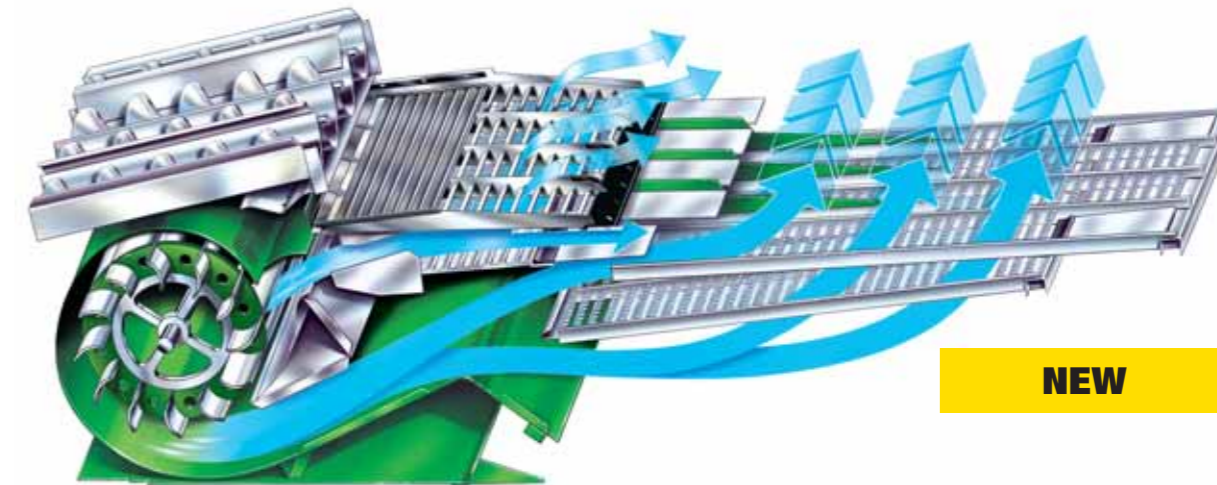
*The non-adjustable raised centre front chaffer pre-cleans up to 40% of free grain before it reaches the rear chaffer. Material from the separator drops down the incline of the louvers, helping to thin the mat. This results in more aggressive separation of material at the step pan. Air from the cleaning fan seeks the higher elevation of the raised front chaffer and increased performance in cleaning is achieved.*

*The single piece front and rear chaffer and the single piece sieve are designed specifically for the S690 combine. Grain falls from the front chaffer onto a solid step pan and then to the front part of the rear chaffer. A 20% longer sieve stroke shakes the material more aggressively improving the cleaning shoe performance.*

### DynaFlo II cleaning system

*The DynaFlo II cleaning system was designed specifically for the S690 combine. Choose an adjustable general purpose chaffer and sieve (standard) for most crops and conditions or an adjustable deep tooth chaffer and sieve for corn harvest.*

*The new DynaFlo II cleaning fan blows a high volume of air across the full width of the cleaning shoe with an improved air distribution between the front and rear part of the cleaning shoe. About 30% of high velocity air flows to the front chaffer; 70% of high volume air is guided to the rear chaffer and sieve. A steep pressure curve delivers high pressure with less volume loss. The result? Maximum efficiency and clean grain tank sample.*



*The scroll type Dyna-Flo II fan now offers a 600 to 1350 rpm speed range to let you match air volume to the crop and conditions. Together, high air volumes generated are matched to the cleaning requirements of the S690.*



*The clean grain elevator is conveniently located on the right hand side of the combine. The lower auger on the tailings return system features a deep trough for gentle grain handling.*



*Now you can adjust the shoe to match conditions on-the-go! Electric shoe adjustment makes it easy to fine tune sieve settings from the operator's seat.*



*The new flywheel drive technology delivers smooth power to the cleaning shoe drive. The results: reduced vibration of the cleaning shoe drive, increased belt life and therefore less downtime for your combine.*



*Use the remote sieve adjustment to change settings from crop to crop or to fine tune performance from the comfort of the operator's seat.*

# Grain handling capacity to handle high yields and tough schedules

Harvest with the S690 combine and you won't be limited by clean grain handling capacity. That's because we increased the capacity of the clean grain elevator to give you better performance from your cleaning shoe, even in high yielding crops. The 11,000 litre grain tank and the high unloading rate boost your combine productivity.



### The John Deere Advantage

- Enormous 11,000 litre grain tank cuts unloading stops, extends productive harvesting time
- High Unload Rate system empties the grain tank in one and a half minutes
- Unloading auger folds for easy transport



Laser sensors mounted on the tailings return elevator provide an accurate measurement of tailings volume. Tailings volume is displayed in the new VisionTrak performance monitor on the CommandTouch cornerpost.

The massive 11,000 litre grain tank capacity combined with 1155 liter fuel tank capacity will keep you working longer with fewer stops.



Grain tank covers open electrically from the operator's seat.



Auger mounted camera and in-cab monitor allows you to view unloading even in high sided trailers; a rear mounted camera gives you a view of material distribution from the straw chopper and the area ahead of the platform trailer hitch.

\*Option



Folding unloading auger makes road transport easier and reduces the storage space requirements for your combine during winter. Simply press one button on the armrest and the unloading auger will fold and unfold electrically.



We increased grain handling capacity by increasing clean grain auger speed and elevator drive speed by 8%. The result is faster grain movement away from the cleaning system, giving you higher cleaning capacity and improved overall cleaning system performance.



Cross auger cover design speeds and simplifies crop changeover. Just pull the pin to raise or lower. No tools needed.



# Chopping, baling or spreading: John Deere has the solution

Whether you drop it and bale it or chop it and spread it, the John Deere S690 can handle all your residue management needs. You can select between two chopper concepts.

For minimum and no tillage production systems, the extra fine cut chopper spreads a fine layer of residue across even the widest swaths. If you bale your straw, the Premium Chopper allows you to spread chaff to the sides of your swath while dropping straw in perfectly formed windrows. Plus, you'll appreciate the high quality of straw from the S-Series threshing and separating system. You won't get straw of this length and uniformity from any other rotary system.

### The John Deere Advantage

- Extra fine cut chopper system provides wide, uniform coverage of finely chopped residue – perfect for no till and minimum till cropping systems
- The Premium Chopper\* ensures perfect separation of chaff and straw and provides perfect spreading of cleaning shoe residue to the sides
- Switch from chopping to windrowing in less than a minute

\* Standard UK and Ireland



**The extra fine cut chopper and spreader system** chops and spreads residue from both the separator and cleaning shoe evenly over your field. Ideal for no till or minimum till applications.

\*Not for UK & Ireland



**60 specially designed, low profile, serrated "Propeller Blade" knives** accompany 60 straight serrated knives, which aggressively cut and distribute the straw and chaff evenly across the entire width of the platform. Choose either 1600 rpm for maize or 3200 rpm for small grain.



**The new discharge beater housing design** improves material flow to the chopper.



**With the Premium Chopper\* concept** you are able to separate and spread the chaff when windrowing straw. Ideal for farmers who use the straw for baling and want an even spread of all cleaning shoe residue. Or direct the chaff into the flow of chopped straw for perfect distribution of the residue.



**The chaff spreader discs** change speed and direction of turning automatically when the chopper is moved between chopping and windrowing position. This ensures perfect distribution of chaff and straw up to the full cutting platform width in all crops and conditions.



**The chaff spreader** is hinged for convenient access to the cleaning shoe.

\* Premium Chopper standard in the UK and Ireland

# i-Series combines for maximum performance

**Boost your hroughput by up to 23%\*.** The new S690i-Series combines are available with intelligent, innovative and integrated features: AutoTrac Assisted Steering, HarvestSmart Automatic Federate Control and HarvestDoc harvesting Field Data Collection.

**HarvestSmart** continually adjusts the combine's ground speed until either the machine's capacity limit or your loss limits are reached.

**AutoTrac** uses satellite signals to steer your combine with reduced overlaps to ensure that you finish each pass or bed with a full platform, increasing the productivity of your combine.

**HarvestDoc** automatically collects all harvesting data such as yield and moisture content for later documentation and analysis.

The combination of these features helps you boost your throughput by up to 23%\*.

\* Tests in collaboration with Weihenstephan University of Applied Science (2006) showed that the combination of AutoTrac and HarvestSmart in capacity mode delivers up to 23% more throughput (measured in t/h) over a manually steered and operated machine.

### The Intelligent Advantage

- S690i-Series combines boost throughput by up to 23%
- AutoTrac hands free steering reduces operator fatigue
- HarvestSmart maintains high levels of combine output



*HarvestSmart system settings are displayed on the cornerpost monitor.*



*Adding a yield monitoring system to your combine is a cost effective way to determine the variance of yields and moisture within your fields. HarvestDoc expands on yield mapping to record yield and crop harvest information onto a PC card. Take it to your office computer to generate yield maps, crop summaries and reports. Precisely the information you need to produce crops which are proven to meet quality assurance scheme requirements.*

*The high precision, grain tank mounted moisture sensor has a faster fill and cycle time for more accurate moisture readings. So accurate that within seconds of starting a new field you can confirm crop moisture levels and decide whether to continue harvesting or not.*

# Integrated Solutions

*AutoTrac Assisted Steering gives you precision guided, hands-free steering, perfect for new operators or harvesting at night. All you do is steer around obstacles or through headland turns.*



• **GUIDANCE.** If you spend long hours in the cab, or if you must occasionally depend on less skilled operators, a GREENSTAR 2 guidance system can pay you back in more

comfortable, more accurate operation. With the GREENSTAR 2 system, you choose the type of guidance you need – either manual, with visual references or fully automatic steering – and the level of accuracy, 2, 10 or 30 centimetres. And because all current John Deere combines are AutoTrac-ready, you don't have to worry about fitting a third-party system.

• **DOCUMENTATION.** The new GREENSTAR 2 displays come pre-loaded with our GREENSTAR Basics software, which includes a variety of documentation tools

for use with your combine, sprayer, tractor or SPFH. Applications include on-screen and as-applied mapping, headland boundaries, map-based prescriptions and more.



John Deere's precision agriculture products and services are designed to help you better manage information, machine utilisation and increase your overall profitability.

All integrated solutions are based on the common components: the StarFire iTC receiver and the GREENSTAR 2 display.

The StarFire iTC receives satellite signals from the Global Positioning System (GPS) and from the John Deere StarFire correction network to provide the exact position in the field.

The GREENSTAR 2 display comes with pre-installed GREENSTAR Basis software to give you an unbeatable documentation and guidance solution. In addition it allows you to control ISOBUS ready implements and to monitor machine performance, combining four functionalities in one display.

Software Pro modules are available to further enhance the capabilities of your GREENSTAR 2 display. The accuracy of the StarFire iTC receiver can be tailored to your specific requirements. The common components can be easily moved from one vehicle to another providing you fully integrated, intelligent and innovative agricultural management solutions.

# Comfort. Convenience. Control. All from John Deere.

You spend all day in the cab of your combine. So we design all our cabs with the features, options and adjustments you need to make operating your combine as comfortable and convenient as possible.

To start, the massive expanse of glass gives you nearly unlimited visibility to the front and sides of the machine, while the optional in-cab monitor gives you a view to the rear and of the unloading process. The all-new CommandCenter Monitor gives you all the information you need to ensure the combine's systems are running properly. And a variety of adjustments make it easy to fit the cab to your comfort.

## The John Deere Advantage

- Spacious, deluxe cab provides best in-class comfort, excellent visibility, superior control
- Simple, logical controls make it easier to train new operators and obtain better results
- Multi-function master control puts most frequently used functions close at hand, eases stress and fatigue



**New GS2 overhead-mounted control panel** puts access to GREENSTAR systems out of the way but within easy reach.



**Headlight and radio controls** are located overhead.



**ClimaTrak automatic temperature control** lets you dial in a specific temperature and maintains it automatically.



**In-cab colour monitor and exterior cameras** enable you to see behind the combine, as well as the unloading auger and trailer.



**A standard tilt and telescoping steering column** adjusts perfectly to your height and driving preference.

**A dedicated training seat** provides a comfortable place to sit when training new operators. The seat flips up and converts to a field office with space for a laptop computer or any other paperwork.

**The new Cornerpost display** gives you quick and easy access to vital engine, HeaderTrak functions and Performance Monitor.

**The new CommandCenter armrest display** (see right) gives you quick, easy access to vital machine readings and functions.

**The standard air suspension seat** adjusts four ways to fit you like a glove. Lumbar adjustment gives you just the right amount of back support.



## New CommandCenter and Armrest Display Unit

Access has never been this easy. The new CommandCenter monitor and armrest puts control at your fingertips. From one panel, you get access to:

- Combine Set-Up
- Remote Shoe Adjust & Automatic Combine Adjust
- Harvest Monitor
- HarvestSmart Feedrate Control
- Warning Alarms
- Calibration "Wizards"
- On-board diagnostics
- Set-Point Adjust



**Automatic Combine Adjustment (ACA)** gives you full, automatic adjustment of the rotor concave setting, cleaning fan and rotor speed, plus cleaning shoe settings.



**Adjust mirrors electrically** from your seat – they are also heated to keep them clear, even in high humidity conditions.



**Infra-red halogen lamps** provide twice as much light as normal lamps for unmatched visibility. Or choose the Xenon lighting package for increased illumination during nighttime operation.



**The handy coolbox** provides ample room to store two 1.5 litre bottles and your lunch.

**HeaderTrak display** features a vertical bar readout that provides a visual representation of relative header height. The header height resume setting is shown in the lower left corner. The bottom right of the display shows the header position when the combine is equipped with the HeaderTrak lateral tilt system.

**VisionTrak display** lets you monitor and control the performance of the cleaning shoe (left vertical bars) and separator (right vertical bars) independently or together. The horizontal bar shows tailings volume. You get a much clearer idea of shoe and separator performance to help maximise grain savings.

**The triple display tachometer** lets you monitor three functions simultaneously. In addition to ground speed (which is always shown on the top line) you can select engine rpm, cylinder rpm, concave clearance or cleaning fan speed. Anytime you touch or adjust any monitored combine function, it's automatically displayed on the bottom line.



# The most powerful John Deere combine to handle the most demanding jobs

All the threshing, separating and cleaning capacity is of no use without a solid engine to drive the entire package. That's why every John Deere S690 combine is driven by a dependable, proven, fuel efficient John Deere PowerTech Plus engine connected to high torque ground drives. And to handle tough harvest conditions easily the S690 is now equipped with even more horsepower.

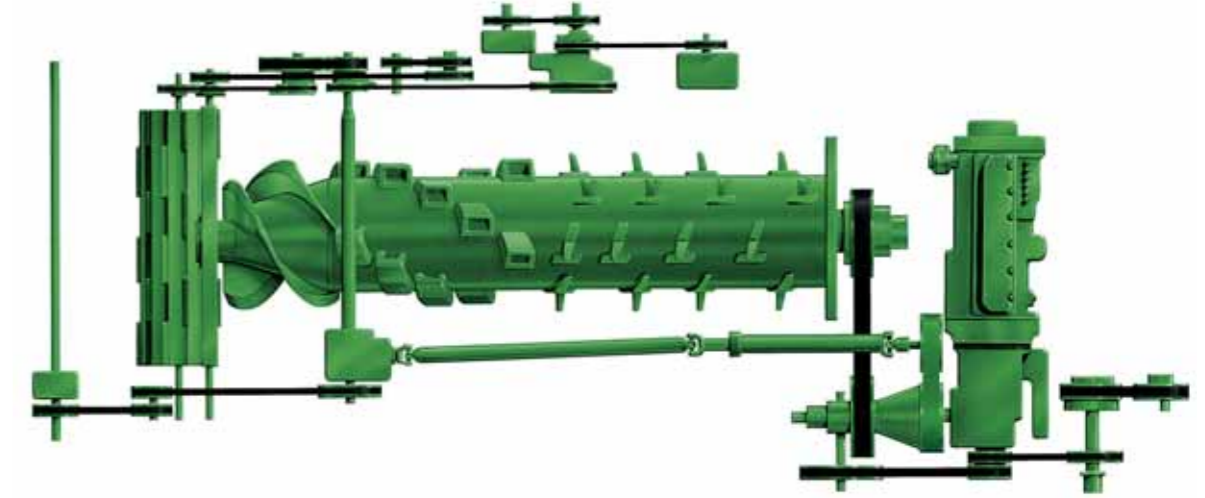
The new 13.5 litre John Deere PowerTech engine delivers 530 hp (ECE R120) at 2100 rpm for efficient combustion, excellent fuel economy and long engine life. That is real power, available in the field when harvesting. Additional horsepower is available above rated power during grain tank unloading for continuous harvesting performance. And with the new auto prime feature fuel filter, service is even easier, just turn the ignition key and your fuel system will bleed automatically.

### The John Deere Advantage

- John Deere PowerTech Plus engine delivers 530 hp ECE-R120 – the highest of any John Deere combine.
- Boosts capacity, delivers more responsive performance to varying crop and field conditions
- Additional horsepower when unloading lets you maintain full harvesting capacity



A 1155 L fuel tank and legendary John Deere fuel efficiency ensure you'll spend more productive time in the field harvesting, less time refuelling.

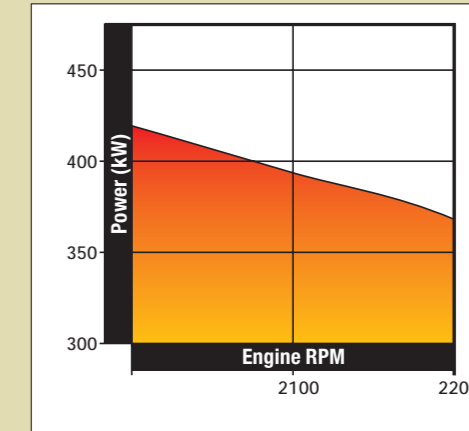


The simple drive system features fewer belts and chains, improving reliability. Notice how the tailings and clean grain elevator drives are located on the right hand side of the combine, improving access to the separator. Modular design of the cleaning fan, feed accelerator and chopper drives makes these secondary drives extremely easy to access.

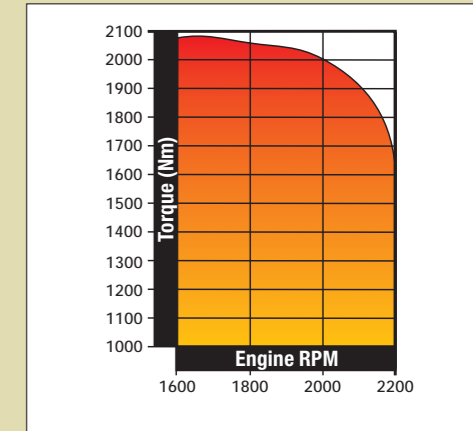


### New Tier III Engine

The high tech features of the John Deere 13.5 I PowerTech Plus engine provide true agricultural characteristics: power that never gives up. A unit injector system, electronic engine control and variable injection timing and a variable geometry turbo-charger deliver power when you need it most.



Engine power increases as the engine speed is pulled down by the crop harvesting load. This famous John Deere Extra Power makes it much easier to harvest on-the-limit when the going gets tough without fear of stalling.



The engine's torque characteristics are the secret behind John Deere Extra Power. More torque is generated as the engine speed is pulled down under load. This built-in overload recovery is the hallmark of John Deere PowerTech Plus engines.

## Building a better family of combines

**Manufacturing excellence is a hallmark of John Deere.**

Nowhere is this more evident than in the new S690 combine. This machine is the result of the tremendous investment in research and development, manufacturing technology and Total Quality Management from John Deere.

A company with the wealth of experience and resources to build one of the world's best machines, capable of handling YOUR tough conditions.



**State-of-the-art design.** John Deere engineers worked with the world's most advanced software to create these outstanding S690 combines. Pro-E design software allowed the engineers to design the line with incredible precision for unmatched in-field reliability.

**The high quality standard** at John Deere factories is based on individual responsibility for quality. Continuous audits include an assembly run off audit of each machine and first customer audits.

Zweibrücken factory was the first combine factory to receive the ISO 9001 quality certification, closely followed by Harvester Works. This ensures that all manufacturing processes are closely monitored to give premium quality for each combine that leaves the factory.



**HarvestForm composite shields** provide a modern aesthetic look. John Deere offers high quality materials to ensure your combine looks as good as new – year in, year out.



**In addition to extensive field testing,** all John Deere combines spend thousands of hours on a test track and on test stands at independent structural testing facilities. Engineers employ the very latest in fatigue and endurance testing to prove the integrity of the structural components of the S690. It's just one more example of how John Deere engineering leadership builds in greater strength and reliability, so you can harvest at your best.

## Hillmaster: Level land performance on 22% slopes

- **Heavy duty axles** provide the load carrying capacity of level land models, letting you use the full capacity of the grain tank
- **Because the cab remains level,** you won't have to fight gravity all day. You can concentrate on harvesting with less stress and fatigue
- **Equal weight distribution** on both front wheels enhances traction and safety



**The HeaderTrak system** lets you maintain an even stubble height over every centimetre of your platform, even in rolling fields or on contours. No bulldozing or gouging, even when you're cutting low to the ground in laid crop. Plus, you can work at faster field speeds and put more grain in the combine.



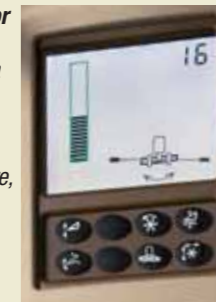
**Resume button 1** can be programmed to return to preselected header height for long stubble crops. Ideal for harvesting crops like rape or sunflowers or to raise the platform at the end of the field.

**Resume button 2** can be used to maintain a preset stubble height, for example, in standing cereals, using ground contact of the mechanical sensors.

**Resume button 3** may be programmed to maintain a preset header ground pressure for perfect contour following in laid crops.



**The HeaderTrak monitor** displays information on the header functions at a glance: active resume button, HeaderTrak operating mode, stubble height or ground pressure, reel resume and the tilt angle of the header.



**Two pairs of mechanical sensors,** (one under each side of the platform) continuously measure the header ground clearance. Their forward location ensures a quick response.



Obtain level land performance on slopes. Hillmaster slope levelling recognises changes in slope and automatically oscillates the entire combine body up to 15% to compensate. In combination with the SlopeMaster system, which maintains level land capacity on slopes up to 7%, Hillmaster is able to harvest on slopes up to 22% with no loss in performance.

You'll fill the grain tank completely, so you have fewer unloading stops. Plus, since the cab remains level, you won't have to fight gravity all day. You can concentrate on harvesting, with less stress and fatigue.

### The John Deere Advantage

- Hillmaster automatic levelling oscillates the entire combine body up to 15% for level land performance on slopes
- In combination with SlopeMaster harvest on slopes up to 22% with no loss in performance, reduce unloading stops and save grain

**More than a combine ... it's a whole new way to look at harvesting.** With features such as AutoTrac and HarvestSmart every operator can harvest at full capacity, all day, every day.

In terms of operator comfort and productivity, it's easy to see that the S690 combine is difficult to beat. In addition to being John Deere's highest horsepower combine, the S690 features the largest grain tank and the fastest unloading system – a combination designed to help you harvest more than you ever thought possible.

Look deeper and you'll find something even more amazing – the exclusive Hi-Performance S-Series Separation system. This harnesses the machine's awesome power to deliver outstanding throughput.

Recent enhancements – such as improved grain cleaning and clean grain handling systems, the redesigned cab, and higher powered engine – make this machine an even better choice. Just ask your John Deere dealer.

## The S690: Excellence in Engineering

### New developments ... new value

- New developments ... new value
- New 13.5 litre engine delivers more power for solid performance in all conditions.
- New cab and controls give you easier access to vital machine functions and readings.
- New performance features like the multi-speed feederhouse drive, new discharge beater and improved clean grain handling system increase capacity and performance in various crops and conditions.

**Built especially for the European market.** Two S-Series combine variants have taken other parts of the world by storm, overwhelming farmers and contractors with unmatched capacity, power and convenience. But the tough, high yielding crops you face require more power, more throughputs and even more capacity. Which is why John Deere has introduced the S690 combine for Europe.

**The only combine with S-Series technology.** The S690 may look like a rotary combine but it's much more. Thanks to the innovative Hi-Performance S-Series threshing and separating system, the S690 can handle loads that would choke a conventional rotary.



**The largest grain tank capacity: 11,000 litres.** The high horsepower and insatiable appetite for crop demands a larger grain tank to maintain peak productivity... and the S690 won't disappoint.

**The highest horsepower: 530 hp (ECE R120).** John Deere's new 13.5 litre PowerTech Plus engine delivers this unmatched power output to handle the widest headers, heaviest yields and fully loaded grain tanks.

**New CANBUS electrical system** improves overall reliability and delivers easier and quicker diagnostic time.



<b>FEEDERHOUSE</b>	
Feederhouse Width (mm)	1397
Feederhouse Length (mm)	1727
Header Reverser	Mech./Hydr. Actuated
Header Reverser Power (hp)	100
Lateral Tilt – Standard (degrees)	± 9
Lateral Tilt – Hillmaster (degrees)	± 18
Header Fore/Aft Tilt – Standard (degrees)	± 9
Feederhouse Speed (rpm) Standard	520
Feederhouse Speed (rpm) Option	520 – 780
<b>THRESHING AND SEPARATING</b>	
Threshing Elements	15/24
Feeding and Threshing Section Diameter (mm)	750
Separating Section diameter (mm)	834
Separating Tines	24
Total STS Rotor Length (mm)	3130
Rotor Speed Range (rpm)	210 – 1000
Concave Types	3
Concave Area (sq. m)	1.10
Separating Grate Area (sq. m)	1.50
Discharge Grate Area (sq. m)	0.40
Total Separation Area (sq. m)	3.00
<b>CLEANING SYSTEM</b>	
Type of Cleaning Fan	Scroll design
Cleaning Fan Diameter (mm)	500
Number of Fan Blades	12
Total Cleaning Area (sq. m)	5.25
Cleaning fan speed (rpm)	620 – 1350
<b>GRAIN TANK</b>	
Volume (L)	11,000
Unloading Auger Length (m)	6.86
Unloading Height, with tire 800/65 R32 (m)	4.48
Unloading Rate (L/sec.)	120
<b>ENGINE</b>	
John Deere PowerTech Plus, 6 Cylinder, Turbocharged, air-to-air after-cooled, diesel	
Engine Type	6135HZ001
Displacement	13.5 l
Rated Speed (rpm)	2200
Maximum Harvesting Power (IECE R120) (kW/hp) *	395 / 530
*at engine speed (rpm)	2100
Power Boost when unloading (kW/hp)	25 / 33
Fuel Tank Capacity (L)	1155
Hydraulic / Hydrostatic Reservoir (L)	35
<b>GROUND DRIVE</b>	
Transmission Type	3 speeds
Hydrostatic Pump Capacity (ccm)	105
Final Drives Type	single reduction
Final Drives Ratio	95:10
800/65 R32 Drive tires	Standard
540/75 R28 Steering Axle Tires	Standard
<b>ELECTRIC SYSTEM</b>	
Alternator (amp)	200
<b>DIMENSIONS**</b>	
Weight (without header) (kg) Standard	15,636
Weight (without header) (kg) Hillmaster	16,586
Transport Height (e.g. with tire 800/65 R32) (m)	3.98
<b>TRANSPORT WIDTH</b>	
710/75 R38 Front Tyre & 480/80 R26 Rear Tyre (m)	3.48
800/65 R32 Front Tyre & 620/70 R26 Rear Tyre (m)	3.75
800/70 R38 Front Tyre & 620/70 R26 Rear Tyre (m)	3.75
900/60 R32 Front Tyre & 620/70 R26 Rear Tyre (m)	3.91
1050/50 R32 Front Tyre & 750/65 R26 Rear Tyre (m)	4.28

\*Specifications and design subject to change without notice

\*\*Data varies depending on specifications

# Intelligent service and support

**More than 1000 independent dealerships.** All John Deere combines are fully supported by one of the most powerful dealer networks in the agricultural business. John Deere customers do not have to worry about finding advice, service and support if needed when time is short and there's crop to harvest.

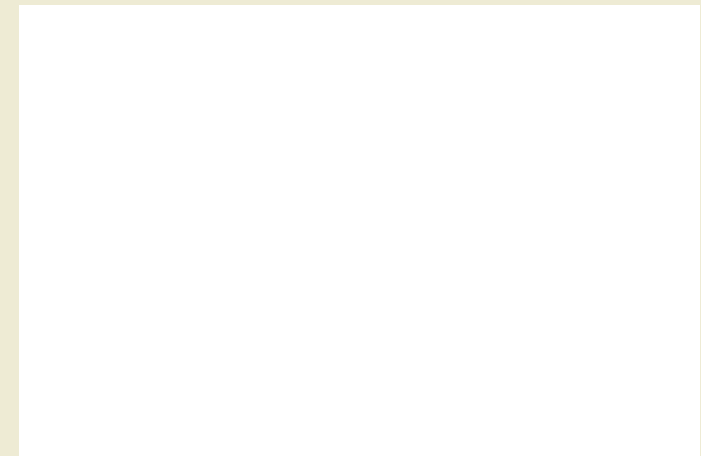
**John Deere trained technicians** help provide "High-Low-High" confidence: High uptime and Low maintenance costs on all John Deere combines, resulting in high resale value.

**Extended hours during harvest.** Most John Deere dealerships are open early and stay open late to provide the service you need, when you need it.

**Computer diagnosis speeds repairs.** Service ADVISOR diagnostics provide John Deere technicians with instant access to your combine's electronics and recommend the steps necessary to correct any problems and return the machine to work-ready condition.

**Around the clock parts support.** John Deere dealers keep the majority of the maintenance parts you need in stock in their parts department. A computerised global parts inventory allows dealers to find and order those hard to find parts quickly – all with next day delivery.

**More than a factory.** Visit our combine factories in Zweibruecken or Moline and you'll find brand-new combine assembly lines and a long list of people who are as serious about agriculture as you are.



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**"Take the credit for buying the best"**

John Deere Credit – A range of finance options as powerful as our products. Contact your John Deere dealer for a comprehensive range of finance options to suit the specific needs of your business. Not available in all countries please consult your local dealers.

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**JOHN DEERE**

**RELIABILITY IS OUR STRENGTH**