

S-Series Combines

S550, S660, S670, S680, S690



Moving a 100-year tradition into the future

John Deere has been manufacturing harvesting equipment for over 100 years, and over those years we've come to recognize that nothing is so good it can't be improved. When it came time to design the new combine, we made sure to listen closely to what you had to say. Thanks to your feedback and a dedication to quality, we are introducing some of the smartest and most powerful machines we've ever built.

More of everything is here

What can you expect from the new S-Series combines? Expect a new Class 9 machine to give you more horsepower than anything in the industry. Expect a larger cleaning shoe that delivers up to 15% more capacity. Need more? How about a 400-bushel grain tank on the S680 and S690 models, and a cab that doesn't let function get in the way of comfort and convenience.

Now that you have more power, take advantage of it – introducing the new 616C and 618C Corn Heads and the new 635FD and 640FD HydraFlex™ Drapers. All are designed to capitalize off of the new machines' enhanced performance and capacity, giving you solid, stable results with every pass.

You've picked a great time to look at the new John Deere S-Series Combines. It's the start of a new harvesting era. You just have to turn the page to become a part of it.



Five Stars – The John Deere S-Series line up features five new machines including the S550, S660, S670, S680 and the S690 the industry's most powerful Class 9 machine.



S690

S660

S550

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Visit www.JohnDeere.com/Combines for more details, or use the online product configurator to build and price an S-Series Combine.

Anything else isn't this – Meet the new S-Series Combines

When you build something this big, powerful and smart, you're going to turn a few heads. Underneath the bold new lines of the new S-Series Combine, lies a harvesting system like no other. Engineered to give you more power and productivity, these machines push the limits and extend the boundaries to give you maximum uptime. From the header to the residue system, we carefully designed every new feature to deliver balanced and consistent performance.

NEW header line-up

- Full range for all crops and conditions
- Larger, up to 18 rows or 40 feet
- Matched capacity
- Stable performance

See page 10-17

AutoTrac™ RowSense™

- Maintain efficiency through changing conditions
- Reduce grain loss
- Improve performance

See page 34-35

NEW premium cab

- Even more space and comfort
- Easy-to-use harvesting controls
- Advanced technology

See page 6-9

Improved feederhouse

- Higher lift capacity
- Faster response times

See page 18-19

NEW larger cleaning shoe

- 30% larger chaffer
- 18% larger sieve
- Reduces tailings/returns

See page 22-23



NEW larger grain tank

- 400-bushel (14,100 L) capacity
 - Higher harvesting efficiency
- See page 24-25

NEW Active Tailings system

- Higher total machine capacity
 - Cleaner grain sample
- See page 22-23

High-speed unloading

- 3.8-bushel/sec (135-L/sec) unload rate, fills cart in seconds
 - Enclosed gear case for quick and quiet engagement
 - 26-foot auger for easy unloading
- See page 24-25

Most advanced threshing concept:

- The TriStream and Variable Stream Rotor
- Better straw quality
 - Higher separator capacity
 - Improved material handling
- See page 20-21

NEW transmission options

- Mechanical-shift transmission
 - PBST push-button shift transmission
 - Exclusive ProDrive™ automatic transmission
- See page 30-31

Flexible residue management

- Choose from two packages
 - More options
 - Wider, smoother spreading
- See page 26-27

IT4 PowerTech engine

- Automatic diesel oxidation and particulates filtering system
 - Functions in a passive or active cleaning mode without interruption
- See page 28-29



Room with a view

Step inside the new S-Series Premium cab and see what you've been missing. The view from your seat is almost a full 180 degrees, so you see more. Next go ahead and stretch out, you've got 30% more space than you had with our previous cab. Feel familiar? That's because the S-Series Combines use the same layout and controls as your other John Deere equipment.

Generous on room, convenience, and comfort, the new cab is designed to keep you alert, relaxed, and productive. All the controls are logical, ergonomic, and easy to read at-a-glance. And the 'soft touch' switches let you fine-tune your machine's performance to your needs.

Sunshades

Together with the tinted safety glass we installed a generous sunshade to prevent fatigue and errors.

Plenty of power outlets

Charge your phone, MP3 player and all your other devices while you work.

A/C comfort

The New air conditioning system helps you stay cool with increased blower capacity and improved air-quality.





Premium sound. Let's say you want to listen to some music and stay connected. The premium package provides full mp3 support and BlueTooth® functionality. Advanced features like Push-to-Talk and a fully synchronized phone book keep you in touch.



Comfort zone. The air suspension premium seat adjusts four ways to fit you perfectly. Lumbar adjustment gives you just the right amount of back support. There's even an optional heated cushion.



More storage. Harvest time means long days in the field, which means you're working and eating on-the-go. Luckily the new S-Series cab features 30% more space than our previous cab. There's also more storage that allows you to work comfortably and an integrated refrigerator keeps your refreshments cold all day.

Mobile office

A lot happens here. From this seat you run your business, harvest your fields, and spend most of your days. You need your cab to be comfortable, convenient, intuitive, logical, and if it can keep your lunch and drink cold during an all-day harvest, even better.

Slimline cornerpost and cornerpost display

See more of the fields outside. We went to great lengths to eliminate as many obstructions as possible. We narrowed the cornerposts, put all the primary combine information where you can read it easily, widened the angle of the front windshield, and tinted the glass. The results are a near total 180-degrees of visibility.

Roomy instructor seat

Dedicated training seat flips up and converts to a field office with space for a laptop.

Tilt-and-telescoping steering wheel

Adjusts to fit your operators in seconds.

Storage compartment

This handy compartment provides ample room to store two 1.5 liter bottles and your lunch.

Twin cup holders

Out of the way, but within easy reach.





Take command

With CommandArm™, a CommandCenter Display, and a digital cornerpost display, the S-Series gives you control over all operations with less effort.

CommandArm console:

The CommandArm console makes it easy and convenient to stay productive. Controls are user friendly and fast to locate.

- Hotkeys for common harvesting adjustments, transmission and HillMaster controls
- Air conditioning controls
- Radio controls
- Light controls

Multi-function control handle:

Fits your hand perfectly to give you smooth hydrostatic speed control. It also controls unloading operations, AutoTrac resume, header functions, and emergency stop.

We've also located controls for lights, wipers, radio, cab climate, and mirrors on the overhead console...out of the way, but always within reach.

Display options

See what you need to see, and more



Digital Cornerpost display
The well-appointed displays are easy to read and give you complete information on your combine's performance. At-a-glance, get a quick overview of forward speed, engine rpm, and alerts. The new power meter shows you the amount of power used.



GreenStar™ 3 CommandCenter Display puts vital machine and crop information within reach, making it easy for you to make quick adjustments. Supports GreenStar applications such as AutoTrac™ and AutoTrac™ RowSense™ from one panel.



GreenStar™ 3 2630 Display
You can swap out the GreenStar 3 Display for a larger 2630 Display. Run all your GreenStar solutions including documentation and guidance. It supports video functionality and includes a USB port for data transfer.

Beat the clock with the New 616C and 618C

16 and 18 rows deliver a more productive harvest

We knew we couldn't come to market with the most powerful combine and not deliver front-end equipment that could keep up with it. Introducing the new 616C Corn Head with 16 rows and 618C Corn Head featuring 18 rows. Built ready, these corn heads offer more rows, and perform exceptionally well at higher harvesting speeds, which means you can get done a whole lot sooner.

Excels in every condition

More acres, higher yields, and hybrids with tougher stalks are real challenges at harvest. That's why the 600C components are robust enough to chop through the toughest, thickest crop with ease.

Smooth handling and less loss. High-performance gathering chains, stalk rolls auger, feederhouse, and trough promote smooth crop flow and help to make sure every kernel makes it inside the combine. The results: fewer tossed ears, less ear shelling, and less trash fed through the combine.



Higher capacity feeding. The optional CommandTouch Multi-Speed feederhouse drive provides higher capacity feeding in the heaviest yielding corn. The reliable PowerShift transmission delivers up to 42% more torque capacity that enables you to operate the corn head in five speed ranges. Push one button and you can control the speed from the cab.



Tapered shaft and locking retention nut improve retention and ensure optimal material transport. Stalks are drawn through with a gentle touch and then finely and consistently chopped by the StalkMaster chopper. The 600 Series corn heads can also be tailored with stalk rolls designed to match your harvesting needs.

Straight fluted. Crimping action leaves the stalk mostly intact.

Opposing Knife. Standard with StalkMaster to maximize stalk processing.

Intermeshing Knife. Medium stalk processing uses less power.



Improved slip clutch protection. A heavy-duty slip clutch design protects both the row unit gearcase and the StalkMaster lower chopping unit gearcase. If the clutch slips, the operator will know immediately.



Lift assist row unit deck shields make it easy to access the maintenance points. Finish quickly so you can resume harvesting.



Improved Height Sensing. To improve ground-following capabilities and increase harvesting speeds, we relocated the height sensors on all 600 Series Corn Heads to the outer points and positioned them forward 7 inches (17.8 cm).



600C StalkMaster™ Chopping Corn Heads

The StalkMaster Corn Head Chopping System lets you size and chop corn stalks while harvesting, eliminating second-pass operations and saving time, fuel, labor, and additional tractor operating costs. StalkMaster is available on the 606C, 608C, 616C and the 618C corn heads.



Easy disconnect. The gearcase on the StalkMaster row units now features a chopping disconnect. Each row unit has a convenient shifting lever on the right side of the gearcase to turn the function on or off.

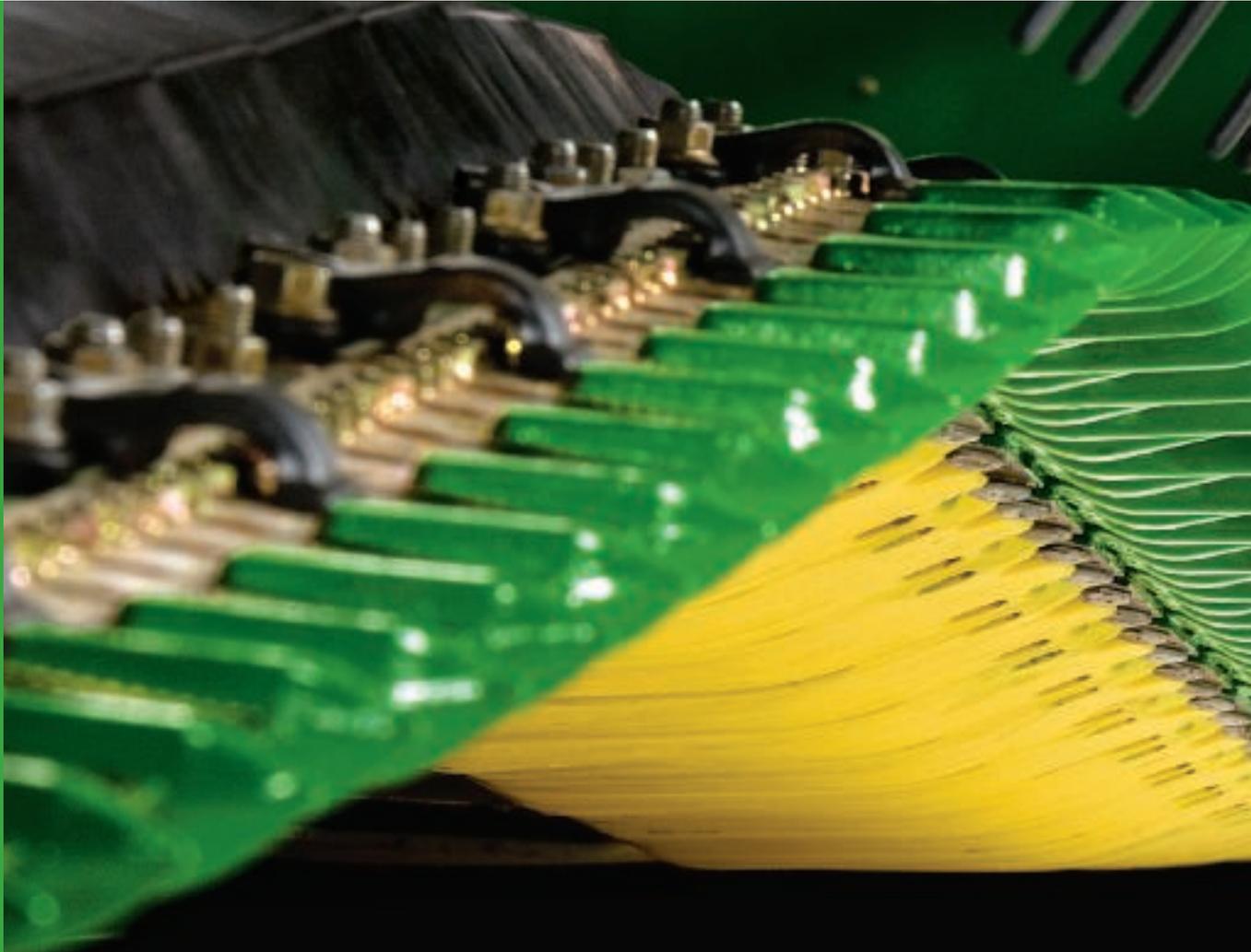
The New 635FD and 640FD – Flexibility meets high-performance

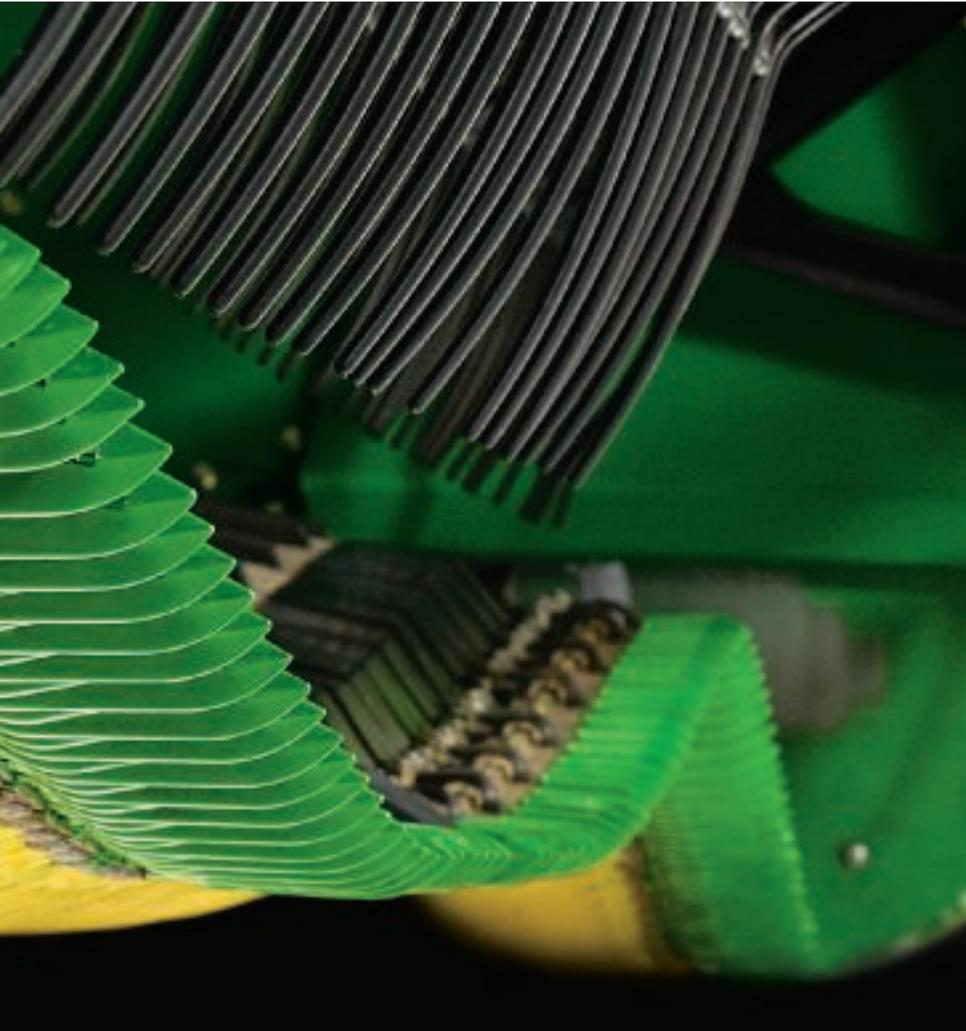
More feet and flexibility to get you more

How can you make sure you don't leave profit in the field? Get to know the true full-width flexible cutterbar – the new 635FD and 640FD HydraFlex Drapers™. Both the 35-ft and 40-ft, 600FDs flex 7.5 inches across the full width of the cutterbar allowing the draper to hug the ground, reaching more beans with every pass. Better still, the exclusive HydraFlex floatation system allows you to change the amount of weight of the cutterbar, riding on the ground, to match soft or hard soil conditions while you cut.



16-Inch High-Capacity Feed Drum. A large feed drum with tapered ends and gathering finger, delivers the crop from the center feed belt into the feederhouse for smooth, uninterrupted crop flow. Engage the feederhouse reverse switch on the armrest and you can easily reverse the reel, feed drum, and center feed belt from the comfort of your cab.





High-speed harvest without compromise



Not only do the 600FDs flex, they are ready to move. Pair them up with the powerful new S-Series combines and you're looking at a powerhouse of harvesting potential. Now you can cut lower, move faster, and get the job done sooner, without sacrificing quality.



Keep an eye on what matters. We designed the new 600FDs with swept back rear panels which allow you an unobstructed view across the full width of the head. You can see the crop as it's cut, laid head first on the side draper belts, delivered to the center belt, and fed smoothly into the combine.



Draper Belt Protection System. Integrated into the HdyraFlex draper platform, this system minimizes side belt damage should slippage occur. How does it work? Speed sensors monitor the speed of the idler rollers and if any major slippage happens, the belts shut off and a warning is displayed on the CommandCenter™ Display.



Two-Piece Reel. We equipped the 640FD with two reels. The two-piece reel features a five-cylinder lift system that provides a consistently level reel height across the full width of the cutterbar. This allows even feeding of the crop unto the draper belts.

Tough conditions won't stop you

Perfect harvesting conditions rarely occur, that's why many of you go with the 600D Draper Platform from John Deere. The entire line works fast even in tough wet conditions.

Designed to perform. The dual-knife drive system, with a built-in drive line protection system, provides years of trouble-free operation. Perma-Glide divider points are designed to minimize outer divider plugging. Performance features also include taller belt cleats, wider belts, and a larger, 16-inch feed drum. You can even add an optional auxiliary top auger to keep bushy crops moving into the feederhouse. With a complete draper line that includes sizes from 25' to 40', you'll have the widest selection of draper heads for the widest range of crops and conditions.



1. Cutterbar Tilt. A center-mounted hydraulic cylinder lets you tilt the cutterbar from the convenience of the cab. You get the optimum cutting angle and the lowest possible cutting height.

2. 16-inch feed drum. Four inches larger than previous models, this drum is sized to provide better feeding in high-volume and high-yielding crops.

3. Timed Dual Knife Drive System. You'll appreciate the smooth, vibration-free cutting performance you get from the shaft-driven in-line dual knife drive system. Standard on the 630D, 635D and 640D.



Reel resume and reverse. With reel resume, you can store two reel positions so you'll always match field conditions. And for the occasion that your draper gets too big a bite, a single button lets you reverse the reel, center feed drum, and center belt to remove material without stepping out of the cab.



HydraFloat™ suspension system. No more cutterbar bulldozing in soft soil! This exclusive hydraulic height-sensing system lets you increase the hydraulic pressure so the cutterbar will float over the ground. Adjustments are made in the cab. Because there's no manual float spring tension to adjust, no stopping is required. With the low, 1.5-inch cut height, this system is a winner in down, tangled crop.



Integrated road transport. Equip your 630D, 635D or 640D with this optional transport system for absolute convenience. Converting from field to transport mode takes only minutes and requires no tools!



One-inch draper belt cleats. Exclusive 1-inch tall belt cleats move heavy, down, damp crop efficiently. In addition, the belt speed is now 20-percent faster for more consistent, even feeding.

For rice harvesting. If you're using the 625D in rice, opt for the large, 25-foot steel tine reel. It has a 54-inch diameter with eight bats to ensure excellent crop contact for optimized cutting and feeding.

Bring-it-on capacity!

What's in front of your combine has just as much effect on productivity as what's inside your combine. So we designed the 600 Series Rigid and HydraFlex™ Platforms to match the high capacity of the S-Series Combines and equipped them with a range of performance-boosting features, including:

Single-point hookup. All John Deere headers and platforms feature single-point hookup of electrical and hydraulic connections, as well as latchpin engagement.

Double-cut knives with heavy-duty drive. Four-inch double-cut knives give you cutting capacity and harvesting speed, while the epicyclic drive offers reliable, smooth performance.

HydraFlex technology. With HydraFlex, you can control how much of the cutterbar's weight is on the ground without affecting the ultra low cutting height of this header. Custom cutters, you can dial up the pressure to maximum, locking the cutterbar into the rigid position, thus giving you one platform you can use for wheat and beans.



Exclusive HydraFlex Platforms give you unmatched flexibility to run faster and cut cleaner over uneven ground. Float arms with hydraulic cylinders give you six inches of float, even when changing pressure to match harvest conditions. In-cab controls let you make adjustments, or run on “automatic.” For rigid operation, simply use the maximum pressure, or use mechanical lock-out brackets.



Segmented skid shoes (available on HydraFlex platforms) provide more flexibility for ground-hugging harvests so you can reduce field losses in down or tangled crops.



Header height sensing (HHS) helps maintain consistent off-ground cut height in uneven ground. HHS is standard on HydraFlex platforms, optional on rigid platforms.



The heavy-duty epicyclical knife drive increases drive capacity and improves reliability. The straight-line oscillation makes the drive run smooth.



The 26-inch diameter auger, with its 5-inch flights, takes in a thick crop mat. Plus, long, retractable fingers running in-line the full width of the auger aggressively grab crop material once it's cut. Result: smooth, high-volume crop feeding – even at faster ground speeds.

The stone dam (Flex only) helps deflect rocks, minimizing damage, while helping hold material on the platform. Stainless steel deck plates provide a smooth transition between the cutterbar and auger. A short stone dam is standard on all HydraFlex platforms; a tall stone dam is available for rocky, uneven fields and no-till soybeans.



Smooth performance in windrows

No matter how rough the field or how thick the windrows, the 615P Belt Pick-Up gives you smooth, complete gathering of windrowed grain, thanks to a variety of exclusive features and innovations.

Start with the belts themselves. Four, 44.5-inch rubber belts provide improved performance over designs using more belts – you'll see tighter tracking, plus reduced seed loss. Connectors between the belts increase drive capacity, even in tough conditions, without the need for a center support on the drive rollers. Belts are driven by dual hydraulic motors, not a mechanical/hydraulic combination, for fewer moving parts and increased reliability.



The exclusive FieldGlide™ suspension features an adjustable air spring and heavy duty hydraulic shock design to dampen movement during field operation and transport, allowing you to increase harvesting speed without bouncing the platform over windrowed crop. No tools required – simply set the air springs quickly and easily; once set, the air springs don't need adjustment during the season.

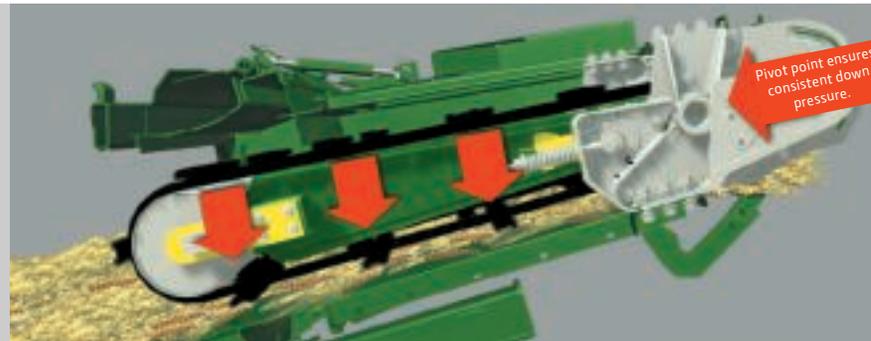
Appetite for more!

The S660, S670, S680, and S690 Combines have a unique **feederhouse** design that gives you more than enough capacity to take full advantage of the extra productivity you get with these machines. Add to that a new durable frame and now you can handle the increased width and weight of the larger heads with ease and confidence.

The **new feederhouse** on the S-Series provides large areas of clearance for high volumes of crop to flow uninterrupted, without hesitation. It's all about matched capacity.

Speaking of crop flow, you can expect better engagement of crop, earlier, plus a smooth transition from corn head or platform to the feederhouse chain. The 5-speed feederhouse drives deliver high-torque slip clutch and 135-hp reverser, for more matched capacity.





- **High capacity feederhouse.** A proven productivity boost for your John Deere S-Series Combine.
- **5-Speed Feederhouse Drive.** The durable high-torque slip clutch ensures peak performance and a long life cycle.
- **Better visibility.** The long feederhouse design gives you a full view of the header and the height-of-cut without having to lean forward. You can also see the stubble height behind the header.
- **Feederhouse reverser.** The robust 135-hp reverser makes light work of stubborn plugs.
- **Single-lever multi-coupler.** Hooking up headers doesn't get much easier than this.
- **Easy adjustments.** The front plate can be adjusted fore and aft to compensate for different tire sizes, crops, and conditions, ensuring easy transition from the header every time.



Lateral tilt feederhouse – Take Control of Header Tilt

Harvest more grain at faster speeds – in any terrain. The lateral tilt feederhouse is a self-leveling system that allows the feederhouse and header to tilt 4 degrees side-to-side, hugging the hills. Sensors on all platforms and corn heads detect changes in the terrain and signal the lateral tilt controller. Tilt response is instantaneous.

The benefit? More consistency without bulldozing or gouging. And because you can harvest faster on sloping terrain, you stay productive.



Smooth operation - TriStream™ Rotor

The best of both worlds...high capacity and gentle threshing. That's why the TriStream is a favorite among corn, soybean and small-grain growers.

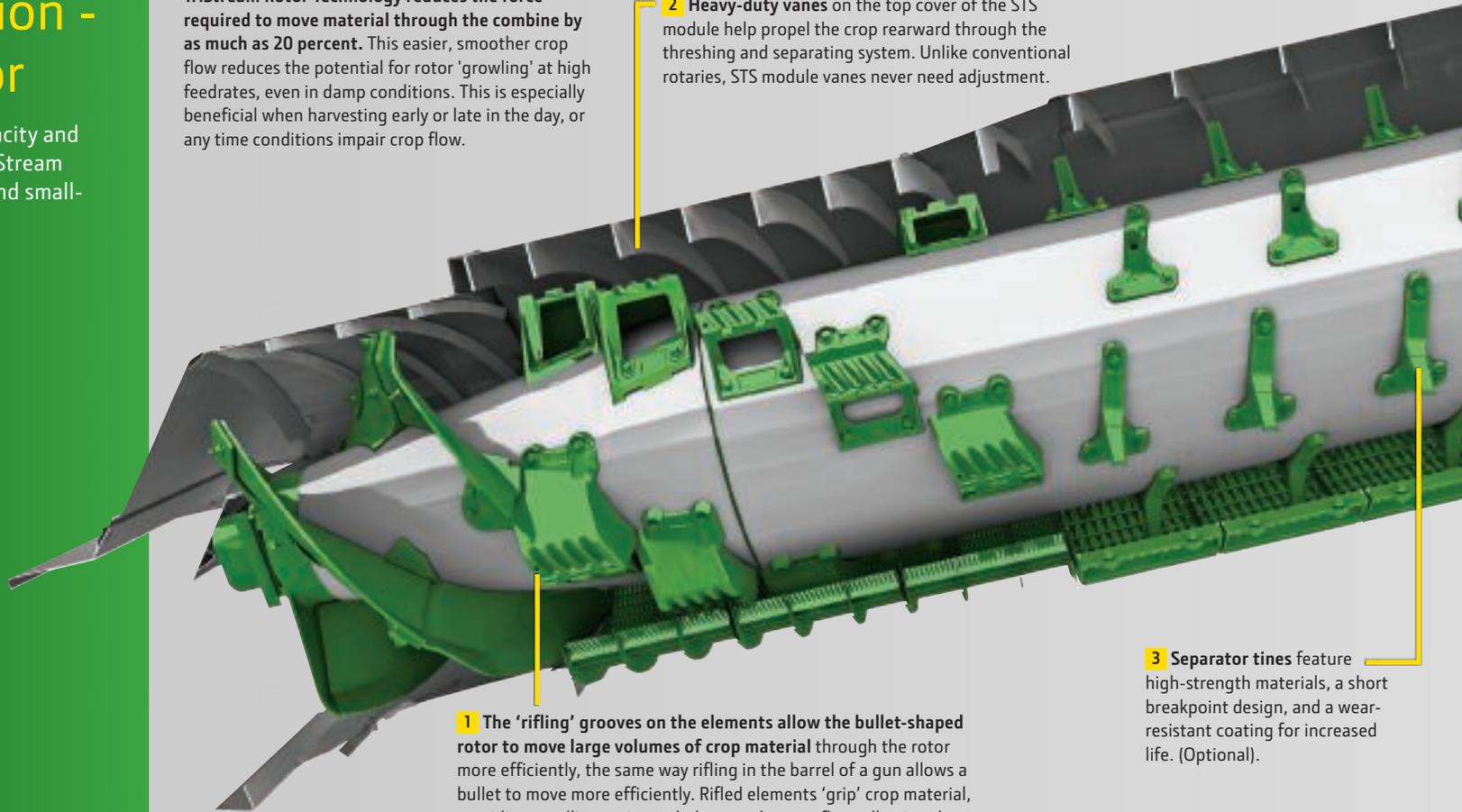
The TriStream rotor features a slightly tapered front nose, which dramatically reduces the 'growling' that often comes with thick crops and heavy rotor loads. The spiral vanes surrounding the rotor, guide the crop material through the feeding and threshing area, reducing hesitation and improving productivity.

TriStream Rotor Technology reduces the force required to move material through the combine by **as much as 20 percent**. This easier, smoother crop flow reduces the potential for rotor 'growling' at high feedrates, even in damp conditions. This is especially beneficial when harvesting early or late in the day, or any time conditions impair crop flow.

2 Heavy-duty vanes on the top cover of the STS module help propel the crop rearward through the threshing and separating system. Unlike conventional rotaries, STS module vanes never need adjustment.

1 The 'rifling' grooves on the elements allow the bullet-shaped rotor to move large volumes of crop material through the rotor more efficiently, the same way rifling in the barrel of a gun allows a bullet to move more efficiently. Rifled elements 'grip' crop material, providing a pulling action to help even the crop flow, allowing the rotor to deliver better threshing performance.

3 Separator tines feature high-strength materials, a short breakpoint design, and a wear-resistant coating for increased life. (Optional).





Extended-wear separating package includes factory-installed extended-wear concaves, extended-wear threshing elements and separator tines, and extended-wear rotor top covers.



Dual-range separator-drive gives you a wide range of speeds to match conditions. High range provides 380 to 1,000 rpm; low range offers 210 to 550 rpm. Shift one lever to change ranges.



Now you can harvest close to the ground without worry thanks to a true stone trap. It helps catch rocks before they reach the threshing module. Flip one lever for fast and easy cleanout.



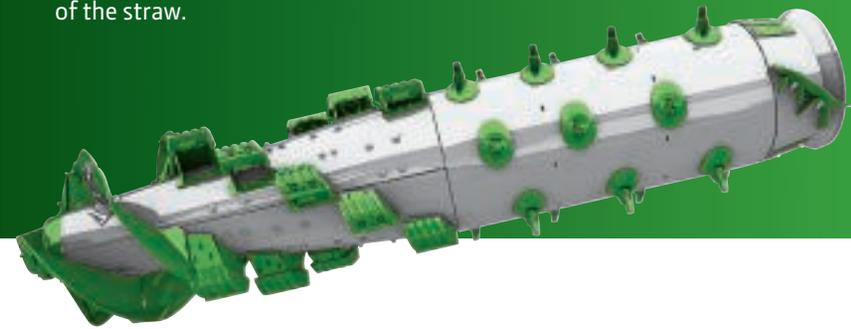
The John Deere S-Series module features a conical design. This gives the crop mat room to expand as it travels through the separator module, reducing the chances for roping – and lowering power requirements. The pull-and-release action frees trapped grain in the crop mat, boosting grain savings significantly.

New Variable Stream Rotor

Building on the proven performance of our TriStream rotor, we've added another opportunity for our small grain and rice operators - the new Variable Stream rotor. It too delivers high capacity and smooth performance.



The longer, more tapered front cone design make this rotor well-suited for rice, where conditions are damp, wet, or extremely green. The rotor is also recommended for small grains where straw is tough. The Variable Stream rotor also features remote adjustable top cover transport vanes. The vane angle can be adjusted to reduce the stress on straw material as it flows around the rotor, increasing the quality of the straw.

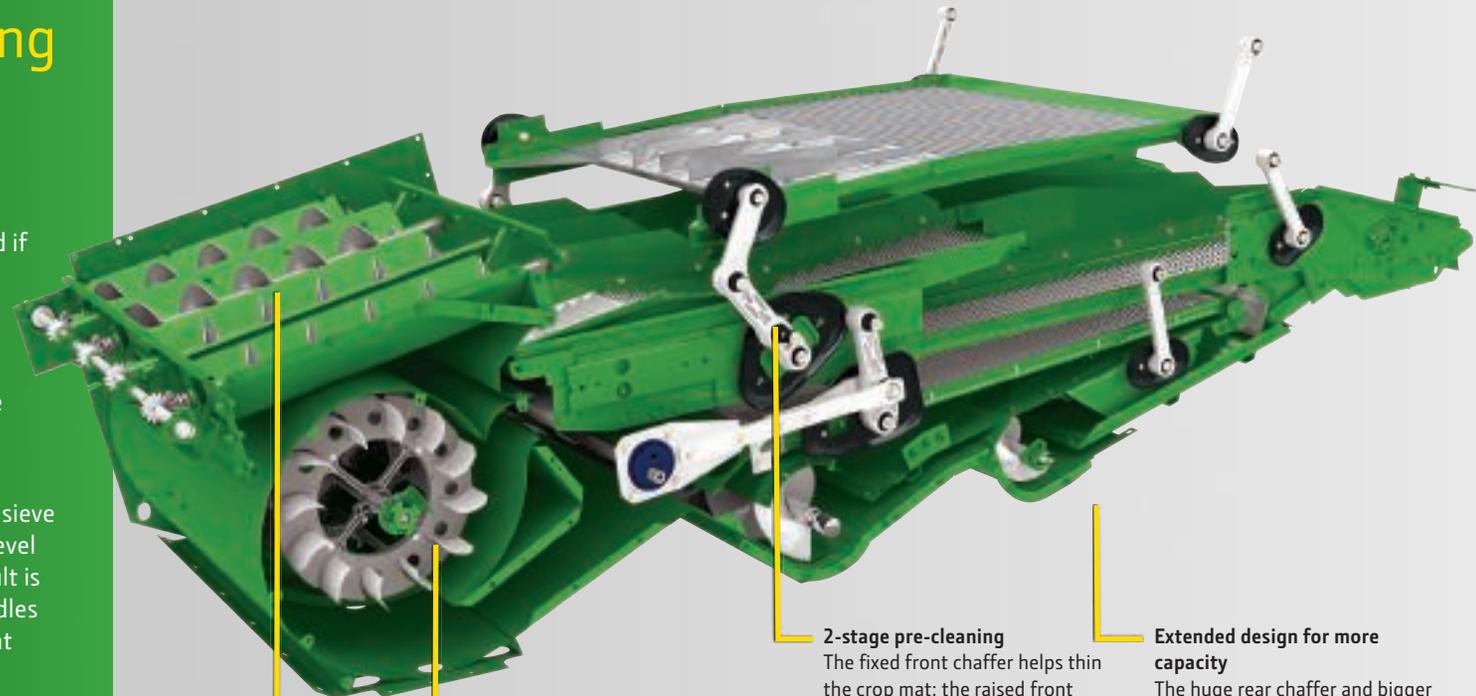


High-capacity cleaning with easy in-cab adjustment

Adding cutting capacity doesn't do much good if your cleaning system is overloaded. To make sure your S-Series can keep up with faster harvest speeds and higher-yielding crops, the new shoe features a large one-piece chaffer and larger sieve to deliver up to a 15% increase in cleaning capacity over the previous system. Tailings are low too.

The chaffer has 30% more louver area and the sieve has 18% more louver area. The unique, multi-level design is also less sensitive to slopes. The result is a high-performance cleaning system that handles slopes and hills, while still delivering consistent results.

But when you do need to adjust the sieve settings, you can make them electronically in moments from the comfort of your cab.



Uniform Distribution

Four conveyor augers move material onto the shoe steadily and evenly, even on hillsides or when going up or down hills.

Improved fan performance

The fan ensures peak performance and clean grain sample. A steep pressure curve delivers high pressure with less volume loss. About 30% of the air goes to the front chaffer at high speed; the rest goes to the rear chaffer and sieve.

2-stage pre-cleaning

The fixed front chaffer helps thin the crop mat; the raised front chaffer pre-cleans up to 40% of the free grain before it reaches the main chaffer.

Extended design for more capacity

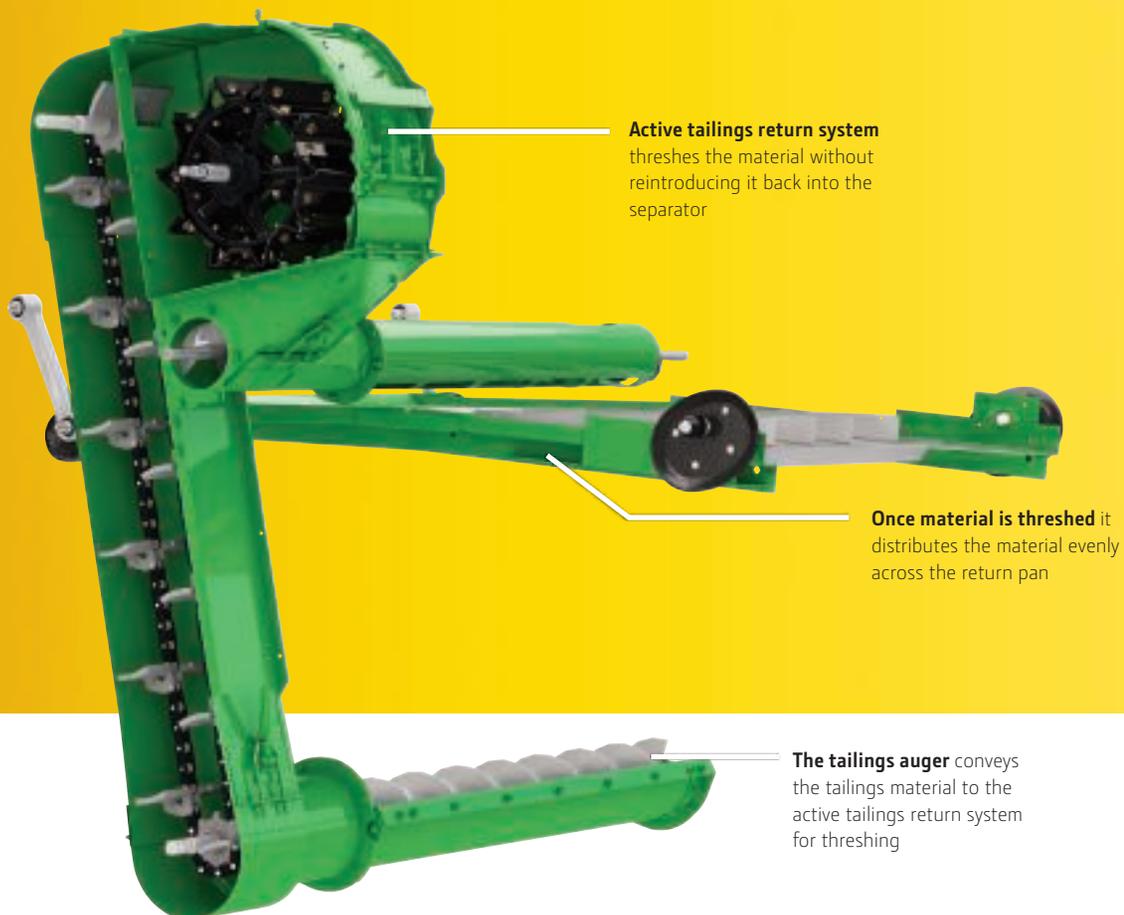
The huge rear chaffer and bigger sieve are specially designed to handle the threshing and separating performance of the new S-Series.



The high-inertia shoe drive, now standard on S-Series Combines, provides smooth, consistent power delivery with less belt slippage.

Active Tailings System

Higher capacity with a gentle touch. If you run a large combine and work a lot of acres, then you'll appreciate the new Active Tailings System on the S680 and S690 models. By handling returns that might normally go back to the separator, consuming its performance, it distributes the grain and material back onto the return pan, not to the threshing area, and increases the total capacity of your machine. Better still, it's easy to adjust. Our Active Tailings System uses less aggressive concave settings than the ones in your separator – and handles sensitive crops gently, maintaining the integrity of your grain quality.



Touch Set

With the selection of a crop and the touch of a button or screen, the TouchSet automatic combine adjust allows you to fine-tune the threshing rotor rpm, cleaning fan rpm, concave clearance, main chaffer opening, and sieve opening all from the armrest console in the cab, while you're moving.

It comes pre-loaded with a number of factory settings, plus you can store one customized setting for each crop setting and a number of personal settings can also be stored for specialty crops like sunflowers, that aren't already pre-loaded.



So you don't have to climb back into the cab, ground level adjustment of the cleaning system is standard equipment on all S-Series Combines.

Grain handling capacity that keeps you running

High yields, tough schedules, and the new Cleaning System. Together, these factors necessitate a clean grain handling system that can keep up with your harvesting pace. Here's how the S-Series Combines deliver:

400-bushel grain tank - the largest factory-installed grain tank in the industry – Our S690 machines boast a 115-bushel per minute capacity, in order to attain matched capacity with available front-end equipment.

Fast delivery – 105 seconds (that's 3.8 bushels/second) is all it takes to empty the 400-bushel grain tank that's standard on the S680 and S690.

Better handling – The 26-foot (7.9 m) unloading auger pairs ideally with the 40-ft platforms and corn heads, making unloading on-the-go a stress-free operation.



Today's wider, centered platforms require a longer unloading auger. Our optional 26-foot auger keeps in-field unloading easy for both the combine driver and the grain cart operator. To ensure reliability, we redesigned both the auger and the support structure. A cast unloading auger turret brace helps carry the increased load and torque found with this larger auger. Plus, we added extra steel to the grain tank, thicker floor sheets, and more support on the right-hand side of the combine.



The John Deere 22.5-foot (6.9 m) folding unloading auger shortens the length of the combine by approximately 8-ft. (2.5 m) making it easier for you to transport and store your combine.



The moisture sensor has been redesigned and is now mounted on the clean grain elevator on all S-Series Combines. The system uses an improved method for more accurate results.

Push to fold



The 300 bu (10,600L) and 400 bu (14,100L) grain tanks on the S-Series combines are available with power-fold extension/covers as an option. Stay in your seat, push a button and the grain tank fountain auger and grain sample trough folds automatically. There's no need to enter the grain tank.



Chop, drop, size and spread: with the S-Series residue handling

Chopped, dropped or fine-cut...the S-Series Combines feature residue handling systems and options that are designed to take care of your residue management needs.

The S-Series combines feature a fine-cut chopper. The chopper blades, along with unique air shrouds in the chopper housing, give an ultra-fine cut while generating a strong blast of air for more even residue distribution.

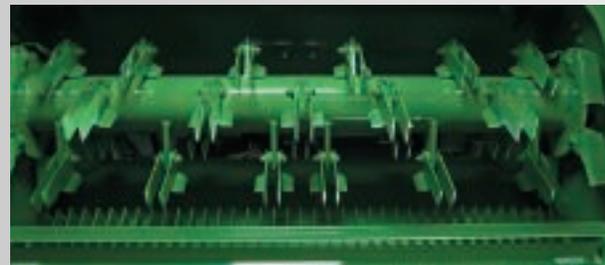
They also feature a manually adjustable vane tailboard design, perfect for spreading residue in widths to 30 feet (9.14 m). This system is easy to swing up and out of the way for windrowing.

To better manage residue distribution with wider platforms, the PowerCast™ tailboard spreads residue 30-ft (9.14 m) and wider. This feature spreads residue evenly, which helps you get even crop emergence in the future, especially in no-till fields.





The high-speed chopper's 12 deep deflector fins can be positioned to control distribution width of crop residue. (Spread can be adjusted up to 30 feet, depending upon conditions.)



Chopper blades feature large surface wings with long lasting, wear-resistant material. The wings are positioned to generate maximum airflow to the outer edges of the chopper, giving you a more consistent spread pattern. Fewer blades make for reduced power requirements and lower replacement costs.

Enhanced residue disposal



The Advanced PowerCast™ tailboard and straw chopper is an option of the premium residue system that gives you additional residue management flexibility. The Advanced PowerCast tailboard contains two hydraulically-driven enclosed discs and a center divider that moves back and forth in a pendulum motion. A straw chopper, overshot beater, and straw chute complete the premium residue system.

With the new premium residue system you can:

- Chop straw and chaff, and then spread both by making adjustments within the cab
- Form a straw windrow while chopping and spreading
- Form a straw and chaff windrow without chopping material
- In-cab shroud adjustment for wind compensation
- At the touch of a button swap the shroud position to match wind direction



More power where you need it

From the increased feeding capacity of the CommandTouch™ feederhouse to the stalk processing ability of the 600C StalkMaster™ Chopping Corn Heads, the new S-Series Combines give you the features that fit the way you farm. But where does all the power come from?

Take a look at the 13.5L PowerTech™ PSX engine on the S680 and S690. This hard-working powerhouse is the finest engine we've ever built. The secret to its impressive power lies in the dual turbochargers (1 fixed, 1 variable geometry) and high-pressure common rail system. The high capacity cleaning system and air-to-air aftercooling also improve engine performance. You'll also appreciate the power boost that lasts up to five minutes during unloading. Simply put, this is one tough, super-efficient, engine that won't let you down.

Interim Tier 4 made simple. The new PowerTech PSX is so advanced, it meets emission regulations. No need for urea either, only diesel is required.

The 9.0L PowerTech PSX Engine delivers higher performance for the S660 and S670. This engine features automatic fuel priming, fuel filter change indicator, water-in-fuel sensor and more.

Consistency = More Control

The **Isochronous Governor** on the new S-Series combines keeps drives operating at a constant speed, enhancing your combine's overall capacity and efficiency. In tough, wet or dry conditions, the shoe and separator operate at a more consistent speed, delivering a more uniform separation and cleaning of the crop.

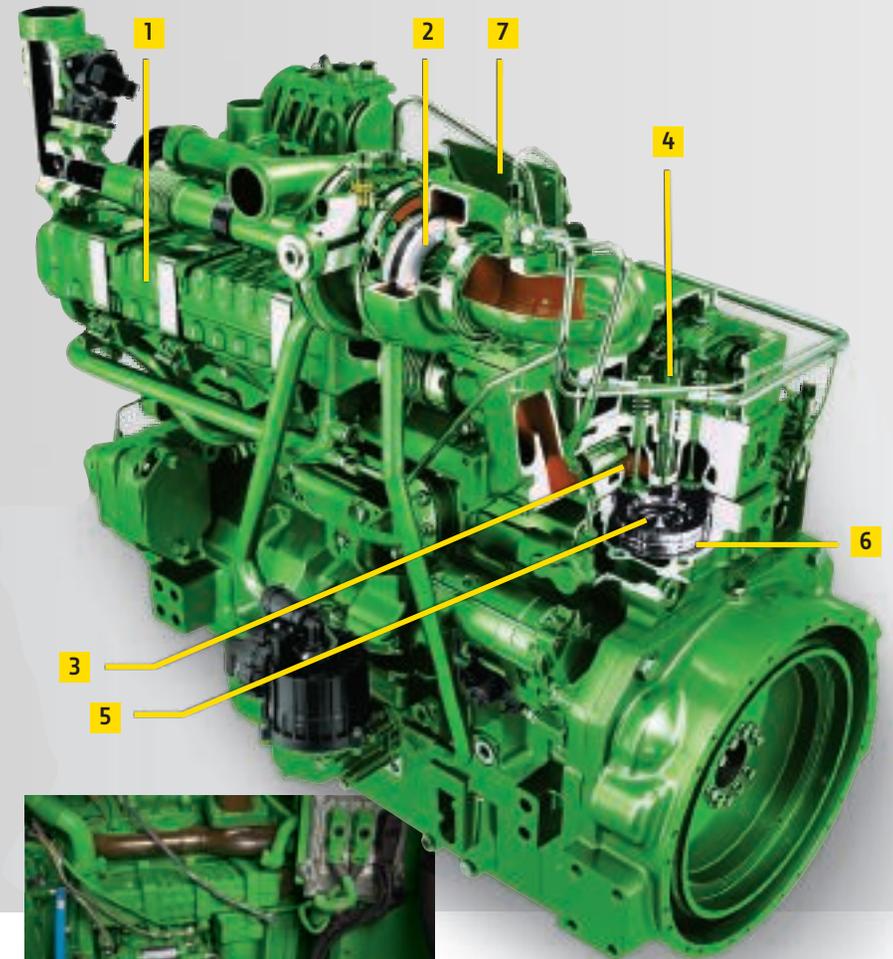
- **Consistent engine speed equals better durability**
- **Consistent engine speed equals better hydro control with constant pump speed**





PowerTech™ PSX Engine: Designed and built for dependability and durability

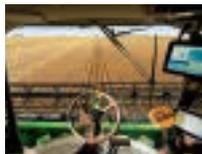
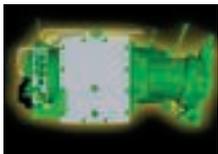
- 1** Exhaust Gas Recirculation (EGR) cools and mixes measured amounts of cooled exhaust gas with incoming fresh air to lower peak combustion temperatures, thereby reducing NOx.
- 2** The series turbochargers deliver more boost pressure which increases the performance.
- 3** 4-valve cylinder head provides excellent airflow resulting in greater low-speed torque and better transient response time.
- 4** High-Pressure CommonRail (HPCR) fuel systems provide variable CommonRail pressure, multiple injections and higher injection pressure with 2000 bar.
- 5** Low-friction, single-piece steel piston improves fuel economy, reduces emissions, and increases durability.
- 6** Directed top liner cooling contributes to improved oil control and increased durability.
- 7** John Deere electronic engine controls: faster engine control unit (ECU) manages both, engine and exhaust filter.





The ProDrive™ Ground Drive System

Get more precise, more consistent control of your ground speed throughout the travel range of the hydro handle. ProDrive lets you switch between two infinitely variable speed ranges with the push of a button. Using the CommandTouch™ armrest console, set the first range for typical harvesting speeds, and the second for transport.



Another benefit ProDrive delivers: An electro-hydraulic differential lock with a 4-pinion differential for greater traction in muddy harvesting conditions.

The right transmission for you

ProDrive: Automatic efficiency

Seamless shifting. When ground conditions change, ProDrive lets you smoothly shift between two speed ranges with the push of a button. You'll no longer have to stop to shift when going up or down hills or exiting fields.

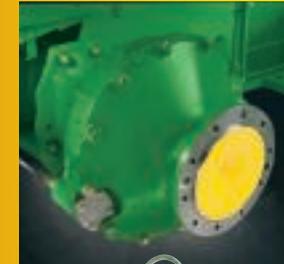
Speed Selection. Set one speed for normal harvesting, the other for faster field work or transport. Then select any speed in either range by using the hydrostatic control handle on your CommandArm™ console.

More torque. With power to spare, ProDrive makes light work of tough conditions. It delivers 64% more torque at a harvesting speed of 5 mph.

Push Button Shift Transmission

Shifting made easy. Our all new three-speed Push Button Shift Transmission makes shifting easy. Simply bring your machine to a standstill, select the gear you need by pressing one of three buttons on the arm rest and let the combine do the rest. Our Push Button Shift Transmission applies the hand brake automatically to ensure seamless shifting.

Comfort and control. Our all-new Push Button Shift Transmission makes operation easier with features like the automatic park brake. As soon as you pull the hydro level to the neutral position, the park brake is applied giving you more comfort and control and helping you through those long working days.



The heavy-duty final drive is designed and manufactured with a massive, ductile iron housing that provides high load-carrying capability. The single-piece, die-quenched ring gear provides high strength and long wear life. The final drive provides the capacity to handle larger high-flotation tire options as well as wide draper platforms or large corn heads.



The hydrostatic system includes a variable displacement pump gear driven from the main engine gear case and a variable displacement motor located on the ProDrive™ Transmission. This provides an infinite speed range in each gear and eliminates ground belts, reducing maintenance.



This heavy-duty rear-axle spindle, standard on S-Series Combines, offers tremendous load-carrying capacity. It lets you go with larger steering tires without the extra expense of 4-wheel drive. All S-Series Corn Combines feature adjustable rear axles that let you adjust tire tread from 120- to 152-inch centers (305-cm 386-cm) in 4-inch (102-mm) increments... ideal for ridge-tillage operations.

Two-speed 4-wheel-drive lets you switch between torque ranges. In slow-speed mode, the high-torque rear assist is ideal for tough conditions. Use high-speed mode for low-torque performance and faster ground speeds.

All S-Series Combines feature a high-strength axle built from a one-piece rectangular tube welded to the separator uprights. Its load-carrying ability and durability are far superior to the bolt-together designs found on other combines.

T670 Combine: Quality from start to finish

If producing high-quality straw for baling is as important as the grain, look no further than the T670 Small Grain Combine. We engineered this Class 7 combine to provide straw quality that's second to none, even in tough, high-yielding crop.

We accomplished this by pairing conventional threshing technology with the Tangential Tine Separator. This approach uses a tangentially mounted separator and a large wrap concave to give thorough separation, yet with fewer opportunities for grain and straw damage. From the threshing system back, the T670 uses straw walkers to gently separate grain from the crop mat.

Aside from a different threshing and separation system, you'll find that the T670 provides you the same excellent field performance you've come to expect from its S-Series cousins. Likewise, the cab controls are comfortable and easy-to-use.

The T670 pairs perfectly with the 600 Series HydraFlex™ and Rigid Platforms, the 615P Belt Pickup Platform, and the high-capacity 600D Series Draper Platforms. Simply choose the platform that best complements your operation.



Engine Power. The 9.0L PowerTech™ PSX Engine found on the T670 provides 373 hp at rated speed for tremendous productivity, even in heavy crop. You'll also appreciate the 7-percent Power Bulge and 33 hp Unloading Boost.

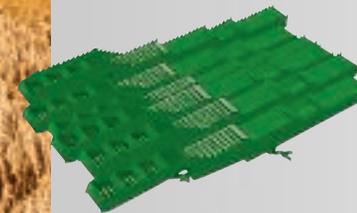




Premium Residue Management. You choose: Get either long straw for baling or fine-cut chopping. Chaff from the cleaning shoe can be spread separately from the chopper or incorporated into a windrow. Need to switch your approach when you move to a different field? No problem. The change-over requires no tools.



Tangential Tine Separator Drum. An innovative over-and-under slat tine separator drum technology is gentle but effective in small grains.



Straw Walker Separation. The T670 uses six long straw walkers to gently separate grain from the crop mat. Seven aggressive steps move the material, but with minimal horsepower use.

Automate your corn harvest with AutoTrac™ RowSense™

To get every dollar from every hour and every acre, consider some of the options available from John Deere Ag Management Solutions.

The biggest opportunity for corn growers is the availability of AutoTrac RowSense. It delivers the accuracy and efficiency you expect from AutoTrac even if you're harvesting in down corn, around terraces, or on pivots. Fusing GPS data from the StarFire receiver with mechanical feeler data gathered from the row sensors (installed on the row units), AutoTrac RowSense lets you harvest hands-free in down corn, around terraces, or on pivots.

With our satellite-based hands-free AutoTrac system, every pass matches the full cutting width of your corn head. This helps reduce overlap - even if you are harvesting at night.

When harvesting in other crops, add ease and convenience by using AutoTrac. Both it and AutoTrac RowSense are scalable to the level of accuracy your operation demands. And because all S-Series Combines now come AutoTrac Ready, you can take advantage of guidance efficiencies with little set up.

Keep track of what you're harvesting with the standard Harvest Monitor – view yield and moisture readings on-the-go. Add Harvest Doc™, and record yield, moisture, and production details, as well as create maps and reports to help with next year's planning.



GreenStar™ guidance. Whether it's you in the cab or a less-skilled operator, a GreenStar 3 guidance system delivers a quick payback. Choose the level of accuracy you need, from 10 inches pass-to-pass, 4 inches pass-to-pass or to one-inch accuracy with the RTK system. To make it even easier, all S-Series Combines come AutoTrac Ready for the best integration in the industry.

Documentation. Keeping detailed records is a snap! Every S-Series Combine comes equipped with GreenStar Harvest Monitor – see the crop's yield and moisture measurements as it's harvested. Information is readily displayed right on the CommandCenter™. Capture and store harvest data with Harvest Doc on your GreenStar™ 3 2630, then download data later into Apex™ Farm Management Software for future planning.

Your combine is calling – JDLINK™

Looking for real-time answers to the challenges that matter most? Ask your dealer about JDLINK. This advanced, web-based telematics solutions comes standard on the new S-Series. Activate the system with your dealer and begin receiving the information you've been looking for, such as:

- Machine location – see which machines are in the field and where
- Location tracking – keep track of where and in which fields your machines have been running in and what they've harvested
- Geofencing – protect machines against misuse and theft
- Maintenance planning – stay informed of when the next maintenance check is due and the best way to manage it
- Fuel consumption – view how much fuel your operators are using in different operations
- Machine hours – keep track of how long your machines are running
- Operator training – encourage and reward efficient performance



JDLINK Ultimate

Boost productivity while protecting your machines from theft and misuse. The diagnostic capabilities keep your harvesting operations running smoothly and at peak performance.



ServiceADVISOR™ Remote

With your permission, your dealer can remotely access your machine from his dealership, monitoring trouble codes and diagnostics, as well as updating software. No lost time. Instead your dealer can respond quickly to your needs and keep you harvesting.

Put service and maintenance on an express route

Brisk harvesting speeds are just the beginning with an S-Series Combine. You'll also breeze through your service and maintenance schedules.

Start with accessibility. It's excellent. Lift the side-shields, and you'll see why. Thanks to gas struts, the shields virtually lift on their own. No heavy lifting.

Service and maintenance points are easy to locate, too, thanks to the uncluttered layout on the left side of the machine. Everything for the separator and cleaning shoe is in view. Access to the tailings and clean-grain elevators is on the right-hand side of the machine.

Greasing an S-Series Combine is a simple task, thanks to convenient lube banks. Or choose the automatic grease option. Plus, there are no daily lube points. In fact, the shortest lube interval is 50 hours. That means you can spend less time prepping your combine, and more time harvesting.

Invest in John Deere equipment and enjoy the benefits of a professional and knowledgeable staff that is always willing to lend you a helping hand.

From the time you first walk into our store, until we deliver that new combine to your farm, we're there for you year after year.





The John Deere Dealership Promise: Standard with every piece of equipment we sell

In each one of the nearly 2,000 North American John Deere dealerships, you'll find a committed staff of sales, service and parts technicians, all dedicated to keeping your S-Series Combine running smooth and strong throughout the entire harvest season.

The John Deere Dealership Promise: Standard with every piece of equipment we sell.

You can't see it and you can't order it, but the John Deere dealership promise comes with your combine to keep it running smoothly all season long. Take a look:

We promise to support your combine with a powerful dealer network that stretches across all of North America.

We promise to have trained parts and service technicians who can help you achieve high up-time and low maintenance costs.

We promise to diagnose and speed needed repairs through the use of the latest computer technology.

We promise tremendous parts support through both our in-stock parts inventory, as well as with JDParts.com. And when it's urgent, we offer next-day delivery.



Engine air scoop pulls cleaner air through the radiator, reducing the load on air-cleaning components and helping maintain a cleaner cooling system.



Air filter replacement is a breeze. Filters can be conveniently reached while standing on the rear deck.



Unobstructed access to common service check points makes daily oil and coolant level checks quick and easy.



Ground-level battery box makes for easier jumping, and quicker connection or disconnection of battery cables.

S-Series Combines Specifications

MODEL	S550	S660	S670	S680	S690
ENGINE					
Type	John Deere 6-cyl. 6.8 L	John Deere 6 cyl. 9.0 L	John Deere 6-cyl. 9.0 L	John Deere 6-cyl 13.5 L	John Deere 6-cyl 13.5 L
Displacement (L/cu. in.)	6.8/414	9.0/548	9.0/548	13.5/824	13.5/824
Fuel Capacity (L/gal.)	757/200	950/250	950/250	1250/330	1250/330
Cooling	Air-to-Air Aftercooler	Air-to-Air Aftercooler	Air-to-Air Aftercooler	Air-to-Air Aftercooler	Air-to-Air Aftercooler
Rated Speed (rpm)	2400	2200	2200	2100	2100
Rated Power (kW/hp)	202/271	239/320	278/373	353/473	405/543
Power Boost @ Rated Speed (kW/hp) - IT4	N/A	25/34	25/34	37/50	37/50
Rated Power @ -100 rpm Rated Speed (kW/hp) -IT4	N/A	256/343	297/398	378/507	433/580
Peak Power @ -200 rpm Rated Speed (kW/hp) - IT4	N/A	272/365	317/425	402/540	460/617
Power Boost @ Rated Speed (kW/hp) ---NON-IT4	22/30	25/34	25/34	37/50	23/31
Rated Power @ -100 rpm Rated Speed (kW/hp) ---NON-IT4	216/290	256/343	297/398	378/507	433/580
Peak Power @ -200 rpm Rated Speed (kW/hp) ---NON-IT4	224/300	272/365	317/425	402/540	458/614
FEEDING					
Drive Type	Fixed or Variable	Fixed or Variable	Fixed or Variable or MultiSpeed	Fixed or MultiSpeed	Fixed or MultiSpeed
Conveyor Chain Slat Type	T-bar	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Width (mm/in.)	1120/44	1397/55	1397/55	1397/55	1397/55
Length (mm/in.)	1727/68	1727/68	1727/68	1727/68	1727/68
“Feed Accelerator, Stone Trap (FAST)”	Standard	Standard	Standard	Standard	Standard
Reverser	Standard	Standard	Standard	Standard	Standard
THRESHING/SEPARATING					
Separator Type	Rotary	Rotary	Rotary	Rotary	Rotary
Rotor Length (mm/in.)	3124/123	3124/123	3124/123	3124/123	3124/123
Rotor Diameter (mm/in.)	610/24	762/30	762/30	762/30	762/30
Rotor Speed Range (rpm)	220-1210	210-1000	210-1000	210-1000	210-1000
Concave Area (m ² /in. ²)	0.9/1395	1.1/1705	1.1/1705	1.1/1705	1.1/1705
Separating Area (m ² /in. ²)	1.3/2016	1.54/2390	1.54/2390	1.54/2390	1.54/2390
Discharge Grate Area (m ² /in. ²)	0.3/464	0.36/555	0.36/555	0.45/698	0.45/698
CLEANING					
Front Chaffer (m ² /in. ²)	0.8/1200	0.5/801	0.5/801	0.5/801	0.5/801
Front Chaffer Extension (m ² /in. ²)	N/A	N/A	N/A	.7/1128	.7/1128
Chaffer (m ² /in. ²)	1.5/2358	2.5/3824	2.5/3824	2.5/3824	2.5/3824
Sieve Area (m ² /in. ²)	1.3/2025	1.9/2964	1.9/2964	1.9/2964	1.9/2964
Total Cleaning Area (m ² /in. ²)	3.6/5583	4.9/7589	4.9/7589	5.6/8711	5.6/8711
Cleaning Fan Speed (rpm)	620-1200	620-1350	620-1350	620-1350	620-1350
GRAIN HANDLING					
Grain Tank Size (L/bu.)	8900/250	10600/300	10600/300	14100/400	14100/400
Unloading Auger Length (m/ft.)	4.7/15.5, 5.6/18.5, or 6.5/21.5	6.5/21.5, 6.9/22.5, or 7.9/26	6.9/22.5 or 7.9/26	6.9/22.5 or 7.9/26	6.9/22.5 or 7.9/26
Unloading Rate (L/sec. / bu/sec.)	77 / 2.2	77/2.2 or 120/3.3	120/3.3	135/3.8	135/3.8

T670	
HEADERS	
25', 30', 36' and 615 Belt pick-up	
FEEDING	
Fixed	
Under shot-slat	
65.6-in (1664mm)	
78-in (1981mm)	
520 rpm	
Mechanical-hydraulic; std.	
THRESHING	
26-in x 66-in (660mm x 1670mm)	
240 to 990 rpm	
1937 sq in (1.25 m ²)	
13	
10	
15.7-in (400mm)	
31.2 ft/sec (9.5 m/sec)	
775 sq in (0.5 m ²)	
TINE SEPARATOR AND SEPARATOR CONCAVE	
26-in (660mm)	
49.2 to 98.4 ft/sec (15 to 30 m/sec)	
SEPARATING	
6 Walker	
128-in (3.25m)	
13,578 sq in (8.76 m ²)	
CLEANING SYSTEM	
1,999.5 sq in (1.29m ²)	
1,999.5 in (1.29m ²)	
2,805 sq in (1.81 m ²)	
7,719 sq in (4.98 m ²)	
750-1,600 rpm	
ENGINE	
6090HZ003D	
548 cu. in (9.0 L)	
Air-to-Air Aftercooler	
2200	
373 hp	
393 hp	
GRAIN HANDLING	
300 bu. (10,600 L)	
23.5 ft (7.1 m)	
2.2 bu/sec	
14-ft 1-in (4.31 m)	
CAPACITIES	
211.3 gal (800 L)	
12-ft 9-in (3.96 m)	

	800/65R32 in. 30.5x32 in. R1,R1W,R2	800/70R38 inches. R1W	800/70R32 inches. R1W	900/60R32 inches. R1, R1W	900/65R32 inches. R2	76x50x32 inches. HF3	480/80R42 inches. R1	520/85R38 inches. R1	520/85R42 inches. R1, R2	650/85R38 inches. R1W
Increased Mobility	Fair	Very Good	Very Good	Good	Good	Excellent	Very Good	Excellent	Excellent	Excellent
30 in. Row Tracking	Excellent	Excellent	Excellent	Good	Good	Poor	Excellent	Excellent	Excellent	Good
Flotation (increased footprint)	Fair .70m ² (1150 sq.in.)	Very Good .95m ² (1470 sq.in.)	Very Good New .69m ² (1078) sq.in.)	Good .91m ² (1208 sq.in.)	Very Good .83m ² (1342 sq.in.)	Excellent 1.25m ² (1930 sq.in.)	Very Good .86m ² (1400 sq.in.)	Excellent .99m ² (1560 sq.in.)	Excellent 1.06m ² (1680 sq.in.)	Excellent 1.42m ² (2200 sq.in.)
Field Rutting (minimized)	Poor	Fair	Fair	Fair	Fair	Excellent	Good	Good	Very Good	Excellent
Stability	Good	Good	Good	Good	Good	Very Good	Very Good	Very Good	Very Good	Excellent
Ride	Good	Good	Good	Good	Poor	Good	Very Good	Very Good	Excellent	Excellent
Traction	Very Good	Very Good	Very Good	Good	Excellent	Fair	Very Good	Very Good	Very Good	Good
Stubble Wear Resistance	Very Good	Very Good	Very Good	Fair	Fair	Fair	Very Good	Very Good	Very Good	Very Good



A 900/65R32 R2 radial tire option is available on a universal rim that can be dished in or out without axle spacers.



Whether you need to curb compaction, reduce rutting, or simply want greater traction when tackling muddy fields, John Deere offers you multiple flotation choices. You're sure to find a flotation system that will fit your operation and your budget.



A new name. A familiar face.

Farm Plan™ and AgLine™ now carry the John Deere Financial name.

Even though our name is new, the way we live up to it isn't. The same things you've always counted on with your multi-use account are still here. And even though our names are changing, you can still count on some things that will never change — our commitment, service, support and philosophy of knowing you, as you. That's the John Deere Financial difference.

In the United States: www.JohnDeereFinancial.com

In Canada: www.JohnDeereFinancial.ca



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