2017 GLEANER S9 Series Combines & Headers

Contents


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The Next Generation Gleaner® for the Next Generation of Farming

Since the introduction of the S Series combine in 2011, Gleaner® has built an incredible reputation for what is important to farmers when it comes to harvesting, such as capacity, grain quality, low loss levels, reduced compaction and serviceability.

The S9 Series is the culmination of millions of dollars of investment and a new generation of leadership that builds on the strong attributes of our previous models and adds more optimum harvesting performance, technology, comfort and convenience to take our current and future owners to a level not offered on any other combine.


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What's New for 2017

Updated Feeder Jackshaft Bearing

The feeder jackshaft bearing size has been increased 50% for improved system reliability and durability. In order to accommodate the larger bearing size increase, the mainframe has also been redesigned.

Updated Main Drive Belt Design

The main drive belt idler has been changed to incorporate a rubber stop inside the tensioner and now utilizes a compression spring. This design update improves reliability of the belt tensioner assembly.

Improved DEF Quality Sensor

A new diesel exhaust fluid (DEF) quality sensor has been selected in order to improve reliability. This new sensor reduces downtime as well as ensures the DEF system consistently performs at optimum levels.

Standard XR Proportional Propel

The XR proportional propel is now standard equipment for 2017. The proportional propel allows the combine to automatically shift between two ranges. This provides the torque needed to power through tough conditions or the high road speed needed to quickly move from field to field.

Optional Ladder & Platform Updates

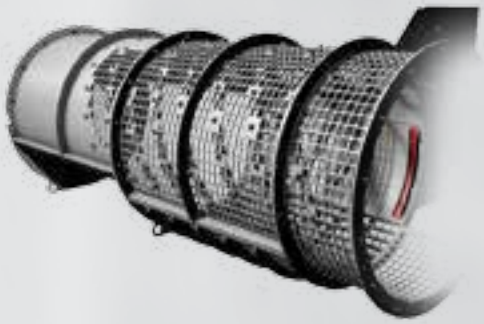
An optional powerfold ladder is now available for 2017 S9 Series combines. This ladder folds vertically rather than swiveling horizontally. The ladder and platform tread pattern has also been updated to include a large-hole dimple pattern. The larger holes promote air flow, reducing build up of material.

Standard Auto-Guide™

The NovAtel™ sub-meter Auto-Guide™ steering system is now standard equipment. All S9 Series combines are now factory-ready with Auto-Guide steering and live yield mapping via the Tyton™ terminal.

Updated Rotor & Cage

Three flights and mounts are now incorporated on the concave side of the rotor. The addition of these flights promotes rotor conveyance in tough green crop conditions. This improves crop flow from the threshing to the separation area.



The discharge end of the rotor now includes a "corn ring" to help move crop around the cage. This promotes proper crop flow from the separation area of the rotor into the discharge.

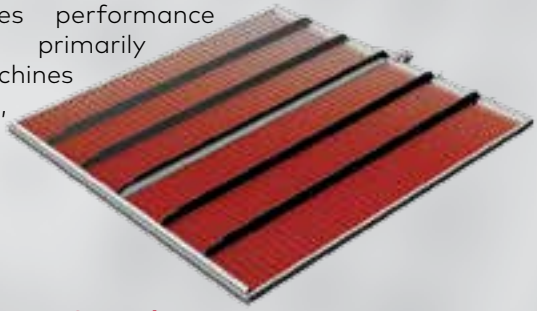
Optional Rasp Bars

Optional aggressive, chromed, ½-inch spaced three-bolt (5/8-inch hardware) rasp bars are now available through your Gleaner dealer. This four-bolt bar has been moved back to the discharge end of rotor.

In hard threshing conditions such as spring wheat, install two pairs of rasp bars (four total) over the concave section of the rotor to reduce white caps. Install each pair of rasp bars opposite of each other to keep rotor balanced.

Optional Round Tooth Corn Chaffer

Gleaner S9 Series combines can now be ordered from the factory with either a round tooth corn chaffer or the standard all-crop chaffer. The round tooth corn chaffer improves performance for customers primarily operating their machines in high volume corn, high moisture corn or soybeans.



Optional Trimble™ Auto-Guide

A Trimble™ Auto-Guide system is now available as an option to the base NovAtel system. Like the NovAtel system, the Trimble system provides live yield mapping capabilities through the Tyton terminal as well as Auto-Guide, but offers additional options to match the needs of customers using Trimble systems.

Slow Speed Elevator Kit

A slow speed elevator kit is now available and should be utilized to reduce grain damage in crops such as edible beans. The slow speed elevator kit is not recommended for use in high volume grains such as corn or rice. Operators can switch between normal and slow speeds simply by moving the elevator belt from one drive sheave to the other.

The Gleaner Vision™ Cab

The S9 Series combines contain a number of developments that will make a significant difference in the productivity of your harvest for 2017.

Customers across the world generated feedback that was used to deliver what farmers wanted in a totally new cab environment.

The Vision™ cab features 15 percent more volume (130 ft^3 versus 113 $ft.^3$) than the ComforTech II™ cab it replaces. Visibility is enhanced with a total glass area of 66 square feet while the front glass area was increased by 22 percent to 32.9 square feet. The Vision cab has a much larger and deeper curved-glass windshield laminated with solar properties, narrower A-posts and B-pillars that have been moved for more room. The sound level in the cab has been improved, making it a very quiet environment in the noisiest harvesting conditions.

The Tyton™ Terminal

The Vision cab features the Tyton™ terminal, with four quadrants, easy-to-read Gleaner-specific graphics and simplified navigation through the screens. Two AgCam™ cameras can be displayed on two of the four quadrants.

You can choose from several options on the Tyton terminal:

- **FieldStar™ Live includes AGCO® yield sensor, AGCO moisture sensor and live mapping on the Tyton terminal. Combine it with the Ag Leader™ technology, which includes the Ag Leader sensor and Ag Leader moisture sensor, with all yield and moisture data displayed on the Tyton terminal.**
- **Or the Ag Leader sensor option, which includes the Ag Leader yield sensor, Ag Leader moisture sensor, the Tyton terminal or use the Ag Leader Integra or Versa monitor. All Gleaner S9 combines equipped with Ag Leader sensors have the harness connection for an Ag Leader monitor available in the cab to view yield and moisture data.**

Gleaner Vision cab automated software features:

- **Fuse® Connected Services monitoring and reporting.**
- **Four cameras on the AgCam™ Quad monitor and one or two on the Tyton terminal.**
- **Automated shaft-speed calibrations.**
- **Automated calibrations for fan choke, concave, chaffer/sieve and header.**
- **Programmable speeds provide an SV1 and SV2.**
- **10 user-programmable counters.**
- **Auto-Guide, NovAtel receiver.**
- **Row guidance.**
- **Convenience of Guidance Nudge from the palm-control handle.**
- **Saves multiple header configurations, such as calibration, tilt speed and raise/lower two-speed.**
- **Single button to activate Automatic Header Height Control (AHHC) and raise above the cut-line.**
- **Armrest-actuated open/close of grain tank.**

Vision Cab Features

The Vision cab features numerous improvements and innovations over our previous ComforTech cab.

- Power swivel ladder swivels toward the front of the combine for transport and provides improved visibility, a comfortable ladder angle and long handles.
  - Optional powerfold ladder
- An integrated step design on the front side of the cab allows for easy access to the front window and cab roof lights.
- 12 cab lights with a high-lumen projection will light up the night for unmatched nighttime visibility.
- Large capacity A/C and climate control system to provide unparalleled comfort.
- Optional heated and cooled compartment located under instructor seat.
- Large instructor seat fold-down for laptop computer.
- Electric shift and park brake.
- Programmable light-control memory.
- New radio/speaker options:
  - Standard: Four speakers (two more than previous models)
  - Deluxe: Four Kicker speakers and a subwoofer
- Bluetooth capability (Hands-free and audio streaming)
- Intuitive operator interface (armrest, controls, Tyton terminal, center display and light-control panel.
- Dual mirrors (remote heated).
- Standard telemetry.
- Mounting brackets on unloader, beacon light on engine compartment for AgCam cameras.
- Egress lighting with 4½-minute delay.
- Automatic functions, including two memory-control speeds.
- Right-hand storage tray with rubber liners.
- Seven cup holders.
- Rubber storage net behind operator seat.
- Storage on back of instructor seat.

Harvesting Performance

All combines have the same goal: to harvest crop dependably with the least amount of loss, foreign material, fuel, field damage and interruptions possible. Most combine designs are similar to each other and therefore have similar results.

The Gleaner design is fundamentally different and offers a level of harvesting performance that other combine makes are unable to achieve.

We call it Optimum Harvesting Performance, and its aim is to give you more and better results for every minute, gallon, pound and dollar you put in.

Harvesting performance is affected by six core elements and our approach to combine design addresses these elements in unique ways.

The ability of the combine to produce a clean grain sample while minimizing loss

Gleaner combines use a two-stage cleaning process. As crop threshes and separates on the rotor, a set of distribution augers and accelerator rolls thins the crop mat and propels it at four times the speed of free fall through an air blast above the cleaning shoe, pre-cleaning crop material before it hits the shoe.

The cleaning shoe with its lower-duct air stream to finish the cleaning

The Gleaner system offers a superior grain sample because material is cleaned in two stages with two different processes. Because of the position and action of the distribution augers and accelerator rolls, crop material is oriented toward the front of the shoe, utilizing the full length of the shoe, and reducing the likelihood that grain will be lost out the back of the machine.

The efficiency of power delivery from the engine to the threshing and separating process

Gleaner combines weigh significantly less than competitive designs. Less horsepower devoted to moving a heavy combine means more horsepower directed to the processor and not wasted through parasitics.

Our design utilizes straight-through-shafts and avoids 90-degree gearboxes that can rob power. It does not require ancillary feeding systems such as beaters or pre-threshers. Our cooling fan and chopper designs are also designed to require less horsepower than other designs.

The utilization of functional space in the combine's systems and the resulting weight, size and efficiency

Gleaner combines thresh and separate the entire circumference of their rotors whereas other designs have a closed top section. The 360-degree threshing and separating area allows the Gleaner to have more separating surface area in a compact design.

The design of the Gleaner cleaning system pre-cleans crop before it touches the shoe and drops material in the same spot at the front of the shoe–utilizing the entire shoe for cleaning. This differs from other designs that may drop crop in several places on the shoe or may direct crop to one side of the shoe.

The number of times crop must be redirected, moved, compressed or shifted by the combine

Gleaner combines feed crop directly into the processor without shifting, bunching or changing direction. This natural feeding flow allows smooth and consistent threshing and separating.

Other designs must change crop direction between feeding and threshing. This shift in direction can increase wear, damage crop, limit capacity and negatively affect grain sample quality.

The time and expense needed to set and maintain the combine's peak performance across changing conditions

Because the Gleaner design pre-cleans crop material in mid-air and always drops crop at the front of the cleaning shoe, the machine's sensitivity to changes in crop characteristics is reduced. The mid-air Gleaner cleaning design resists the affect of gravity on up to 23+% slopes.

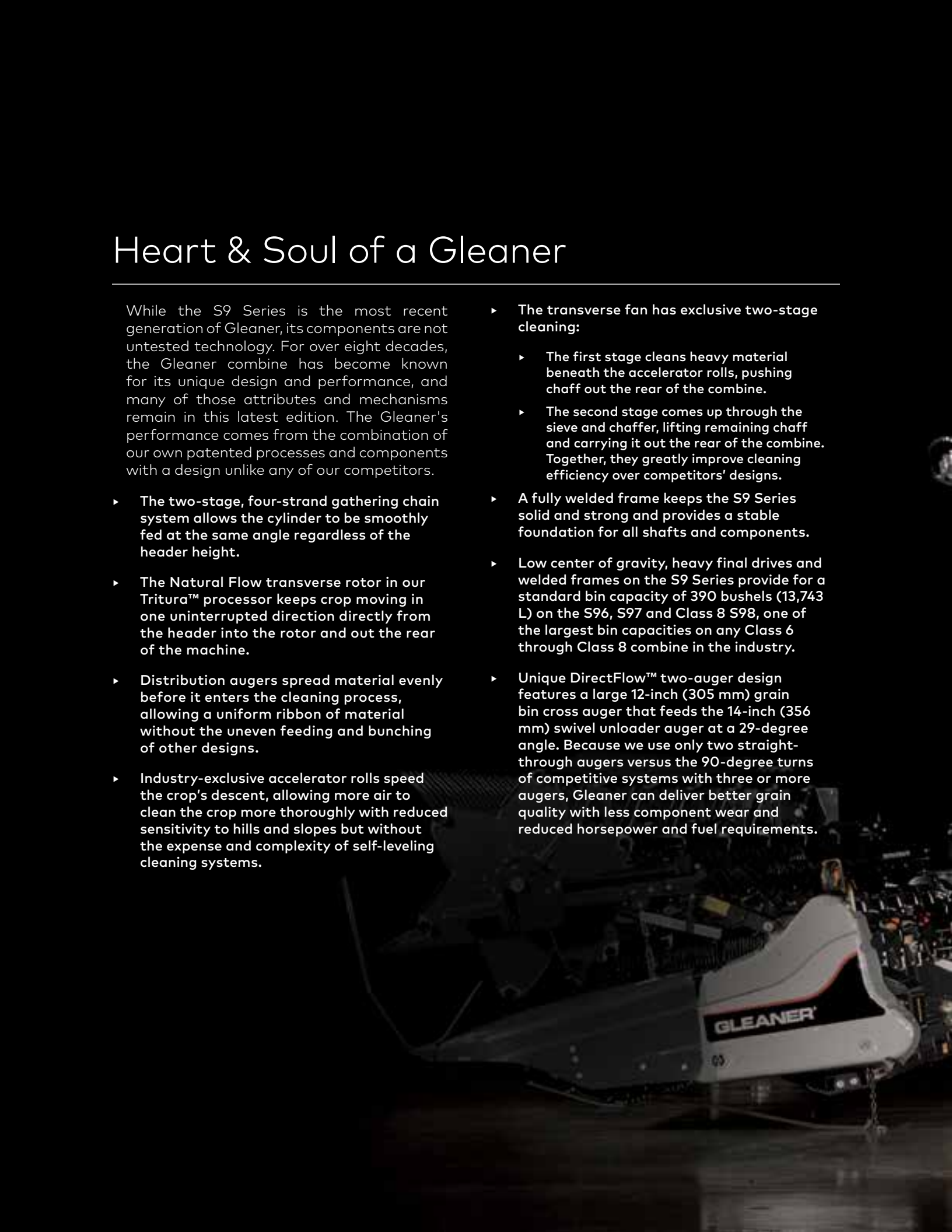
Competitors' designs often require complex concave and rotor set-up to respond to changing conditions. Axial design is sensitive to slope, which can cause material to build up on one side and result in shoe loss.

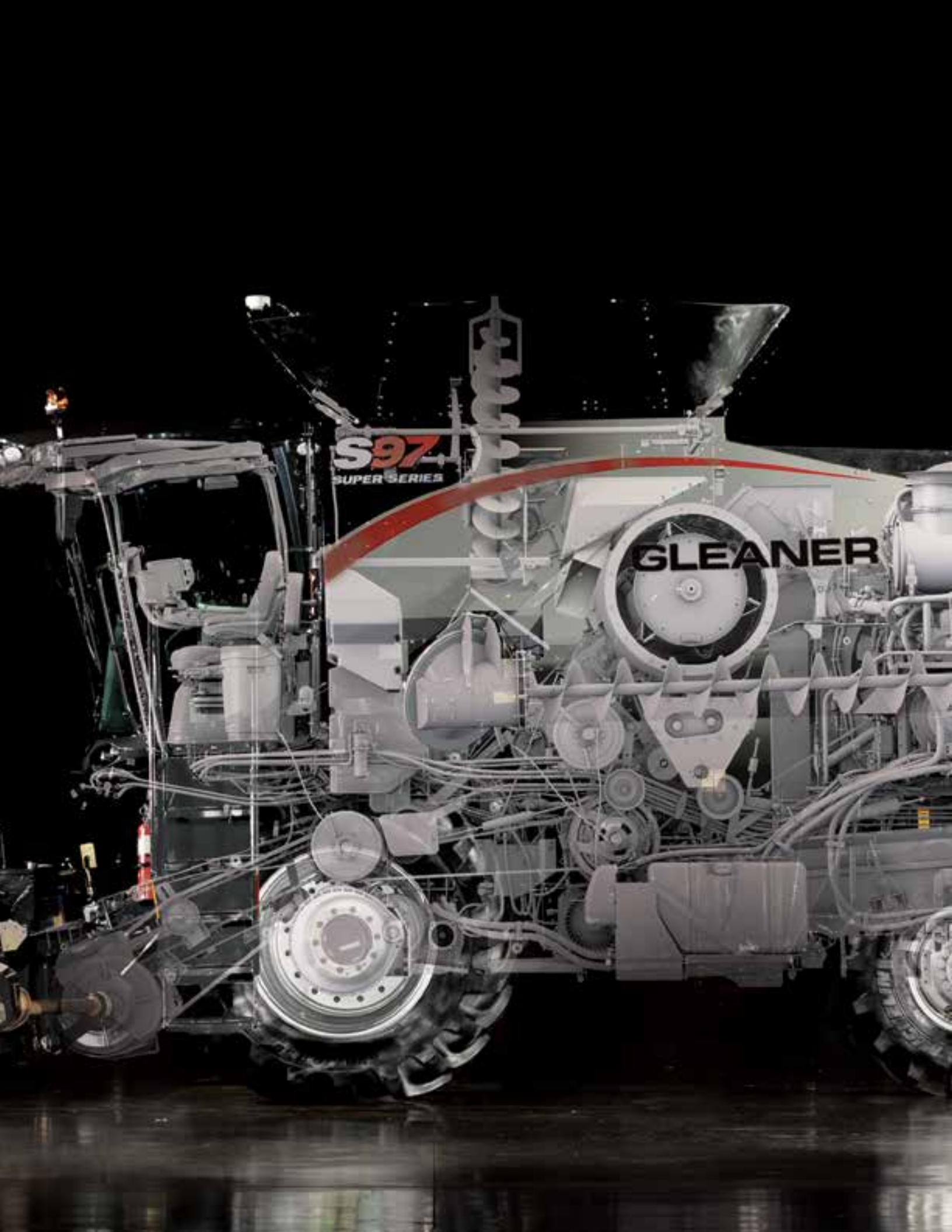
Gleaner combines rarely require changing concaves, and the transverse design of the processor means the majority of service points can be reached while standing on the ground beside the combine.

Heart & Soul of a Gleaner

While the S9 Series is the most recent generation of Gleaner, its components are not untested technology. For over eight decades, the Gleaner combine has become known for its unique design and performance, and many of those attributes and mechanisms remain in this latest edition. The Gleaner's performance comes from the combination of our own patented processes and components with a design unlike any of our competitors.

- **The two-stage, four-strand gathering chain system allows the cylinder to be smoothly fed at the same angle regardless of the header height.**
- **The Natural Flow transverse rotor in our Tritura™ processor keeps crop moving in one uninterrupted direction directly from the header into the rotor and out the rear of the machine.**
- **Distribution augers spread material evenly before it enters the cleaning process, allowing a uniform ribbon of material without the uneven feeding and bunching of other designs.**
- **Industry-exclusive accelerator rolls speed the crop's descent, allowing more air to clean the crop more thoroughly with reduced sensitivity to hills and slopes but without the expense and complexity of self-leveling cleaning systems.**
- **The transverse fan has exclusive two-stage cleaning:**
  - **The first stage cleans heavy material beneath the accelerator rolls, pushing chaff out the rear of the combine.**
  - **The second stage comes up through the sieve and chaffer, lifting remaining chaff and carrying it out the rear of the combine. Together, they greatly improve cleaning efficiency over competitors' designs.**
- **A fully welded frame keeps the S9 Series solid and strong and provides a stable foundation for all shafts and components.**
- **Low center of gravity, heavy final drives and welded frames on the S9 Series provide for a standard bin capacity of 390 bushels (13,743 L) on the S96, S97 and Class 8 S98, one of the largest bin capacities on any Class 6 through Class 8 combine in the industry.**
- **Unique DirectFlow™ two-auger design features a large 12-inch (305 mm) grain bin cross auger that feeds the 14-inch (356 mm) swivel unloader auger at a 29-degree angle. Because we use only two straight-through augers versus the 90-degree turns of competitive systems with three or more augers, Gleaner can deliver better grain quality with less component wear and reduced horsepower and fuel requirements.**

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COMMITMENT TO QUALITY

Commitment to Quality

As part of ensuring the quality of our combines, we've invested in a combine dynamometer testing area. The dynamometer, or dyno for short, is a testing bay that puts the combine through a series of extensive external and internal tests while providing feedback on critical areas.

The dyno bay features a "jounce" test that rocks the combine back and forth, evaluates combine sensors, electrical, hydraulic and diagnostic systems and provides a thorough break-in of transmission and final drives. Even the cab lighting is adjusted to the proper angles. Over 120 areas are checked and monitored before a Gleaner goes to post-production inspection.

Paint System

In addition to the dyno bay, our unique to the industry paint system represents a $40 million investment in the quality and longevity of your Gleaner combine.

We realize how important paint is to the value of farm equipment. Our state-of-the-art system puts on a finish like no other, and you can be confident in the durability of your Gleaner thanks to its durable e-coat and powder paint finish.

AGCO is the first company to e-coat and powder paint all major parts on harvesting products. These parts go through a 17-step process from the dip system that includes removal of rust, scale and laser oxides, e-coating, and baking in e-coat ovens before powder paint.

- **On the following page, a Gleaner welded mainframe is picked up by the special hanging device. It is carried into the first high-temperature dip tank, containing an alkaline solution at 160° F. The frame is fully immersed for 90 seconds and coated inside and out. Each one of these 15 dip tanks has a 35,000-gallon capacity.**
- **The second and third dip tanks rinse the mainframe at ambient temperature for 30 seconds each.**
- **Next, two acid pickling dip tanks, one at ambient temperature and one at 160° F, remove any rust, scales and laser oxides.**
- **The mainframe then enters another rinse tank at ambient temperature and another alkaline solution tank at 160° F for one minute each, followed by two reverse-osmosis rinse tanks at ambient temperature.**
- **Next, it is lowered into a zirconium coat dip tank, then undergoes two more reverse-osmosis rinses.**
- **Finally, the mainframe reaches the e-coat tank, where it receives the special e-coat primer with a high-voltage and high-amperage charge for 180 seconds. Then it goes through two more rinse tanks, one at ambient temperature and one at 160° F.**
- **The mainframe is now ready to go to one of 10 e-coat ovens to be baked at 375° for 40 minutes. This is followed by a 20-to-60-minute cooldown.**
- **Parts going to the powder booth system can be painted one of five different colors. These booths feature an automatic section of 32 paint guns and two manual reinforcement painters. They also fully reclaim all unused powder. From there, parts go to the powder oven for 60 minutes.**

Weight & Height

Transport Height

Even with one of the largest grain bin capacities on any combine in the industry, the Gleaner S9 Series' unique standard power-foldable 390-bushel bin extensions fold down in under 20 seconds with the push of a button on the console, to an overall height of 12.41 feet (3.78 m). This compactness can make a big difference when transporting or storing your combine.

Center of Gravity

Gleaner combines have their rotor in the center, which allows the grain tank to sit low and wrap around the processor. The result is a larger grain bin capacity that also provides the machine with a low center of gravity. Our competitors must compromise their axial rotor design in order to fit their grain bin in their combines. The axial design places the weight higher, creating a higher center of gravity and, ultimately, a smaller grain bin.

Efficiency

Extra weight requires more horsepower to achieve the same result as a lighter machine. The John Deere S680 weighs almost 17,500 pounds more than a Gleaner S98. This extra weight requires 34 HP extra just to move the laden weight difference of the two machines through the field. That's the equivalent of pulling a John Deere 6210R, MFWD tractor behind your Gleaner.

For the Case IH 8240, you'll have to hook up a Case IH Farmall 140A, two-wheel-drive tractor with cab behind your Gleaner to travel up every hill, through every mud puddle and down every road.

Brand/ Model*	Operating Weight (lbs.)	Header Weight (30' draper) (lbs.)	Weight w/ Header (lbs.)	Difference vs. Gleaner (lbs.)	Power Required† (HP)	Grain Tank Capacity (bu.)	Grain Weight§ (lbs.)	Total Weight (lbs.)
Class 6 Combines								
GL S96	**33,923**	**5,770**	**39,693**	NA	NA	**390**	23,400	**63,093**
JD S660	44,077	5,307	49,384	9,691	18.9	300	18,000	67,384
CIH 6140	40,276	6,648	46,924	9,234	12.4	300	18,000	64,924
Class 7 Combines								
GL S97	**34,223**	**6,610**	**40,833**	NA	NA	**390**	23,400	**64,233**
JD S670	45,930	7,683	53,613	12,780	22.9	300	18,000	71,613
CIH 7240	43,288	7,061	50,349	9,516	17.7	315	18,900	69,249
Class 8 Combines								
GL S98	**34,223**	**7,350**	**41,573**	NA	NA	390	23,400	**64,973**
JD S680	50,649	8,367	59,016	17,443	32.1	400	24,000	83,016
CIH 8240	43,988	7,475	51,463	9,890	19.3	410	24,600	76,063

NOTE: Dimensions taken from actual machines on Holtgreven digital scales within 1% accuracy, similar equipped tires and full tank of fuel. * Models compared are equipped with 2-wheel-drive. § Estimated at 60 lbs. per bushel at 17% moisture (soybeans). † Horsepower requirement achieved by multiplying an engineering calculation of rolling resistance (CRR) (an estimated 0.00196) by the weight difference in the Difference vs. Gleaner column.


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Feeding

One of the main things that makes a Gleaner S9 Series unique is the Natural Flow feeding and threshing system. With the rotor located the width of the combine, the crop does not compress or change directions when moving from the feeder house to the rotor.

The process begins as grain enters the machine through the 69-inch-long (1,752 mm) by 39 1/2-inch-wide (1,003 mm) feeder house that is powered by an 8 5/8-inch-diameter (219 mm) front feed drum. The feeder house can be reversed with the touch of a button from the operator's seat in the event of a plug.

In addition to keeping the crop moving in a smooth ribbon from feeding to threshing, the Natural Flow system has an additional feature that distinguishes it from competitors' designs. Because the rotor moves in line with the way the crop is fed into the machine, material is pulled into the rotor rather than being pushed in from the feeding system. This design ensures smooth feeding and reduces plugs. Bottlenecks are reduced because a Gleaner does not narrow the crop mat when moving it from the feeder house to the rotor. The width of crop mat remains the same from the time it enters the feeder house to the time it enters the rotor, also reducing plugs and increasing threshing efficiency.

Natural Flow

We call our feeding system Natural Flow because the crop material flows straight into the combine, straight into and around the rotor and straight out the back. Our competitors shift the crop's path and change its direction, requiring more horsepower to do the same threshing and separating. ❶▸

Feeder House

While Gleaner has a narrow, 39 1/2-inch feeder house compared to other combines, the opening that feeds the rotor is actually wider because Gleaner does not narrow or compress the crop mat.

❶ The Gleaner transverse rotor is fed a crop mat naturally and directly to ensure even and consistent threshing. Our competitors' designs, which include either a beater or "elephant ears," need to stuff, bunch and shear the crop mat in order to feed their rotor.

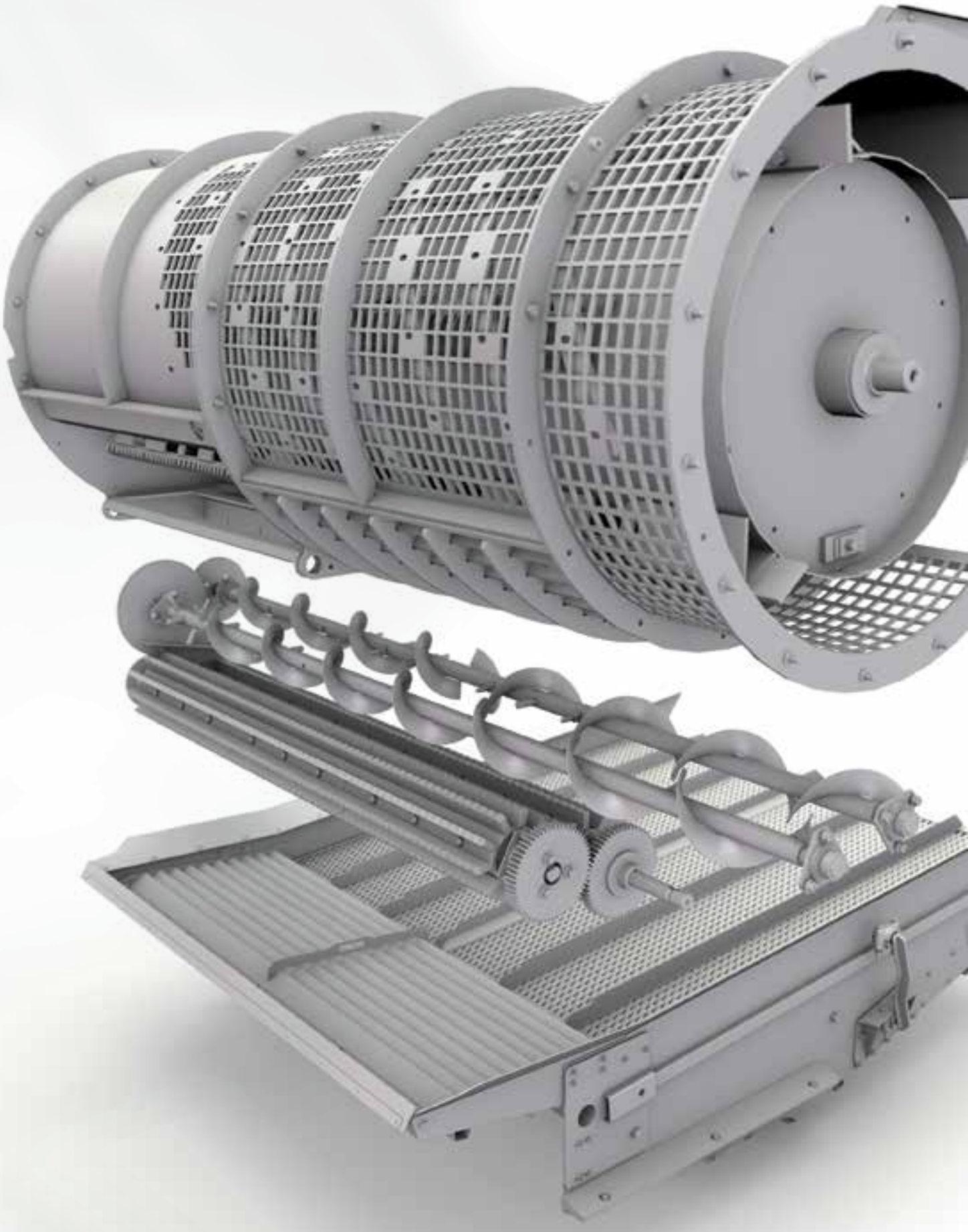
Threshing & Separating

Once the crop enters the rotor, separation takes place throughout the full 360 degrees of the rotor cage, resulting in more effective threshing with less power.

The 30-inch-diameter (762 mm) rotor uses six rows of 3/4-inch (18 mm) high-profile bars that are chromed and reversible in the threshing area. The bars build just enough pressure to release grain that often escapes other rotors, while taking less of a toll between bar and cage on the green-stem material. A four-section 17-bar concave and wider helical bars provide gentle threshing and reduce horsepower requirements.

Threshing Area

Threshing begins once the crop enters the rotor, it separates and falls through a 360° cage. It is crucial that crop be threshed only long enough to release it from heads, pods or cobs. Crop that remains in the threshing area too long can be damaged. Our 360° cage allows grain to exit the rotor cage once it is threshed. Our competitors' designs are closed on top, keeping free grain inside, where it continues to contact the rotor's threshing elements.

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Cleaning

The cleaning process begins with distribution augers just underneath the threshing and separating system, distributing the material flow into a smooth and even cascade into the accelerator rolls.

Two large-diameter five-fluted polyurethane accelerator rolls accelerate grain and chaff downward at four times the speed of free fall. The grain is then propelled through an evenly distributed air curtain from a large 13-inch-diameter (330 mm), cab-controlled transverse fan. The two-stage, high-velocity cleaning provides a high-quality clean tank sample, even at the highest harvesting rates. The separated grain lands on a cushion of grain on the cascade pan just ahead of the chaffer.

Perforated Cascade Pan

The perforated cascade pan is slanted at a six-degree angle, and an additional 992 square inches have been converted to pneumatic cleaning area for a total of 8,721 square inches. This design provides additional cleaning capacity and allows high-moisture corn and other high-moisture crops to fall through sooner and reach the sieve and clean grain cross auger faster. ❶

Slope Sensitivity

Gleaner propels grain through the air blast and onto the cascade pan. Because Gleaner does not rely on gravity to move the grain, the direction of the grain stays consistent, even on slopes up to 23+%. ❷

Air Velocity

Our transverse system drops material in a position parallel to the fan, which means every piece of grain is hit with the same velocity of air. With an axial rotor, grain can drop at any point on the rotor, meaning grain that drops early is hit with one air velocity and grain that drops later with another. Gleaner's ability to preclean the grain before the shoe and use the shoe as a highly effective secondary cleaning system is why it can obtain such clean grain with low loss levels. ❸

Shoe Overload

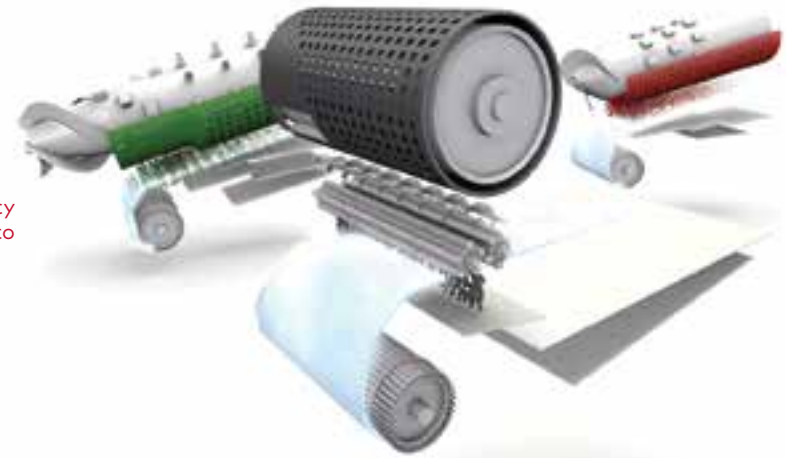
Many axial combines, due to their concave design, tend to overload the cleaning shoe on one side of the machine. As the rear portion of the shoe becomes overloaded with grain and material other than grain (MOG), grain can be carried out the back of the combine.

With Gleaner, after grain falls from the processor, a set of distribution augers keeps the crop mat consistent. The crop is then propelled by the accelerator rolls through an air blast at four times the speed of free fall and onto the grain pan. These distribution augers ensure a uniform ribbon of crop feeding into the remainder of the cleaning system, no matter where crop falls from the processor.

❶ The perforated cascade pan has ¾-inch ridges with holes running throughout. This design allows heavier-density seed to fall through as it comes down from the accelerator rolls. This process helps avoid potential buildup and substantially reduces shoe load. This design increases our capacity by approximately 10% in these conditions. In addition, the air duct has been moved forward 1½ inches to redirect the air to the crop that is falling through this perforated area to the front of the sieve or directly to the clean grain cross auger.

❷ Competitors require the expense, complexity and wear of self-leveling shoes or undercarriages to match the hillside abilities of Gleaner.

❸ The same issue of where grain drops from the rotor affects the effectiveness of the shoe. Gleaner always drops its grain and material in the same position. Axial combines tend to distribute grain unevenly to the cleaning shoe, which can cause grain loss out the back of the combine.




S9
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Grain Handling

The unique Direct Flow swivel unloader on all Gleaner S9 Series combines accomplishes the marvel of an average unloading speed of four bushels per second throughout the entire unloading process with a large 12-inch (305 mm) grain bin cross auger that feeds a massive 14-inch (356 mm) unloader auger—unloading the entire grain bin in 98 seconds.

Because Gleaner uses two augers rather than three or more, like our competitors, we provide more efficient unloading with better grain quality and less wear. No gearboxes. No open drives. No vertical augers. ❶

With the transition angle between the grain bin cross auger and swivel auger reduced, it requires less horsepower and less fuel to achieve this impressive unloading rate.

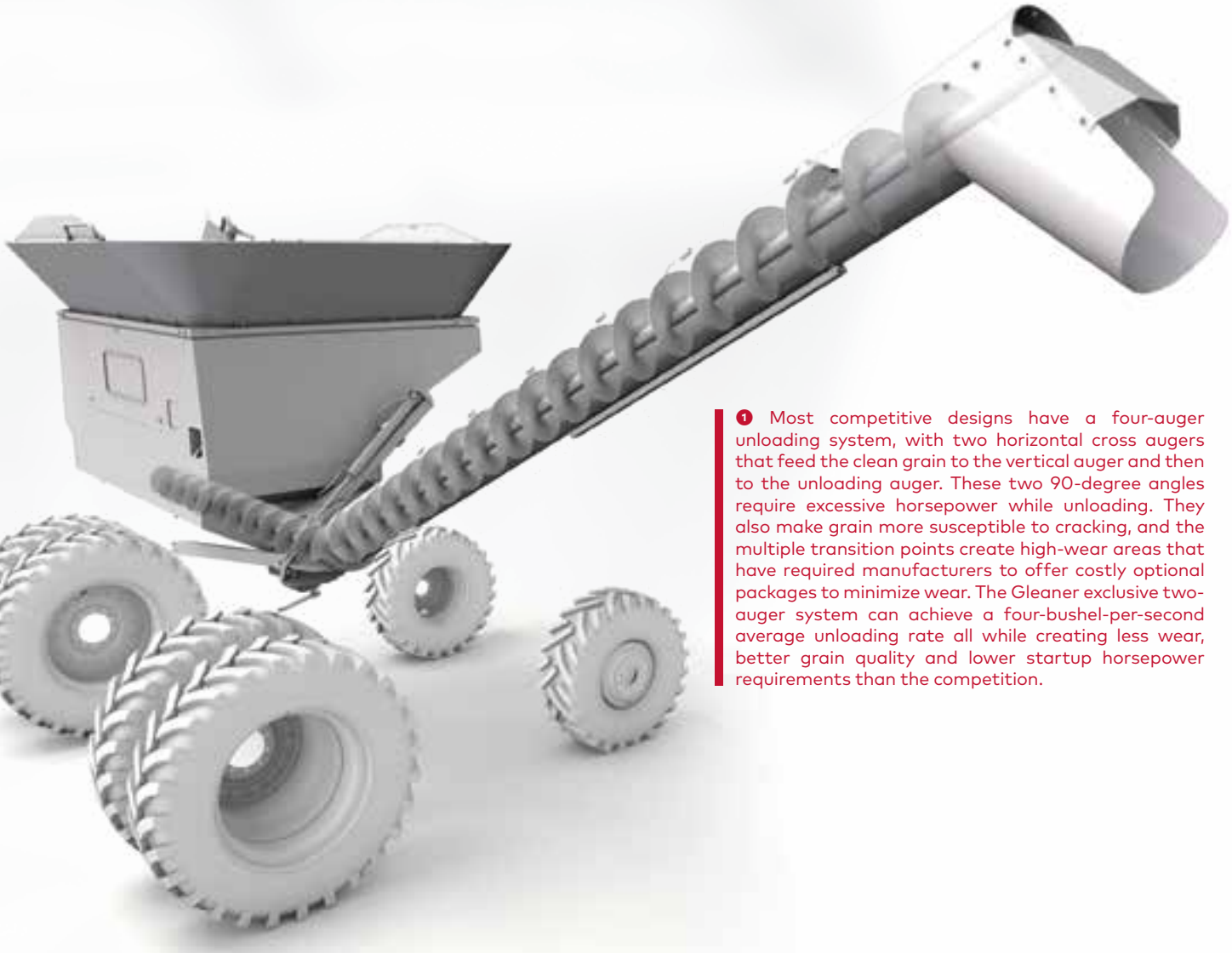
The unloading auger has a 15-foot (4.54 m) discharge height and a 24.8-foot (7.56 m) reach from center.

The S96, S97 and S98 have one of the largest grain bin capacities of any Class 6 through Class 8 combine, at 390 bushels (13,743 L), with standard power-foldable bin extensions that fold down in less than 20 seconds to the lowest overall transport height—12 feet, 4 inches.

Class 7 Unloading Comparison

How much time do you invest to fill ten 1,000-bushel grain trucks?

Model	Grain Tank (bu.)	Average Unloading Rate (bu./sec)	Time Per Unloading Cycle (sec.)	Unloading Cycles	Total Time Invested (min.)
GL S97	**390**	**4.0 peak; 4.0 avg.**	**98**	**26**	**42.5**
JD S670	300	3.8 peak; 3.3 avg.	91	33	50.0
CIH 7140	300	3.2 peak; 3.0 avg.	100	33	55.0
NH CR7090	315	3.7 peak; 3.3 avg.	95	32	50.6



❶ Most competitive designs have a four-auger unloading system, with two horizontal cross augers that feed the clean grain to the vertical auger and then to the unloading auger. These two 90-degree angles require excessive horsepower while unloading. They also make grain more susceptible to cracking, and the multiple transition points create high-wear areas that have required manufacturers to offer costly optional packages to minimize wear. The Gleaner exclusive two-auger system can achieve a four-bushel-per-second average unloading rate all while creating less wear, better grain quality and lower startup horsepower requirements than the competition.

A large, deep clean grain auger trough features a lowered cross auger below the centerline of the trough to maintain speed but avoid cracking the grain and to increase capacity to move grain away from the shoe quickly; this change, along with heavier paddles, increases elevator capacity by 30 percent to over 5,000-bushel-per-hour elevator rating.

Residue Management

Farmers in Indiana, Ohio, Pennsylvania and Ontario want to bale their straw. In the remaining areas of the Corn Belt, higher-density soybean residue places higher demand on chopped residue and requires a very even and wide distribution to eliminate any chance of temperature differences that cause uneven germination. In Western Canada, where the harvest time window is short, and oat, wheat, barley and canola residue is dense and tough, zero-till requirements call for the shortest straw possible and the widest width of spread for no-till air-drill planting. The S9 Series attacks this problem in two ways:

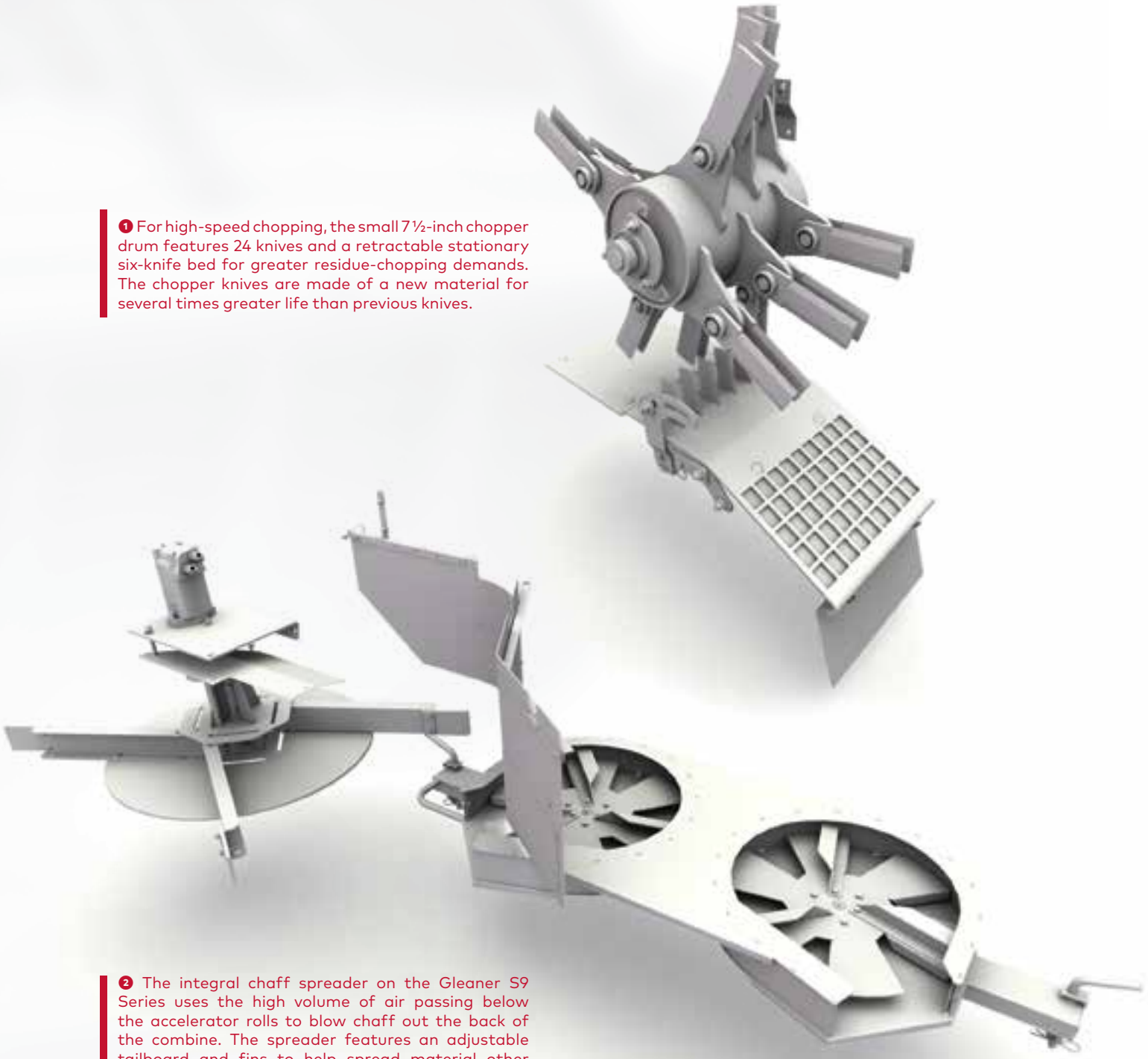
Straw, corn stalks and stems exit the rotor discharge where non-grain material is handled by either an impeller or chopper.

The S9 Series features a two-speed chopper for greater residue-chopping demands when required. For high-speed chopping, the small 7 ½-inch chopper drum features 24 knives, a 50 percent increase over previous designs, for greater chopping and a 16 percent increase in speed to 3,250 RPM to create enough vacuum pressure to pull residue on through and keep the processor cage clean, optimizing processor performance. ❶▸

For severe chopping requirements in zero-till conditions such as Western Canada, a retractable stationary six-knife bed provides even greater chopping and straw breakup. This retractable feature allows those not requiring an extra-fine chop to minimize horsepower requirements by disengaging the knives.

Bale straw or stover by simply changing from the large-diameter pulley to the small pulley, reducing rotor speed, removing the standard hydraulic spreader and dropping the residue into a clean, compact windrow. The Tritura processor delivers a high quality straw sample because the material spends less time in the processor, creating longer undamaged straw—perfect for baling.

The new S9 Series residue-management system provides today's chopping and spreading requirements but accomplishes it with substantially less horsepower than competitors' choppers, which must process all the straw and chaff across the entire width of their machine and requires a higher velocity of air to spread their increased residue density. ❷▸



❶ For high-speed chopping, the small 7½-inch chopper drum features 24 knives and a retractable stationary six-knife bed for greater residue-chopping demands. The chopper knives are made of a new material for several times greater life than previous knives.

❷ The integral chaff spreader on the Gleaner S9 Series uses the high volume of air passing below the accelerator rolls to blow chaff out the back of the combine. The spreader features an adjustable tailboard and fins to help spread material other than grain (MOG) into a wider swath as it leaves the machine. There is no stripping of material and no mechanical drives that rob horsepower as in competitors' designs.

The hydraulic dual chaff spreader on all S9 Series combines delivers the ultimate in chaff spreading and, when used with the hydraulic straw spreader, provides an even wider spread of residue for tillage, planting and chemical applications.


GLEANER

SERVICEABILITY

Serviceability

The Gleaner S9 Series is designed to have the fewest belts, chains, augers and gear drives possible to reduce the total number of moving parts, points of potential wear or breakage and the number of hours you have to spend on service.

The walk-in rear-engine compartment is the industry's largest, and the combine's overall low center of gravity puts most machine parts within easy reach from the ground. Easily accessible suction-type hydraulic filters, single reservoir and sight-level tube all work to limit service time demands without risking hydraulic system integrity. ❶

SmartCooling™

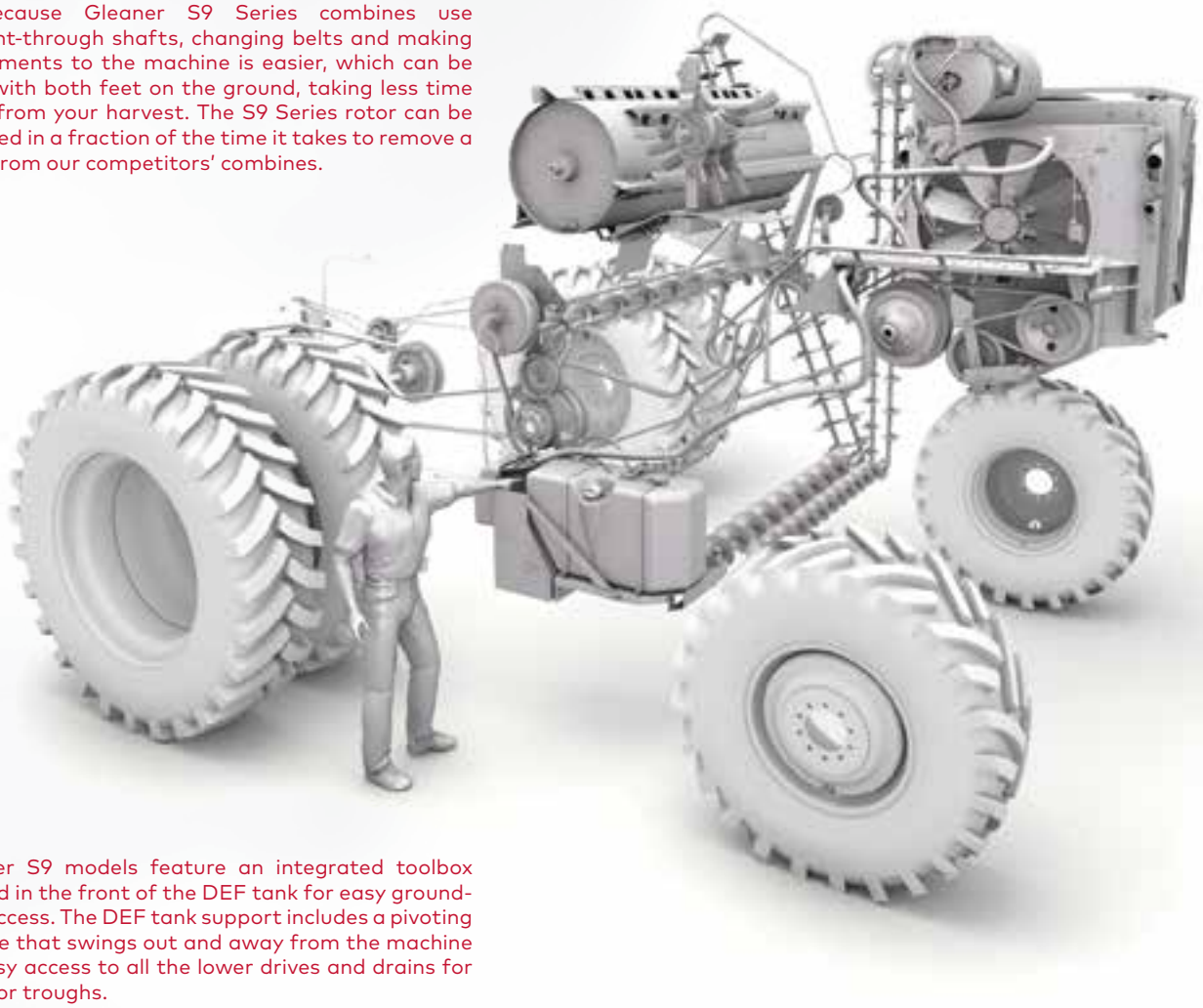
The standard AE50 award-winning SmartCooling™ system consists of a variable-pitch cooling fan with reversing capability. The "smart" system has new software that varies the pitch based on engine temperature, providing a more accurate means of regulating the amount of cooling required versus outside ambient temperature. The fan pitch varies automatically, resulting in only the amount of cooling required. ❷

The reduction in fan pitch results in a significant increase in available horsepower while saving fuel. The minimum fan pitch can be reduced to 20 degrees, and the fan pitch will not increase until the engine temperature rises over 181° F. The pitch will increase in relationship with the temperature of the engine until the engine reaches 212° F, at which time the cooling fan is at its maximum pitch. This system allows Gleaner S9 Series combines to optimize cooling based on engine performance, engine load and engine temperature.

When the separator is engaged, the fan will reverse pitch at full rotation for 1.5 seconds every 15 minutes to clean the radiator, coolers and rotary screen. The fan returns to 100 percent pitch for 15 seconds to clean the engine compartment and then goes back to variable pitch to save horsepower and fuel. The SmartCooling fan can also be manually reversed from the cab via the Tyton terminal.

❷ The entire rotary screen box and coolers pivot out for easy service inspection. Exclusive SmartCooling eliminates the need for daily cleaning of the radiator, coolers and rotary screen even in heaviest soybean dust and chaff.

❶ Because Gleaner S9 Series combines use straight-through shafts, changing belts and making adjustments to the machine is easier, which can be done with both feet on the ground, taking less time away from your harvest. The S9 Series rotor can be removed in a fraction of the time it takes to remove a rotor from our competitors' combines.



Gleaner S9 models feature an integrated toolbox located in the front of the DEF tank for easy ground-level access. The DEF tank support includes a pivoting feature that swings out and away from the machine for easy access to all the lower drives and drains for elevator troughs.

Fuse® Technology

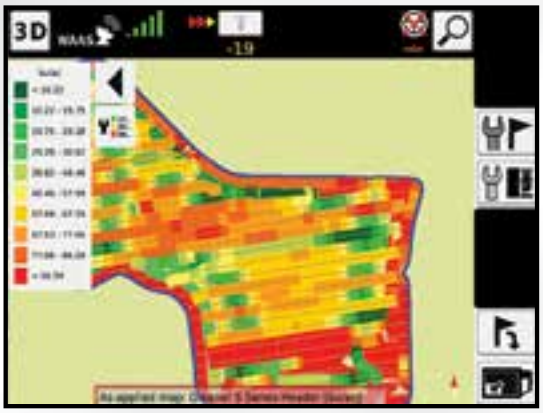
Fuse® is AGCO's next-generation approach to precision agriculture that connects the entire crop cycle from enterprise planning to planting, crop care, harvesting and grain storage—providing mixed-fleet farming operations improved access to their farm data to make more informed business decisions, resulting in enhanced productivity and profitability.

You can choose from two options on the Tyton terminal:

FieldStar® Live Option

Gleaner S9 Series combines come standard with integrated FieldStar® Live yield-monitoring systems. FieldStar Live uses yield and moisture sensors, global positioning and the Tyton terminal to track yield data.

FieldStar Live includes AGCO yield sensor, AGCO moisture sensor and live mapping on the Tyton terminal. Combine it with the Ag Leader technology, which includes the Ag Leader sensor and Ag Leader moisture sensor, with all yield and moisture data displayed on the Tyton terminal.



Gleaner Tyton terminal screen showing FieldStar Live real-time yield mapping.

Ag Leader™ Option

The Ag Leader™ sensor option includes the Ag Leader yield sensor, Ag Leader moisture sensor or the Tyton terminal. The Ag Leader Integra or Versa monitors may also be used with this configuration. All Gleaner S9 combines equipped with Ag Leader sensors have the harness connection for an Ag Leader monitor available in the cab to view yield and moisture data.

Features:

- **Live yield mapping.**
- **Calibration of weight and moisture from run screen.**
- **Automatic weight calibration.**
- **Variety mapping with automatic variety tracking and region-changing selection (Integra models only).**

Ag Leader 12.1" Integra screen showing variety tracking region changing.

Auto-Guide

The standard Auto-Guide guidance system features a NovAtel satellite receiver that comes from the factory set up for WAAS. The system integrates Auto-Guide control into the Tyton terminal and eliminates the need for a separate screen in the cab.

Optional Trimble® Auto-Guide

A Trimble® Auto-Guide system is now available as an option to the base NovAtel system. Like the NovAtel system, the Trimble system provides live yield mapping capabilities through the Tyton terminal as well as Auto-Guide, but offers additional options to match the needs of customers using Trimble systems.

AgCommand®

AgCommand® is available at two service levels. Whether you opt for self-monitoring in Level 1 or take full advantage of your dealer's expertise in Level 2 and beyond, AgCommand helps you minimize downtime and run your operation more efficiently.

Features include:

- **Customizable and pre-populated vehicle and engine information.**
- **Automated, actionable, near real-time alerts.**
- **Prioritized notifications.**
- **Pre-populated service and maintenance intervals.**
- **Machine geofencing.**
- **Broader geographic coverage via both GSM and CDMA networks.**
- **Fully accessible via your web browser.**

Fuse Connected Services

Fuse Connected Services utilizes Fuse technology to enable customers to receive equipment and operational support from your Gleaner dealer to improve efficiency, increase productivity and optimize farming operations season-to-season, throughout the crop cycle.

Fuse Connected Services improves productivity and increases yields through a combination of technology products and dealer services including off-season inspections, preventative maintenance, condition monitoring, training and year-round support.

Fuse Connected Services Levels

Get the support you need, when you need it, with the flexibility of different levels of dealer engagement, ensuring maximum productivity for your operation.

- **Level 1: Access & Insight**
  - **Make informed decisions using information generated from AGCO and/or non-AGCO equipment, while proactively managing equipment through automated reports and condition monitoring. Level one puts you in control.**
- **Level 2: Consult & Monitor**
  - **Rely on the expertise of a dedicated dealer analyst to monitor equipment, inform you of potential issues and provide recommendations for operational improvement. Level two adds hands-on support from your dealer, so you can focus on your business.**


GLEA

Engine & Drivetrain

The S9 Series features a variable-displacement motor and provides automatic high-low shifting through the hydrostatic propel system that was accomplished manually through the XR two-speed shift-on-the-go transmission of the S8 Series. The programming of speed and torque sets the hydrostatic motor to optimum displacement automatically and provides speed and torque when you need it, whether you are looking for a faster road speed or climbing a hill.

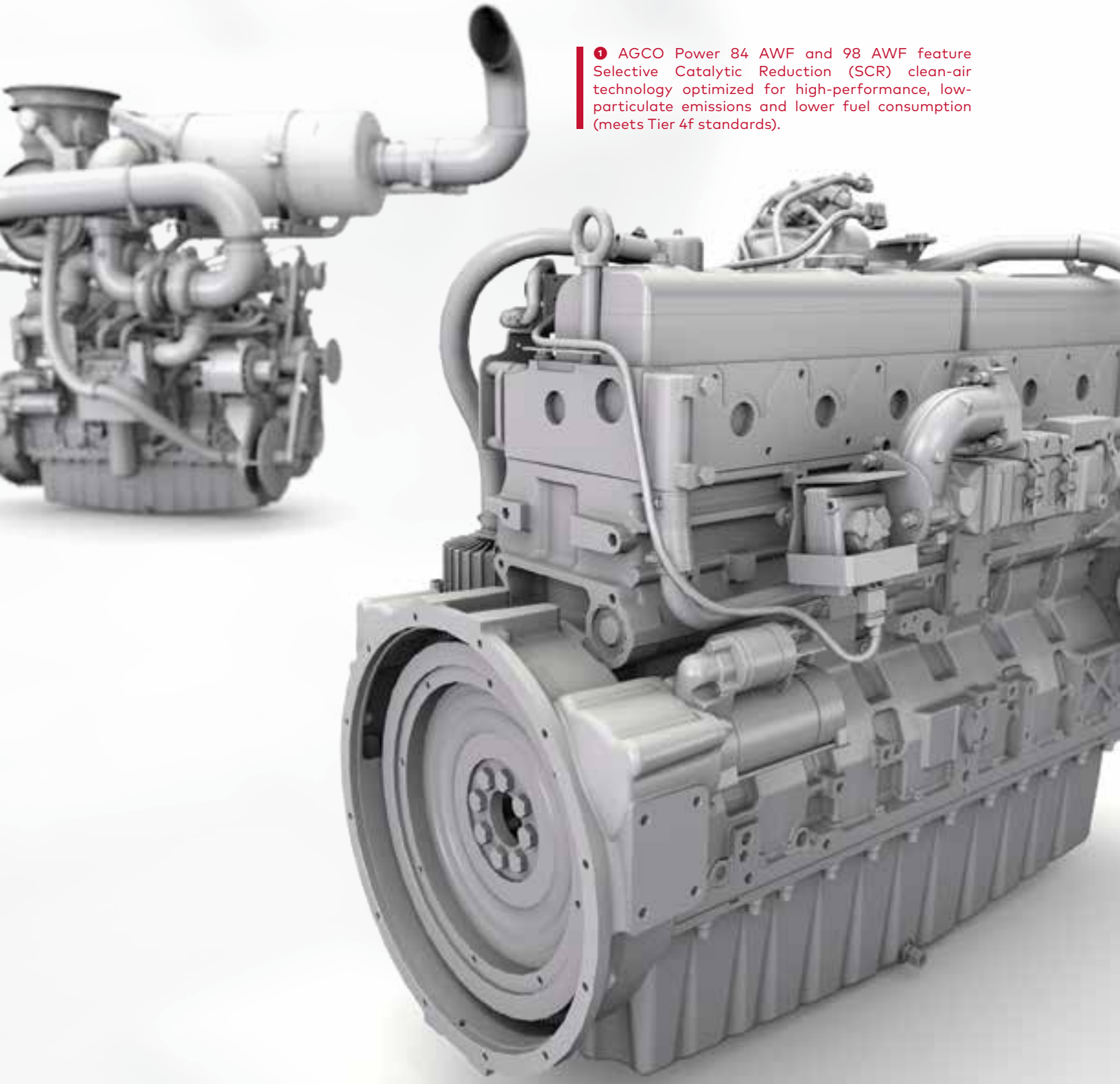
The rear adjustable steering axle and factory- or field-installed rear wheel assist (RWA) keep the combine moving through soft field conditions.

Pushing all Gleaner S96 Class 6 combines is a dependable high-torque fuel-efficient easy-to-service AGCO Power™ 84 AWF liquid-cooled 8.4L twin-turbocharged diesel engine. The Gleaner S97 Class 7 and S98 Class 8 combines feature a new high-torque, fuel-efficient AGCO Power 98 AWF liquid-cooled 9.8L twin-turbo-charged diesel engine. These engines feature Selective Catalytic Reduction (SCR) clean-air technology that is more fuel efficient at higher horsepower ratings than previous models. From a rated 322 HP (240 kW) in the S96, 375 HP (279 kW) in the S97 and 430 HP (320 kW) in the S98, maximum boost power jumps to 398 HP (296 kW) on the S96, 451 HP (336 kW) on the S97 and 471 HP (351 kW) on the S98. The rear-mounted engine distributes weight better for less noise and vibration and is more accessible for service and maintenance. ❶▸

Model	Engine hp (Kw)	Maximum Boost hp (Kw)
Gleaner S96	322 (240)	398 (296)
Gleaner S97	375 (279)	451 (336)
Gleaner S98	430 (320)	471 (351)

AGCO Power 84 AWF and 98 AWF engine features:

- **Four-valve-per-cylinder cross-flow head permits our engineers to center the injector over the piston, improving fuel/air mixing to control emissions and fuel consumption better.**
- **Bosch common-rail fuel injection system takes its commands from the EEM3 electronic engine management software for precise, faster response and more power per gallon of diesel.**
- **Three-ring pistons seal tightly for efficiency and better oil control.**
- **Dual centrally supported cylinder liners eliminate liner cavitation, prolonging cylinder life.**
- **Lightweight, big-end connecting rods' fracture-split production process leaves a rough edge at the face to improve holding power and durability while minimizing vibration.**
- **A 24.5-gallon polyethylene tank holds diesel exhaust fluid (DEF) and is filled after approximately every third diesel fill-up.**
- **Large 230-gallon polyethylene fuel tank, protected by in-line canister-style separators, ensures an adequate supply of clean fuel to feed the system.**
- **Three-stage pilot injection.**
- **Automatic fuel-temperature compensation.**



❶ AGCO Power 84 AWF and 98 AWF feature Selective Catalytic Reduction (SCR) clean-air technology optimized for high-performance, low-particulate emissions and lower fuel consumption (meets Tier 4f standards).


GLEANER

Headers

3300 Command Series Corn Heads

The Command Series corn head delivers more capacity and faster harvesting rates with reduced header loss relative to both cobs and overall corn loss at the header itself. A smoother transition of crop into the head is due to the new low-density polyethylene snouts allowing crop a smoother feeding transition without butt-shelling and ear bounce. A large-diameter, high-capacity auger provides better feeding and transition of material into the feeder house for more capacity and better crop control.

The Command corn head has incredible performance in down corn. An innovative fore-aft header tilt feature also increases performance in down corn, and an integrated header accumulator system allows the header to float while providing cushion for both the header and combine.

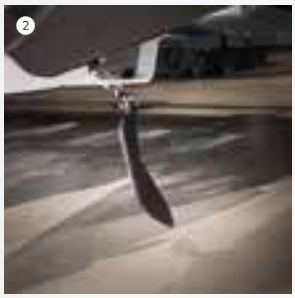
If the Command Series is equipped with the optional chopper, you can choose between chopping or non-chopping operation using a lever on the head. The Command series corn heads will come standard with a header hood to prevent cobs from going over the top of the header opening.

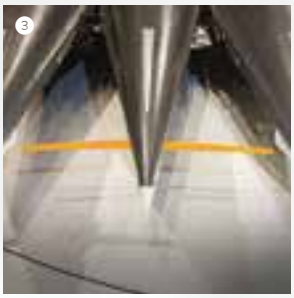
1. Snout skids provide smooth flotation for a smoother ride.

2. Headsight auto header height sensors provide more responsive header height control.

3. Snouts are Reichhardt Ready and do not require modification to install row sensing.

4. Stalk Crushers help reduce tire hazards in the field.





Gleaner 9255 DynaFlex® Draper Headers

With up to 40 feet of cut, the 9255 DynaFlex® draper header allows for increased capacity and harvesting rate and reduces operator fatigue. The flexible cab-controlled cutter bar provides you with a full eight inches of vertical travel, allowing you to take crop at ground level.

A dual mechanical SCH sickle-drive system on all models except the 25-foot are equipped with a heavy-duty flywheel, eliminating the need for a counter weight from the side. The design considerably narrows the divider. This permitted a redesigned narrower profile end shield and includes a new taller crop divider.

A single-height skid design has been integrated, and the improved skid geometry over the previous 9250 models reduces potential for wear to extend life. Larger diameter outer hydraulic cylinders have been incorporated for longer life and improved reliability. A new AGCO-built and-designed one-piece reel has been incorporated into the 9255 DynaFlex header, improving visibility and performance.

Choose from two sickle options:

- **Schumacher row crop or small grain sickle with rollers.**
- **AGCO high-capacity row crop or small grain sickle with self-adjusting spring hold downs.**

3200 Series Corn Heads

The 3200 Series 12-row folding corn head is designed specifically for the grower who is looking to decrease the amount of time it takes to detach and road a corn head. The 3312F and 3312FC models are foldable from the cab using the header pitch switch.

Available in six row, 12 row in both chopping and non-chopping configurations

7200/8200 Series Headers

The 8200 Series flex headers begin with a welded steel frame for a solid foundation.

The SCH epicyclic drive system assures a faster linear cut with less vibration. Plus, the precision factory-balanced conveyor with exclusive 7-inch (178 mm) auger flighting ensures smooth crop flow. Available with new level-2, HCC pickup reel in widths up to 35 feet (10.6 m). Electric, in-cab fore-and-aft reel adjustment comes standard, so you can adjust to changing crop conditions on the fly.

Available in 20 feet (6.0m), 25 feet (7.6 m), 30 feet (9.1 m) and 35 feet (10.6 m).

4300 Series Pickup Headers

The 4300 pick-up header from Gleaner provides greater performance, reliability and simplicity with simplified drives, capable of more reliable feeding at higher speeds; an innovative belt tracking system with multiple tracking grooves to keep belts aligned; larger drive rollers and a smaller number of draper belts to minimize chance of seed loss that are now wider for more tractive force. The draper sections are connected, and there is more overlap of front and rear decks to minimize loss further. The draper belt drive has two hydraulic drive motors for increased performance. The new pickup header provides for both automatic header height and lateral tilt control. It also features a new float system with preload setting.

Simplified drives, capable of more reliable feeding at higher speeds, innovative belt-tracking system with multiple tracking grooves to keep belts aligned, drive rollers have been increased in size and the number of draper belts has been reduced to minimize chance of seed loss and are wider for more tractive force.

Warranty, Service & Financing

Gleaner combines are backed by the strength and reputation of one of the world's largest farm equipment manufacturers: AGCO. Local Gleaner dealers support each combine with experienced, factory-trained staff and service personnel.

GleanerGuard™ Warranty

The GleanerGuard™ warranty is the best in the industry from header to spreader. Nonconsumable parts found to be defective in workmanship or material as delivered will be repaired or replaced for two years from date of delivery to the initial owner, regardless of the number of hours the machine has been used. Optional one-year or two-year extended comprehensive warranty packages are available.

AGCO Parts

The AGCO Parts supply network offers a complete line of high-quality replacement parts and accessories. The AGCO Live-On-Net electronic parts and service information provides immediate online access for dealers worldwide to operator manuals, service manuals and service bulletins, further improving their response time and knowledge base and ensuring that your combine is back and running quickly.

Gleaner dealers can provide Gleaner owners with access to agcopartsbooks.com, which gives Gleaner owners 24-hour access to online parts information for their combines.

Fuse Contact Center

Get set-up, calibration and operation support for your Gleaner technology products 19 hours/day, 7 days/week. Call AGCO Answers (877) 525-4384, email FuseSupport@AGCOcorp.com or live chat AGCOtechnologies.com/fuse-contact-center.

AGCO Finance®

AGCO Finance® remains committed to agriculture and understanding its unique needs—like the need to offer flexible programs such as seasonal payments, skip payments and waiver periods. We are proud to offer affordable, comprehensive equipment financing options for all Gleaner combines. We have the expertise, systems and flexibility to design a financing program that's as tailored to your needs as your new Gleaner combine is.


GLEANER

Specifications

	S96	S97	S98
Feeding System			
Chain size	#557 serrated		
Variable speed drive	Available		
Feed reverser	Electro-hydraulic, #60 chain		
Housing width in. (cm)	39.5 (100.3)		
Smartrac® lateral tilt	Standard		
Threshing / Separation System			
Type	Transverse rotor		
Concave type	4 sections with 17 bars		
Concave wrap	87°		
Rock protection	Stone trap		
Rotor / Cylinder / Threshing			
Bars, type	Chrome, reversible		
Diameter in. (m)	30 (7.62)		
Length in. (m)	88 (2.2)		
Separation area	360°		
Speed, low-range RPM	180-480		
Speed, high-range RPM	336-900		
Concave area in² (m²)	960 (0.61)		
Threshing & separating area in² (m²)	6,047 (3.89)		
Cleaning System			
Cleaning stages	2		
Cascade pan in² (m²)	992 (0.63)		
Chaffer area in² (m²)	3,889 (2.51)		
Sieve area in² (m²)	3,397 (2.19)		
Total area in² (m²)	8,721 (5.62)		
Max. Cleaning fan speed RPM	1,250		
Cleaning fan diameter in. (mm)	13 (330)		
Grain Handling System			
Tank capacity bu (L)	390 (13,743)		
Unloading Auger			
Diameter in. (cm)	14 (35.6)		
Unload rate bu/sec (L/s)	4.0 (141)		
Length from centerline in. (m)	298 (7.56)		

	S96	S97	S98
Discharge height in. (m)	185.5 (4.712)		
Clearance height in. (m)	169.5 (4.305)		
Crop Residue Disposal			
Chopper	2 speed, 24-knife, FineCut II		
Maximum chopper speed RPM	3,250		
Straw spreader	Hydraulic, Variable speed		
Hydraulic chaff spreader	Standard		
Engine			
Model	AGCO POWER 84AWF	AGCO POWER 98AWF	
Displacement in³ (L)	513 (8.4)	598 (9.8L)	
No. of cylinders/ type	6/inline	7/inline	
Horsepower @ 2,100 rpm SAE hp (kW)	322 (240.1)	375 (279.6)	430 (320.6)
Maximum boost hp (kW)	398 (296.7)	451 (336.3)	471 (351.2)
Fuel tank capacity gal (L)	230 (870.6)		
DEF tank capacity gal (L)	24.5 (92.7)		
Engine Cooling System			
Type	SmartCooling™ GEN 2 w/variable pitch and reversing capability		
Drive / Propulsion System			
Transmission (Std.)	4-speed electronically shifted w/single speed hydrostatic		
Proportional speed hydro transmission (Opt.)	4-speed w/automatic changes in speed and torque		
Park brake	Electronically activated		
Final drive type	Spur gear S-42		
Tread width standard/ reversed in. (m)	120/145 (3.05/3.65)		
Steering Axle			
Tread width adjustable axle in. (m)	119/143 (3.02/3.65)		
Tread width RWA in. (m)	126/144 (3.20/3.65)		

	S96	S97	S98
Steering type	Dual cylinder		
Turning radius in. (m)	270 (6.85)		
Hydraulic System			
Hydraulic pump	Gear		
Control valve	Electro-hydraulic		
Tank capacity gal (L)	13 (49.2)		
Cab & Controls			
Interior volume ft³ (m³)	130 (3.68)		
Total glass area ft² (m²)	66 (6.13)		
Front glass area ft² (m²)	32.9 (3.05)		
Lighting			
Standard	(8 halogen cab roof, 2 LED header, 2 LED row finder)		
Nightsight™ (Opt.)	(8 LED cab roof, 2 LED header, 2 LED row finder)		
Standard Cab	High back/air ride, cloth seat Standard lighting package AM/FM, USB, Bluetooth (streaming only), weatherband, MP3 w/4 speakers Remote outdside mirrors		
Deluxe Cab	Premier heated and cooled seat Nightsight lighting package AM/FM, CD, Satellite-ready, weather band, MP3, Bluetooth head unit and 4 Kicker speakers w/subwoofer Cooler Remote heated outdside mirrors		
Terminal			
Type	Tyton		
Screen	Glass w/LED backlighting and touch control		
Size in. (cm)	10.4 (26.4)		
Display area in² (cm²)	51.7 (333)		

	S96	S97	S98
Video	Camera-ready for operating 2 cameras through Tyton terminal, 2 brackets (rear beacon light, grain bin extension & unloader tube) Optional 4 camera-ready with AgCam 9" Quad monitor *Cameras/cable kit not included.*		
Yield Monitor			
Fieldstar Live (Std.)	Yield and moisture sensors, live mapping data through Tyton terminal		
Ag Leader Technology (Opt.)	Ag Leader yield and moisture sensors, live mapping data through Tyton terminal Harness connection in cab for Interga or Versa monitor		
Dimensions			
Transport height in. (m)	141 (3.58)		
Length w/o header in. (m)	339 (8.61)		
Wheelbase in. (m)	134 (3.40)		
Base weight with tires lb. (kg.)	31,920 (14,479)	32,220 (14,615)	
Ground clearance in. (cm)	23.5 (59.7)		

2017 GLEANER S9 Series Combines & Headers

AGCO • 4205 River Green Parkway, Duluth, GA 30096 • gleanercombines.com

AGCO is a premier manufacturer of agricultural equipment, providing high-tech solutions for professional farmers feeding the world. The company is dedicated to delivering superior customer service, innovation and quality. AGCO products are distributed in more than 140 countries worldwide.

GLEANERGUARD FUSE AGCO FINANCE AGCO PARTS Play It Safe. Work Safely.

AGCO ANSWERS
(877) 525-4384 AGCOanswers@AGCOcorp.com